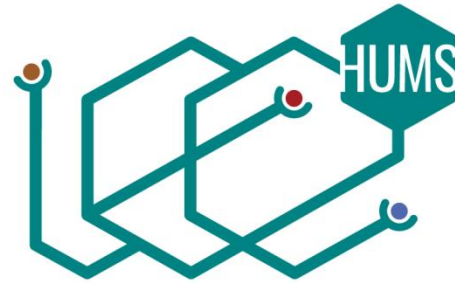
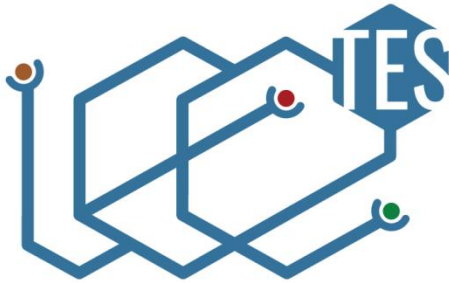




UNIVERSITAS
KRISTEN
MARANATHA



1ST INTERNATIONAL CONFERENCE ON EMERGING ISSUES
IN TECHNOLOGY, ENGINEERING AND SCIENCE
&
1ST INTERNATIONAL CONFERENCE ON EMERGING ISSUES
IN HUMANITY STUDIES AND SOCIAL SCIENCE

1-2 JULY 2021
VIRTUAL CONFERENCE

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Message from the Rector

Honorable Keynote Speaker, Mr. Ignasius Jonan, former Minister of the Energy and Mineral Resources, and previously Minister of the Transportation Ministry of the Republic of Indonesia, we are greatly honored to have you with us this morning.

Distinguished keynote speakers, Prof. Ahmad M. Ramli (represented by Indra Maulana, SH. LLM., Head of the Legal and Cooperation Division, Ditjen PPI, Ministry of Communication and Information Technology), Prof. John Silke, Dr. Ferry Sandra, Prof. Takayuki Arai, Prof. Young Ho Kim, Prof. Susy Tjahjani, Prof. Pim Martens, Dr. Dwinita Larasati, Prof. Chien-Hsu Chen, Prof. Wilson Bangun and Prof. Marcellia Susan, as well as all participants in the international conferences being held here.

A very good morning and best wishes to you all and good evening to our colleagues in the US. Greetings and a warm welcome to Maranatha Christian University (MCU), Bandung, Indonesia.

I am delighted to be here with you today for the opening of the first MCU international conferences. These are:

- (i) The International Conference on Emerging Issues in Technology, Engineering, and Science, and
- (ii) The International Conference on Emerging Issues in Humanity Studies and Social Sciences, with the themes of:
 - a. Digital Ecosystems for Sustainable Health and Community Development towards an Intelligent Society, and
 - b. Innovations for Sustainable Community Development - Research and Practices.

We would like to thank the many participants from countries across the different continents: the USA, the UK, the Netherlands, Germany, Taiwan, Malaysia, and Indonesia. Thank you for joining us.

These first international conferences will serve as a platform to enable speakers and participants to share their research results, drawn from up-to-date research work, to initiate and strengthen further collaboration.

My sincere hope is that what we accomplish today will be beneficial towards establishing collaboration among all the participants of these conferences.

I hereby declare the first international conferences at MCU in 2021 officially open.

God bless you all. Thank you!

Prof. Ir. Sri Widiyantoro, MSc., PhD., IPU.

Rector of Maranatha Christian University



Message from General Chair

On behalf of the committee members, it is a great pleasure to welcome you all to our first two international conferences:

Emerging Issues in Technology, Engineering, and Science (ICE-TES) and, Emerging Issues in Humanity Studies and Social Sciences (ICE-HUMS).

ICE-TES and ICE-HUMS are twin events which serve our passion in balancing technology and humanity issues in the world of science, and share the core values of our university: Integrity, Care & Excellence (ICE).

This year's theme for both conferences focuses on the United Nations' Sustainable Development Goals (SGD), which emphasize the following aspects: ICE-TES (Digital Ecosystem for Sustainable Health & Community Development: Towards the Intelligent Society) and ICE-HUMS (Innovations for Sustainable Community Development: Research and Practices). We believe research and initiatives that has pragmatic and multidisciplinary/interdisciplinary approaches allows us to unravel fundamental problems and answer related questions regarding sustainable development.

The logistics of both of the First ICE-TES and ICE-HUMS 2021 conferences consist of two general and five-scientific keynote speakers. Special tracks are designed in each conference which cover recent developments in: ICE-TES (technologies, engineering, medical, and dentistry), ICE-HUMS (psychology, languages & cultures, economics, arts & design, and laws). The ICE-TES tracks received 82 submissions and 52 accepted full papers, involving authors from five countries and corresponding to an acceptance rate of 63.4%. At the same time, the ICE-HUMS has received 130 submissions and accepted 76 full papers, involving authors from four countries, corresponding to an acceptance rate of 58.4%. All submitted papers were peer-reviewed on the basis of their significance, state-of-the-art contributions, and technical qualities.

Since we are still in the midst of COVID-19 pandemic, the conference has been organized virtually. The organizing committee has been working intensively to ensure that the scientific sessions will be valuable and engaging for all presenters and attendees. The parallel session format is a mix of pre-recorded and synchronous engagement through in-person live videos and question and answer sessions.

We would like to express our sincere appreciation to all the keynote speakers, committee members and reviewers for their dedication. Last, but certainly not least, we would like to offer many thanks to all authors who submitted their papers and all participants who registered to join this conference. We believe that ICE-TES and ICE-HUMS 2021 will be an inspiring academic occasion and will become a great platform for many ideas as well as research initiatives in the scientific community. Have an inspiring conference!

Dr. Hapnes Toba, M.Sc., General Chair of ICE-TES and ICE-HUMS 2021

Dr. Wahjoe Widowati, M.Si., General Co-chair of ICE-TES 2021

Joni, Ph.D., Ak., CA., CPSAK., General Co-chair of ICE-HUMS 2021



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IN HUMANITY STUDIES AND SOCIAL SCIENCE
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Prof. Lawrence Young, University of Warwick, United Kingdom

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Prof. Budi Hartanto Susilo, Maranatha Christian University, Indonesia

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Dr. Elizabeth Susanti, B.A., M.Ds., Maranatha Christian University, Indonesia

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Dr. Pan Lindawaty Suherman Sewu, S.H., M.Hum., M.Kn., Maranatha Christian University, Indonesia

Dr. Peter, S.E., M.T., Maranatha Christian University, Indonesia

Dr. Rapina, S.E., M.Si., Ak., CA., Maranatha Christian University, Indonesia

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Dr. Yenni Carolina, S.E., M.Si., Maranatha Christian University, Indonesia

Dr. Yuspendi, M.Psi., M.Pd., Psikolog. Maranatha Christian University, Indonesia

Editors of ICETES

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Dr. Emmanuel Jean-Francois, Ohio University, United States

Dr. Ratnadewi, S.T., M.T., Maranatha Christian University, Indonesia



Virtual Conference Instructions

General Information

ICETES-ICEHUM 2021 is a virtual conference which uses konfrenzi as its platform. There will be a co-host, a Session Chair, presenters, and guests for each session. The co-host and the Session Chair will be the persons in charge of facilitating the use of technology and coordinating the session and manage the Q&A respectively.

Session instructions

1. Beginning of the Session

- The Session Chair will introduce the presenter and then the technical assistant (or student) will play the video recording that the presenter has submitted. It will be followed by live Q&A.
- The duration of all presentation types is as follow:
 - Keynote speech: (20 minutes).
 - Recorded presentation (video) = max. 10 minutes per session.
 - Live Q&A = max. 5 minutes.
 - For opening and closing ceremonies, both ICE-TES and ICEHUMS participants can use the link below:

INTERNATIONAL CONFERENCE ON EMERGING ISSUES – ICE HUMS

Time: This is a recurring meeting Meet anytime

Join Zoom Meeting

<http://gg.gg/ICEHUMS>

Meeting ID: 858 132 1255

Passcode: ICE



2. Prior to the session

- The co-host will prepare the designated Go To Webinar session (10 minutes before the Session) and begin recording (2 minutes before the Session).
- The Session Chair introduces the session (1 minute before the Session).
- The participants of ICE-TES and ICE-HUMS can use the links below to access each event separately, except for the opening and closing ceremonies (we use ICE-HUMS link only).

**INTERNATIONAL
CONFERENCE ON EMERGING
ISSUES – ICE HUMS**
Time: This is a recurring meeting
Meet anytime
Join Zoom Meeting
<http://gg.gg/ICEHUMS>
Meeting ID: 858 132 1255
Passcode: ICE



**INTERNATIONAL
CONFERENCE ON EMERGING
ISSUES – ICE TES**
Time: This is a recurring meeting
Meet anytime
Join Zoom Meeting
<http://gg.gg/ICETES>
Meeting ID: 869 481 9461
Passcode: ICE



3. End of the Session

- Before ending the session, the Session Chair will fill out the evaluation form.



Virtual Conference using Konfrenzi Platform

The global COVID-19 pandemic, which is still occurring to date, has resulted in impediments to the holding of scientific/academic conferences in Indonesia. One alternative solution to this problem is to hold virtual conferences by utilizing online information and communication technology. This onference can be accessed via the link: <https://konfrenzi.com/link/WM9CqjF>. In general, there are two types of virtual conferencing, which are briefly described below.

1. Synchronous Virtual Conference (SVC)

The implementation of the SVC is very similar to a traditional conference, except that the presentation sessions go completely online; thus, the physical meeting is eliminated. The presenter's talk time is still limited as usual (a session moderator is needed), and the interaction with the audience (questions and answers) must also be instantaneous. The point is, everything (presentations and questions and answers) is carried out in real time via the internet / online. Some of the popular applications that can be used for example are ZOOM, Google Meet, Skype, WebEx, and many other applications as well. Since it is implemented in real time with a very limited time, many technical problems might occur in VirtualConf SVC. The problems might be a slow or even intermittent presenter / audience internet connection, technical difficulties with laptop / smartphone cameras, problems with mic / speaker, background noise, laptop hangs suddenly, gadget runs out of battery, and so on. These problems might result in ineffective presentation sessions.

2. Asynchronous Virtual Conference (AVC)

The implementation of AVC is different from traditional conferences. The concept is quite simple, namely physical meetings are eliminated and all presenters make video recordings of their presentations instead. The video is then uploaded to the internet by each presenter, so that other conference participants can watch and listen to the presentation video. Then, the interaction with the audience is carried out online, through an online question and answer forum. The committee opens access to view video presentations and opens a question and answer forum for a rather long period of time, for example for one week. Thus, even if the presenter / audience experiences



technical problems at a certain point in time, this will not be too much of a problem, because the presentation video can be viewed again at any other time, and also the question-and-answer interaction can be held at any time within one week. Thus presentation sessions can be very effective. There are quite a number of conferences that have been held virtually / online, even a few years ago (especially in Europe and America) before the outbreak of the COVID-19 outbreak, both with the SVC and AVC methods. We can find many articles on the internet discussing the advantages and disadvantages of each method (SVC and AVC) and taking valuable lessons from their various experiences. Based on these articles, we recommend implementing VirtualConf with the AVC method rather than SVC. The Konfrenzi platform can be used for the implementation of VirtualConf both SVC and AVC. Konfrenzi can be directly used for SVC implementation, where the stages are exactly the same as traditional conferences. Especially for the implementation of AVC, we have recently complemented our system by adding new features in the form of a Presentation Video Embedding (YouTube-based) and also an Online Question & Answer Forum. AVC features are available in the Premium and Ultimate license packages, and not available in the Standard license package. We hope the brief information is useful to make you familiar with Konfrenzi.com.

Guidelines for Scientific Video presentation

A. Rules for Scientific Presentation

1. Every scientific presentation will be in a form of a recorded video (maximum duration 10 minutes) followed by a live Q&A (maximum duration 5 minutes).
2. Thus, every presenter should prepare his/her recorded presentation in a form of a video file (one file such as .mp4) of maximum 10 minutes. He and she also has to record the content of the presentation using Microsoft Power Point in English with maximum file size 100 MB and upload it to YouTube. Please submit the link YouTube file into the Konfrenzi system.
3. Audiences are not allowed to record, download, copy, or edit the presentations.

B. Tips for preparing video file for scientific presentation

1. Before recording your presentation, please prepare the following items:
 - a. Microsoft PowerPoint Presentation slides.
 - b. Laptop/computer.



- c. Microphone.
2. To record your voice and make sure the video is audible. Please connect the microphone/headset to your laptop/computer.
 3. Since your voice will not be recorded while you switch the pages, you will have to finish your words before you go to the next page.
 4. Hyperlinks are not available for the recorded presentation; thus, if you would like to play videos, please embed them directly in the slides.



Instruction for Session Chairs/Presenters/Attendees

Session Chairs

A session chair will be responsible for:

- Introducing the session, and then each author/paper-title before playing the video.
- Observing and taking notes of questions from Q&A panel during the presentation playback.
- Reading the questions to the presenter during the Q&A period with absolutely no delay on the allocated Q&A slots.
- Concluding the session and filling out the evaluation form.
- Making sure the session starts and finishes on time.

Notes for the Session Chair:

- Please join the session at least 15 minute in advance by clicking a link that Organizer will provide via email.
- Please check and test your microphone once joined so that the session can start on time.
- Please turn on your video to engage the attendees during the sessional introduction and Q&A.
- Please turn off the video when the video is played so that the attendees can focus on the talk video.
- Please make sure to ask the questions verbally and according to the FIFO time they were first submitted.
- Please feel free to ask some of your question when there are not many questions from the audience.
- If the attendee needs to clarify their question, the Session Chair may unmute the attendee who placed the question to make clarifications.
- Please be mindful of the Q&A time limits! Any delays on the predetermined slots of each session will push other sessions behind.



Presenters

- Please join at least 15 minutes before your designated time slot by clicking the link that the organizer will send you via email.
- Please be present during the video playback as well as the Q&A session.
- During the replay of the presentation video, your microphone will be muted during the video playback and you are encouraged to keep an eye on the attendees' questions.
- At the end of the pre-recorded presentation, your microphone will be unmuted and please open your webcam to engage well when answering questions.
- If the time does not permit you to answer some of the questions, you may want to discuss the answer off-line.
- You may stay in the session as an attendee when not presenting.

Attendees

- Since webinars are intended to be "listen-only," the organizer will mute all webinar participants by default.
- To make sure the virtual conference runs smoothly and productively, following the introduction and the video presentation, the conference chair will moderate a brief Q&A session.
- All attendees are welcome to ask questions during the replay of the presentation video by typing your question in the given chat box.
- Since the time is limited, the Session Chair will select and ask the questions during the Q&A session.
- You will be unmuted if you would like to elaborate your questions by virtually raising hand; however, the limited Q&A duration, attendees may want to discuss with the author(s) off-line.
- You do not need to announce yourself when arriving or leaving a Session.



Conference Schedule

The program schedule will be set in Western Indonesia Time (WIB or GMT+7).

Please adjust your time to be in line with WIB or GMT+7. Please visit <http://time.bmkg.go.id/> to get more information about WIB.

ICE-TES Timetable

Day 1: Thursday, 1 July 2021

Day 1 (1 July 2021)		
	Activities	Description
08.50-09.00	Pre-event	Video
09.00-09.30	Opening ceremony	Prof. Ir. Sri Widiyantoro MSc. PhD. IPU Dr. Hapnes Toba, M. Sc., IPM
09.30-10.00	General Keynote Presentation	Prof. Ahmad M. Ramli
10.00-10.30		Drs. Ignasius Jonan, M.A.
10.30-11.00	Paper presentation 1	a maximum of 15minutes for each presenter
11.00-11.30		
11.30-12.00		
12.00-12.30		
12.30-13.00		Break Time
13.00-13.30	Keynote Presentation	Prof. John Silke
13.30-14.00		drg. Ferry Sandra, PhD.
14.00-14.30	Paper presentation 2	a maximum of 15minutes for each presenter
14.30-15.00		
15.00-15.30		

Day 2: Friday, 2 July 2021

Day 2 (2 July 2021)		
	Activities	Description
08.50-09.00	Pre-event	Video
09.00-09.30	Keynote Presentation	Prof. Takayuki Arai
09.30-10.00		Prof. Young Ho Kim
10.00-10.30		Prof. Dr. dr. Susy Tjahjani, M.Kes
10.30-11.00	Paper presentation 3	a maximum of 15 minutes for each presenter
11.00-11.30		
11.30-12.00		
12.00-12.30		
12.30-13.00		Break Time
13.00-13.30	Paper presentation 4	a maximum of 15minutes for each presenter
13.30-14.00		
14.00-14.30		
14.30-15.00	Closing Ceremony	Closing remark and best paper announcement
15.00-15.30		



ICE-HUMS Timetable

Day 1: Thursday, 1 July 2021

Day 1 (1 July 2021)		
	Activities	Description
08.50-09.00	Pre-event	Video
09.00-09.30	opening ceremony	Prof. Ir. Sri Widiyantoro MSc. PhD. IPU Dr. Hapnes Toba, M. Sc., IPM
09.30-10.00	General Keynote Presentation	Prof. Ahmad M. Ramli
10.00-10.30		Drs. Ignasius Jonan, M.A.
10.30-11.00	Paper presentation 1	a maximum of 15minutes for each presenter
11.00-11.30		
11.30-12.00		
12.00-12.30		
12.30-13.00		Break Time
13.00-13.30	Keynote Presentation	Prof. Pim Martens
13.30-14.00		Dr. Dwinita Larasati, M.A.
14.00-14.30	Paper presentation 2	a maximum of 15minutes for each presenter
14.30-15.00		
15.00-15.30		

Day 2 : Friday, 2 July 2021

Day 2 (2 July 2021)		
	Activities	Description
08.50-09.00	Pre-event	Video
09.00-09.30	Keynote Presentation	Prof. Chien-Hsu Chen
09.30-10.00		Prof. Dr. Drs. Wilson Bangun, M.Si.
10.00-10.30		Prof. Dr. Dra. Marcellia Susan Karnadi, M.T.
10.30-11.00	Paper presentation 3	a maximum of 15 minutes for each presenter
11.00-11.30		
11.30-12.00		
12.00-12.30		
12.30-13.00		Break Time
13.00-13.30	Paper presentation 4	a maximum of 15 minutes for each presenter
13.30-14.00		
14.00-14.30		
14.30-15.00	Closing Ceremony	Closing remark and best paper announcement
15.00-15.30		



ICE-TES Timetable

Paper Presentation 1

Day 1: Thursday, 1 July 2021

ROOM A at 10:30-12:00

Artificial Intelligence, Big Data, IoT, Robotics, Multimedia and Game	Authors	Title
ABS-037	Ratnadewi Ratnadewi, Aan Darmawan Hangkawidjaja, Agus Prijono, Rudy Wawolumaja, Kartika Suhada, Maria Christine Sutandi, Andrew Sebastian Lehman, Elty Sarvia and Kervin Lusiano	Naive Bayes Classification of Nominal Value Detection System with Entropy, Contrast, Correlation, Energy, Homogeneity and Rupiah Paper Legality Detection, 2004-2021 RGB
ABS-047	Joseph Sanjaya, Mewati Ayub, Hapnes Toba	Comparative Study of Convolutional Neural Networks-Based Algorithm for Fine-Grained Car Recognition
ABS-063	Muliady Muliady, Tien Sze Lim, Voon Chet Koo, and Nathaniel Pius Winata	Estimation of Paddy Leaf Nitrogen Status Using a Single Sensor Multispectral Camera
ABS-065	Novie Theresia Br. Pasanbu, Erwani Merry, Katya Icasia, Jordan Eliezer, Che-Wei Lin, Febryan Setiawan	Taekwondo Poomsae-3 Movement Identification by using CNN
ABS-076	Semul Tjharjadi	Design and Implementation of A Path Finding Robot Using Modified Trémax Algorithm
ABS-091	Marvin Chandra Wijaya	Priority Petri Net Multimedia Model For Non-Deterministic Events of Multimedia Presentations

Day 1: Thursday, 1 July 2021

ROOM B at 10:30-12:00

Bio informatics, Medical and Veterinary Science	Authors	Title
ABS-005	Hanna Sari Widya Kusuma, Hartini Tiono, Philip Onggowidjaja, Selonan Susang Obeng, Wahyu Widowati, Cintani Dewi Wahyuni, Cahyaning Riski Wijayanti, Muhamad Aldi Maulana, Aditya Rinaldy, Rizal Rizal	Anti-inflammatory Activity Screening of Pineapple (Ananas comosus) Core Extract in Lipopolysaccharide-induced RAW264.7 Cell Line
ABS-008	Wahyu Widowati, Rita Tjokropranoto, Cindy Damayanti, Hanna Sari Widya Kusuma, Aditya Rinaldy, Rizal Rizal	Potential of Black Tea (Camellia Sinensis (L.) O. Kuntze) Extract as Anti-oxidant, Skin Anti-aging
ABS-009	Ervi Afifah, Hartini Tiono, Philips Onggowidjaja, Selonan Susang Obeng, Wahyu Widowati, Cintani Dewi Wahyuni, Cahyaning Riski Wijayanti, Muhammad Aldi Maulana, Tri Handayani, Rizal Rizal	Luteolin Possess Anti-Inflammatory Effect on LPS induced RAW 264,7 Cell Lines
ABS-029	Julia Windi Gunadi, Diana Krisanti Jasaputra, Decky Gunawan, Ludovicus Edwinanto, Kwee Lindawati, Harijadi Pramono, Adrian Suhendra, Ghita Sariwidyantry, Hanna Goenawan, Ronny Lesmana	The Effect of Different Intensities of Treadmill Exercise on FGF23 Gene Expression in Gastrocnemius and Soleus Muscles of Wistar Rats
ABS-038	Ermi Girsang, Chrismis Novalinda Ginting, I Nyoman Ehrich Lister, Cahyaning Riski Wijayanti, Wahyu Widowati, Rizal Rizal	Antioxidant Properties of Salacca zalacca (Gaertn.) Voss Peel Ethanolic Extract Compared to Chlorogenic Acid
ABS-043	Tiur Gantini, Hans Christian	Analyse Protein Model of the SARS-CoV-2 Virus Using Data Mining Methods

Day 1: Thursday, 1 July 2021

ROOM C at 10:30-12:00

Bio informatics, Medical and Veterinary Science	Authors	Title
ABS-067	Didik Priyandoko, Wahyu Widowati, Cintani Dewi Wahyuni, Hanna Sari Widya Kusuma, Rizal Rizal	Antioxidant Properties of Soybean (Glycine max) Extract and Its Compounds
ABS-083	Dian Rath Laksmiawati, Diah Ika Pratami, Wahyu Widowati, Hanna Sari Widya Kusuma, Cahyaning Riski Wijayanti, Cintani Dewi Wahyuni, Ervi Afifah, Rizal Rizal	Significance of Antioxidant Properties of Curcuma longa L. and Curcuma xanthorrhiza rhizomes
Dental Science and Advanced Dentistry	Authors	Title
ABS-034	Vinna Kurniawati Sugiaman, Henry Yonatan Mandalas, Ethan Yeshael Tanamal, Nathalia Cahya Calista, Natalia Pranata	The Effect of Agarwood Leaves Ethanol Extract on Porphyromonas Gingivalis Growth Inhibition and in Vitro Cytotoxicity Assay on Fibroblast
ABS-087	Aprianisa Obsidiary Daisy Tangan, Hendra Polii and Rosalina Intan Saputri	Comparison of Two Dental Age Estimation Methods: the London Atlas and the Schour & Massler Atlas in 3-23 Years Old Indonesian
ABS-095	Rudy Djuanda, Eliza Madyanty, Almira Anggarani Witjaksono, Vinna Kurniawati Sugiaman, Natalia Pranata	The Effect of Apple Vinegar as an Irrigation Solution to Dental Root Canal Microstructure



Paper Presentation 2

Day 1: Thursday, 1 July 2021

ROOM D at 14:00-15:30

Electrical, Electronics, Computer Engineering and Science	Authors	Title
ABS-049	I Gede Made Karma, I Ketut Gede Darna Putra, Made Sudarna and Linawati	The Color Dissimilarity Based Method Among Other Segmentation Methods: a Comparison
ABS-054	Sodikin- Hendramawat Aski Safarizki	Safety Driving Behavior of Adolescents Pre-Owning Driving License (SIM)
ABS-064	Erwani Merry Sartika, Novie Theresia Br. Pasanbu, Richard Setiawan, Reynaldy Felicius Gunawan, Dion Melvern Siswanto, Che-Wei Lin, and Febrian Setiawan	Virtual Reality Stimulants of Motor Ability through the Virtual Reality-Based Game
ABS-094	Zainal Anifin- Linda Fitri	Implementation of Battery Energy Storage System at Cirata PV Solar Floating for Reducing the Electricity Cost Production on Jamali Grid
Process Automation, Scheduling and Adaptive Industrial Engineering	Authors	Title
ABS-068	Novie Theresia Br Pasanbu, Vivi Anisandhy, Christina, Elty Sarvia, Rainisa Maini Heryanto, Erwani Merry Sartika, Audyati Gany, Olga Catharina Pattipawaej, Richard Setiawan, Jessica	Design of Bilateral Hand Movement Device
ABS-081	Winda Halm, Rainisa Maini Heryanto, Santoso, Christina, Erwani Merry Sartika, Audyati Gany, Andrew Sebastian Lehman, Anggie Ervany Haryono, Vieni Candhya Wigayha	Experimental Design of Driving with Distractions at Urban Area using Simulator Driving

Day 1: Thursday, 1 July 2021

ROOM E at 14:00-15:30

Geo informatics, Building Structure, Landscape and Architecture	Authors	Title
ABS-021	Robby Yussac Tallar1 , Teofilus Sawang1	Experimental Study on Velocity Profiles due to Ecological Barriers
ABS-025	Cut Talitha Salsabila Nurapili, Robby Yussac Tallar, Alexander Yovan Suwono	Comparative Study of Riprap Model Design for Scour Protection of Bridge Pier
ABS-026	Daud Rahmat Wiyono, Roi Milyardi, Yosafat Aji Pranata, Robby Yussac Tallar	The Experimental Study of Optimum Thickness on Riprap Layer Design
ABS-027	Daud Rahmat Wiyono1 , Roi Milyardi2 , YosafatAji Pranata3 and Robby Y Tallar3	The Effect of Seismic Masses in Calculation of 17th Building Structures
ABS-030	Deni Setiawan1 , and Stefanny Abigail	Identification of Risk Factors for Delayed Time Schedule in Summarecon Serpong Playfield Preschool Project

Day 1: Thursday, 1 July 2021

ROOM F at 14:00-15:30

Geo informatics, Building Structure, Landscape and Architecture	Authors	Title
ABS-033	Roi Milyardi1 , Deni Setiawan2 and Tri Octaviani Sihombing3	Flood Risk Assessment of Heritage Building in Semarang City
ABS-052	Jeffrey Limas Lim, Ayomi Dita Rarasati, and Mohammad Ichsan	Identification of Risks in Making Decision for Overseas Expansion by Indonesian State-Owned Construction Enterprise
ABS-053	Rumasoreng W.A.K ,Karyadi , and Nindyawati	Pull-Out Resistance of Glued-In Rod Embedded Parallel to Grain in Laminated Bamboo with Two Edge Distance Variations
ABS-066	Marwahyudi, S Sangadji, Halwan Alfisa Saifullah, SA. Kristiawan	Experimental Study of Shear Strength of <i>Purus Lobang Berkait</i> (PLB)-Masonry Wall
ABS-073	Noek Sulandari, Cindrawaty Lesmana, Cindy Mania Setyana	Engineering Education: Measuring the Relationship Between Knowledge and Confidence to the Student Performance
ABS-097	Ferlina Sugata, Nathalia Yunita Sugiharto, Nina Nurviana, Seriwati Ginting, Isabella Isthipraya Andreas, Shirly Nathania Suhanjoyo, Andi A. Hamzah and Heddy Heryadi	Bio-Cord as an Ecotechnological Wastewater Treatment for Productive and Attractive Urban Open Spaces



Paper Presentation 3

Day 2: Friday, 2 July 2021

ROOM G at 10:30-12:00

Health informatics, Public Health, and Clinical Research	Authors	Title
ABS-016	July Ivone, Stella T Hasianna and Victor Yohanes S, Vilia Ruthy W	Relationship between Low Birth Weight (LBW), Birth Length, Basic Immunization History and Stunting in Children Age 9 - 60 Months in Kabupaten Purwakarta
ABS-040	Nur Ika Haniastuti, Nike Susanti, Hana Apsari Pawestri and Kartika Dewi Puspa	Application of Freeze-thaw Harvest for SARS-CoV-2 PCR EQA Panel Material
ABS-046	Charissa Lazarus, Khamelia Malik	Suicide and Narcissistic Personality Traits: a Review of Emerging Studies
ABS-058	Elty Sarvia, Elizabeth Wianto, Erwin Ardianto Halim, Elvira Natalia	Expected Variables to Design Sleeping Facilities for the Elderly Based on the Potential Stakeholders Point of View
ABS-093	Wahyu Widowati, Teresa Liliانا Wargasetia, Fanny Rahardja, Rimonta F Gunanegara, Hanna Sari Widya Kusuma, Seila Arumwardana, Cintani Dewi Wahyuni, Aditya Rinaldy, Cahyaning Riski Wijayanti, Tri Handayani, Rizal Rizal	Potential of Wharton's Jelly Mesenchymal Stem Cells as an Alternative Candidate for Covid-19 Therapy

Day 2: Friday, 2 July 2021

ROOM H at 10:30-12:00

Software Engineering, Information and Communication Technology	Authors	Title
ABS-011	Apriliana Fajri Wibowo, Yova Ruldeviyani	Factors Affecting Success of Team Members in Indonesia Scrum Implementation
ABS-013	Erwin Ardianto Halim, Monica Hartanti, Maresha Caroline Wijanto, Yosepin Sri Ningsih, Hendra Setiawan, Yudita Royandi, Yunita Setyoningrum, Berti Alia Bahaduri, Aulia Wara Arimbi Putri	The Application of Digital Module Design of East Sumba Woven Fabric on Interior Accessories
ABS-057	Bayu Rima Aditya, Dina Fitria Murad, Oscar Kamalim, Aditya Permadi, Andrisyah, Fathul Jannah, and Irawan Nurhas	The Use of Technology in Indonesian K-6 Education during Covid-19 Pandemic: a Review
ABS-060	Febrina Anastasha, Teddy Marcus Zakaria	Build Software of Information Management Community Service Events
ABS-096	Bernard Renaldy Suteja, Wilfridus Bambang Triandi Handaya	User Interactions Analysis on a Moodle-based online Learning Management System during Pandemic

Paper Presentation 4

Day 2: Friday, 2 July 2021

ROOM I at 13:00-14:30

Nutrigenomics and Food Science	Authors	Title
ABS-019	TE Pramudito, EGA Putri, E Paluphi, G Florencia, MR Gunawan, MP Pratiwi and Y Yogiara	Bioactivity of Soybean Tempeh Against Diarrhea Associated Pathogen is More Correlated with the Number of Total Bacteria than Specific Major Bacterial Phylum
ABS-031	Diana Krisanti Jasaputra, Julia Winda Gunadi, Penny Setyawati Martoso, Larissa, Yenny Noor, Ima Permasani Gani, Erik Dwikurnia Saiman, Desman Situmorang, Andi Haryanto Sri Wulandari, Makhmudun Ainuri and Anggoro Cahyo Sukartiko	Effects of Herbal Ingredients (Allium Sativum, Punica granatum, Curcuma longa, Curcuma xanthorrhiza) on FATP3 Gene Expression in Aorta of High Fat Diet-fed Rats: a Preliminary Study
ABS-055	Deni Rahmat, Wahyu Widowati, Etik Mardiyati, Eny Kusnini, Abdi Wira Septama, Yati Sumiyati, Mita Restinia, Sjaikhumizal El Muttaqien, Cintani Dewi Wahyuni, Hanna Sari Widya Kusuma, Muhammad Aldi, Tri Handayani, Rizal Rizal	Biochemical Characteristics of Ground Robusta Coffee under Various Postharvest Technologies and Processing Parameters
ABS-092		Substantially Improved Antioxidant Activity of Modified Polymeric Nanostructure Entrapping Curcumin

Day 2: Friday, 2 July 2021

ROOM J at 13:00-14:30

Machine Learning, Edge Computing, Deep and Federated Learning	Authors	Title
ABS-032	Hendra Bunyamin, Hapnes Toba, Meyliana, and Roro Wahyudiansih	Breast Cancer Histopathological Image Classification Using Progressive Resizing Approach
ABS-082	Natalia Hartono	Multi-objective Bees Algorithm for Feature Selection
ABS-089	Audyati Gany, Meilan Jimmy Hasugian, Erwani Merry Sartika, Novie Theresia Br. Pasanbu, Hannah Georgina	Eye Abnormality Automatic Detection Using Deep Learning based Model



ICE-HUMS Timetable

Paper Presentation 1

Day 1: Thursday, 1 July 2021

ROOM K at 10:30-12:00

Family, Gender and Intergenerational Issues	Authors	Title
ABS-26	Jeanyfer, Eva Tuckyta Sari Sujatna, Susi Yuliawati, Trisnowati Tanto	Female Representation in <i>Legenda</i> Tangkuban Perahu: a Transitivity Analysis
ABS-36	Aiffah Z. Sari, Destie N. Ramadhan, Minerva Patricia, Pingkan C. B. Rumondor, Farah M. Djalal	How do Indonesians perceive Marriage? Semantics Analysis of Marriage as a Concept and its Relation with the Well-Being
ABS-50	Abd Rahman, Sri Rum Giyarsih, Sigit Herumurti BS	Desire to Have Children Assessed from Socioeconomic Context Post Disaster in Palu
ABS-59	O.Irene Prameswari Edwina, Tesselonika Sembiring, Cindy Maria, Jean Esparanci	Family Resilience: Traits, Positivity, and Close Relationship in Adolescents
ABS-60	Ria Wardani, Ira Adalina, Heliany Kiswantomo	Predicting Retention: Sociodemographic, Motivational, and Perceived Social Support Factors
ABS-64	Fenty Lidya Siregar, Henni, Silvanni Comara	The Representation of Gender in Gamer's Politically Correct Bedtime Stories: a Critical Stylistic Analysis

Day 1: Thursday, 1 July 2021

ROOM L at 10:30-12:00

Financial Models, Accounting, Marketing and Economic Growth	Authors	Title
ABS-20	Tan Ming Kuang, Lidya Agustina, and Yani Monalisa	Using Educational Game for Improving Students' Knowledge and Interest in Investing in the Capital Market
ABS-24	Apriani D.R. Atahau, Imanuel Madea Sakti, Cheng-Wen Lee, Andrian D. Huruta	Green Microfinance and Renewable Energy: Empowering the Role of Women in Rural Areas
ABS-34	Yenni Merlin Djajalaksana and Doro Edi	Utilization of Digital Marketing after Covid-19 Pandemic in Indonesia Businesses
ABS-41	Moh Fand Najib	Assessing Business Performance of the Traditional Market Trader: the Role of Buyer-Supplier Relationship and Dynamic Capabilities
ABS-51	Maya Malinda, Asni Harianti, Yolla Margaretha, Henky Lisan Suwarno, Kaleb Immanuel Yahya, Miki Tjandra	Comparison of Financial Literacy for Micro, Small and Medium Enterprises Entrepreneurs at Bojong Soang upon Using Financial Planning Application "SAKA (peSAK Abdi)"
ABS-57	Rhosalina Damayanti, Adrian Izaak Rompis and Aprina Nugrahesthy Sulistyia Hapsari	Testing the Internal Control of Simda Application in Effort to Improve Public Accountability

Day 1: Thursday, 1 July 2021

ROOM M at 10:30-12:00

Financial Models, Accounting, Marketing and Economic Growth	Authors	Title
ABS-62	Rima Kusuma Rini, Nanda Ayu Wjayanti	Does Socioeconomic Factors drive Peer to Peer Lending? Analysis in Indonesia
ABS-65	Christina Wirawan	Bibliometric Analysis of Product-Service System Related to Life Cycle
ABS-77	Elvira Luthan, Yulia H. Yeni, Eri Besra	Analysis of Factors Affecting the Sustainability of Village-Owned Enterprise in the Province of West Sumatera
ABS-80	Ita Salsalina Lingga	The Importance of Internal Control on Accounting Information System's Quality: Survey on Banking Sector
ABS-99	Ilham Pranata, SeTin SeTin	The Roles of Organizational Politics and Fairness in the Relationship between Relative Performance Evaluation and Managerial Performance
ABS-110	Marcellia Susan, Jacinta Winarto, Agus Aribowo, Yusuf Osman Raihin, Martalena, Herlina, Herman Kambono, Enny Prayogo	Sustaining Customer Loyalty in Higher Education



Paper Presentation 2

Day 1: Thursday, 1 July 2021

ROOM N at 14:00-15:30

Financial Models, Accounting, Marketing and Economic Growth	Authors	Title
ABS-135	Rifal Hijira, SeTin SeTin	The Interactive Effects of Superior Trust and Subordinate Involvement in Decision Making on Budget Gaming and Budget Value
ABS-139	Michael Christian, Lasmary RM Girsang, Henilia Yulita	Measuring Ease of Use Aspects of Shopee Usage Behaviour During Pandemic Using the PLS-SEM Approach
Psychological, Education and Social Resources in the New Normal	Authors	Title
ABS-75	Yuspendi, Trisa Genia C. Zega, Indah Soca R. Kuntari, Lie Fun Fun, and Ida Ayu N. Kartikawa	The Role of Adult Attachment and Spiritual Well-Being Towards Wife's Marriage Satisfaction in the Muslim Community of Bandung
ABS-109	Imelda Junita, Fanny Kristine, Sherlywati, Rizki Muhamad Sidik	Potential Relationship between Students' Satisfaction on University Attributes and Positive or Negative Word-of-Mouth (WOM) and Its Correlation with their Recommendations
ABS-115	Purnama E.D. Tedjokoesoemo, Poppy Firtatwentyana Nilasari, and Siti Mayang Sari	Addressing The Independent Learning Curriculum (<i>Kurikulum Merdeka Belajar</i>) as a Form of Positive Disruption to Empower the Community
ABS-134	Robert O. Rajagukguk, Candra Sinuraya, Jane Savitri, Kristin Rahmani, Stephanie Andamani	Model of Student Identity Development by Chickening Theory

Day 1: Thursday, 1 July 2021

ROOM O at 14:00-15:30

Hybrid Approaches to Create Sustainability in Arts and Design	Authors	Title
ABS-8	Elizabeth Wianto, Monica Hartanti	The Role of Sustainable Packaging Design for West Java Local Products
ABS-16	Ariesa Pandanwangi- Dewi Isma Aryani- Belinda Sukapura Dewi- Ismet Zaenal Effendi- Wawan Suryana- MikyEndro Santoso- Leonardo- Beni Sasmito	Spiritual Value: a Mythological Figure in Keraton Kanoman Cirebon
ABS-40	Christine Claudia Lukman, Krismanto Kusbiantoro, Irena Vanessa Gunawan, Lois Denissa, Eliati Djakaria, I Nyoman Natanael, Grace Caroline Sahertian, Wenny Anggraini Natalia	Multidiscipline Hybrid Approach in Art and Design Education to Support the Sustainability of Batik Cimahi
ABS-46	Greysia Susilo, S.E., S.Sn., M.Hum., Veila Venisia	Changes in Interior Design Programming at Residencials after Covid-19 Pandemic
ABS-82	Lois Denissa	JFC Timeless Uses Hybrid Codes in Costumes for Reaching Sustainable Identity
ABS-87	Isabella Isthupraya Andreas, Shiry Nathania Suhanjoyo, Andi Aulia Hamzah, Ferlina Sugata, Nathalia Yunita Sugiharto, Nina Nurviana, Heddy Heryadi, and Seriwati Ginting	The Improvement of <i>Jamu</i> Appeal Using Creative Sales Strategy and Contemporary Design

Day 1: Thursday, 1 July 2021

ROOM P at 14:00-15:30

Hybrid Approaches to Create Sustainability in Arts and Design	Authors	Title
ABS-105	Ratnadewi, Agus Prijono, Ariesa Pandanwangi, and Andrew Sebastian Lehman	Preservation of the Tasikmalaya <i>Batik</i> Motif with Turtle Graphics
ABS-121	Ariesa Pandanwangi, Ratnadewi, Agus Prijono	Local Potential as the Source of <i>Batik</i> Design Using Turtle Graphics
ABS-151	Hayu Puspasari Saputri	Arumawa Ilé: New Normal and Sustainable Café Concept in Turirejo, Malang, East Java
ABS-152	Elizabeth Susanti Gunawan, Krismanto Kusbiantoro and Sugiri Kustedja	Transformation of a Chinese Cultural Heritage House in Bandung: Towards Sustainability
ABS-153	Kezia Clarissa Langi, Dian Widiawati, Setiawan Sabana, and Tusita Metadevi Jayamangalani Suprpto	Development of Weaving Craft Motif Designs as a Diversification Attempt for Nias Local Souvenir Products
ABS-154	Petrus Gogor Bangsa- Wening Udasmoro, and Christian Budiman	Self-taught Online Graphic Designer in Salaman, Magelang: Between Art Work, Decent Work and Vulnerable Work



Paper Presentation 3

Day 2: Friday, 2 July 2021

ROOM Q at 10:30-12:00

Law and Legal Systems for Sustainable Development	Authors	Title
ABS-9	Johannes Ibrahim Kosasi- Yohanes Hermanto Sirait	Urgency in Using Indonesia Language on Business Contracts and Potency of Investment Dispute (the Study of Supreme Court Decision Number 601 K/Pdt/2015)
ABS-10	Tresnawati	Corporate Social and Environmental Responsibility Regulation and Implementation in Indonesia: Contribution for Sustainable Development or Legalized Robbery?
ABS-15	Rahel Octora , Fauzan Hanif M.	Financial Exploitation by Spouse, a Crime in Private Space (an Overview Based on Indonesian Legal System)
ABS-53	Ida Sumarsih	Study of Stock Ownership Nominee Agreement in Mining Business to People's Welfare that is Aligned for Sustainable Development Goals
ABS-70	Reggiannie Christy Natalia	Part Time Working Arrangement in Omnibus Law as Part of Sustainable Development and How it is Implemented in Developed Countries
ABS-108	Agus Setiawan, Hamis Wiguna, Pan Lindawaty Suherman Sewu	Good Faith Principle and Legal Protection over Parties Related to Fiduciary Certificate in the Constitutional Court Decision in Indonesia after the Constitutional Court Decision Number 18/PUU-

Day 2: Friday, 2 July 2021

ROOM R at 10:30-12:00

Mental Health, Human Resources, Leadership and Well-being	Authors	Title
ABS-22	Missiliana Riasnugrahani, Meta Dwijayanthi, Cindy Mania	Calling and Work Engagement in Priest: the Moderating Role of Social Support
ABS-23	Susanti Saragih, Meily Margaretha, Sherlywati	The Role of Calling and Job Crafting on the Promotion of Employee Engagement for Organizational Sustainability
ABS-28	Hasna Fauziati Zakkiah, Stella, Farah Mutiasari Djalal, & Yosef Dedy Pradipto	What does Sejahtera mean to you? The interpretation of Sejahtera based on money-saving habit, happiness, and life satisfaction
ABS-58	Ida Ayu Nyoman Kartikawati, Lie Fun Fun , Lisa Imelia, Stephanie Andamani	Teacher Self Efficacy and Work Engagement: the Mediating Role of Psychological Well Being
ABS-63	Heliany Kiswantomo & Theofanny	Neuroticism and Subjective Well-Being in Faculty of Psychology Student
ABS-66	Leonardus Dewa Hardana, Rayini Dahesihari	Internal Change Agents' Strategies to Deal with Boundary in Organizations in Indonesia

Day 2: Friday, 2 July 2021

ROOM S at 10:30-12:00

Mental Health, Human Resources, Leadership and Well-being	Authors	Title
ABS-091	Pingkan C. B. Rumondor , Elien Rosalie, Syifa Fauziah, Adriana Ginanjar, Claudia Chiarolanza, Ashley K. Randall	Perceived Individual, Partner, and Community Stressors Related to Covid-19 Quarantine in Indonesia: a Qualitative Study
ABS-094	Efnie, Indrianie	Brain Respiration to Overcome Stress People Who Live with HIV (ODHIV)
ABS-101	Rhea Griselda- Olivia Gunawan- Laksmi Kusuma Wardani	The Interior of Medium-Scale Business Tiara Handicraft in Surabaya with Accessible Design Principle for Mentally and Physically Disabled Employees
ABS-102	Mutiara Ramadhita Roesad, Pingkan Cynthia Belinda Rumondor	Happily Married in the Absence of a Child: Marital Satisfaction of Voluntary and Involuntary Childless Individuals
ABS-136	Ka Yan, Priska Analya	Gratitude Journal, Expressive Writing and Mindfulness
ABS-138	Henilia Yulita, Vincencius Farrel Jonathan, Yustinus Yuniarto, Michael Christian, Eko Retno Indriyarti, Suryo Wibowo	The Role of Affective Commitment in Mediating the Relationship between Authentic Leadership and Organizational Learning at Chicken-Based Food Processing Company in Indonesia

Day 2: Friday, 2 July 2021

ROOM T at 10:30-12:00



Mental Health, Human Resources, Leadership and Well-being	Authors	Title
ABS-155 ABS-159	Ni Luh Ayu Vivekananda, Evi Ema Victoria Poli Erwin Permama, Widarto Rachbini, Wasi Widayadi, Rukun Santoso	Perma - a Multidimensional Framework of Well-Being in Indonesian Adults The Dimensions of Transformational Leadership and Their Impacts on the Performance of Construction Business during Covid-19 Pandemic
Psychological, Education and Social Resources in the New Normal	Authors	Title
ABS-39	Ira Adelina, Vida Handayani, Maria Yuni Megarini	Systematic Literature Review on Mindset and the Benefits in Living New Normal Life
ABS-52	Tery Setiawan, Indah S.R. Kuntari, and Indah Puspitasa	Human Development Index in Indonesia: Are We in Line with SDGs and How Much Have We Grown?
ABS-54	Ellen Theresia , Marissa Chitra Sulastra and Serena Wijaya	Role of Parental Stress in Parenting Practice in Parents of Middle Childhood Children

Paper Presentation 4

Day 2: Friday, 2 July 2021

ROOM U at 13:00-14:30

Religion, Language and Humanity Issues in Sustainable Communities	Authors	Title
ABS-2	Anton Sutandio, Ph.D.	Indonesian Film Industry amidst the Covid-19 Pandemic: an Observation on Sustainability Efforts
ABS-27	Trisnowati Tanto, Sri Iriantini	Local Wisdom in Indomie and Demae Icechou Video Advertisements: a Multimodal Analysis
ABS-38	Mohamad Makincoiri, Mulyana	The Influences of Song Lyrics "Jagad Anyar Kang Dumadi" on the Productivity of Traditional Artists in Yogyakarta: a Critical Discourse Analysis
ABS-43	Selvia, M.Hum., Yohan Yusuf Arifin, M.His., Septeranie Sutandi, M.TCSOL.	Representation of Political, Social, and Cultural Phenomena in Biopics of Chinese Indonesian Figures Using Historical Approach
ABS-67	Brian L. Djumaty: Nina Putri Hayam Dey	Food Sustainability in Local Wisdom Perspective of the Indigenous People Dayak Tomun Lamandau
ABS-73	Dexon Pasanbu, Bagus Takwin, Pim Marten	The Role of Religious Orientation and Ethical Ideologies in Environmental Concerns amongst Teachers and School Staff in East Java, Indonesia

Day 2: Friday, 2 July 2021

ROOM V at 13:00-14:30

Religion, Language and Humanity Issues in Sustainable Communities	Authors	Title
ABS-78	Vera Budi Lestari Sihotang	Tangos Therapy: Health Behavior as the Result of Normalizing Power in Medicating Symptoms of Malaria on the Community of Sebesi Island
ABS-84	Maryani	The Perceptions of Indonesian University Students on the Use of Extensive Reading in English Grammar Class
ABS-90	Xuc Lin, Mariana, Fu Ruomei	Raising Environmental Awareness Through Teaching Chinese as a Second Language at University
ABS-95	Hurniyah	Local Religions and Contested Civic Space in Indonesia: a Case Study of Sunda Wiwitan community in Cigugur
ABS-103	Irsanti Widuri Asih, Heru Nugroho, Budiawan	New Constellations of Power and Resistance in the Platform Economy: Study of Gojek
ABS-104	Devi Riskianingrum- Herry Yogaswara	The Recalled of Disaster Memory on Sebesi Island: a Historical Perspective

Day 2: Friday, 2 July 2021

ROOM W at 13:00-14:30

Religion, Language and Humanity Issues in Sustainable Communities	Authors	Title
ABS-106	Olivia Gunawan- Rhea Griselda- Diana Thamrin	The Influences of Chinese Culture on Historical Buildings in Surabaya
ABS-113	Rizki Theodorus Johan, S.S, M.A, Sonny Angjaya, S.S, M.Hum.	Healing Through Acting: the Therapeutic Effect through Online Monologue Performance
ABS-132	Julianti Kasih1 , Yenni Merlin Djajalaksana2 and Doro Edi3	Digital Interactions in Church Communities Attributable to COVID-19 Pandemic
ABS-156	Ulyna Dewi	Phonics Instruction for Young Learners in EFL Context: a Comparative Review
ABS-158	Muhammad Syafar, Helmy Faizi Bahrul Utuni	Social Entrepreneurship Pesantren-Based to Support Rural Development in the Era of Covid-19 Pandemic (Case Study in District of Lebak, Banten Province, Indonesia)



Keynote Speakers



Ignasius Jonan

Former Minister for Energy & Mineral Resources of Indonesia (2016-2019), former Minister of Transportation (2014-2016) and former CEO of the Indonesian government-owned railway company, PT Kereta Api Indonesia (PT. KAI) which he preside from 2009 to 2014. Born in Singapore, Jonan received his Bachelor's degree in Accounting from Airlangga University, Surabaya in 1986, and M.A. in International Relations and Affairs from the Fletcher School of Law and Diplomacy and Tufts University in 2005. He started his professional

career in the banking sector, holding a managing director role in the American banking and financial services corporation, Citigroup. Right now, he is Independent Commissioner at PT Unilever Indonesia and PT Industri Jamu dan Farmasi Sido Muncul, Tbk.

Abstract

"World Order after Pandemic?"

The world must move on from neoliberalism after the pandemic. According to World Economic Forum Founder Klaus Schwab Free-market fundamentalism has eroded worker rights and economic security, triggered a deregulatory race to the bottom, and prompted the emergence of massive new global monopolies. So as COVID-19 shakes the globe, it's time to re-evaluate some sacred cows. In the decades after WWII, the world made huge strides towards eradicating poverty, reducing childhood mortality, increasing life expectancy and expanding literacy. Capitalism, trade and international cooperation drove these changes, and must be defended. We must also remain focused on the Fourth Industrial Revolution and digital technology. Recent advances have given us the tools to confront the crisis through vaccines, new treatments and personal protective equipment. But it's time to confront outdated aspects of the global economy. Chief among these is the neoliberal ideology which supports free markets, financial deregulation and fiscal austerity. We must rethink what we mean by 'capital', whether financial, environmental, social or human. Today's consumers do not just want cheaper, better goods and services. Instead, they expect companies to contribute to the common good. There is a demand for a new kind of approach: stakeholder capitalism. Where businesses work to improve the state of the world, and not just shareholder profits. How do you think we can make the world a fairer place?





**Prof. Dr. Ahmad M. Ramli, SH, MH,
FCBArb**

Born in Bandung on July 4, 1961, Prof. Dr. Ahmad M. Ramli, SH, M.H., FCBArb is Professor of Legal Studies, University of Padjadjaran who has experiences more than 10 years as Echelon I on several government agencies. In October 2016, he was appointed as Director General of Post and Information Technology, Ministry of Communications and Information Technology. He pursued education by completing the Bachelore, Master and Doctoral Program of Law (cumlaude)

at Padjadjaran University and Visiting Scholar Program at the University of California Berkeley United States, as well as some International training of Intellectual Property Rights. When he was a grand-student, he has been named by the Ministry of Education and Cultural Affairs as Exemplary Student of University of Padjadjaran in 1985.



ICETES



Prof. John Hendry Silke

Prof. John Hendry Silke was born on 6th March 1968. He pursued his undergraduate education at King's College, University of London and Churchill College, University of Cambridge. He then continued his education at the Institut für Molekularbiologie II, University of Zürich. Currently, he is a professor & theme leader in The Walter and Eliza Hall Institute. He is also adjunct associate professor at La Trobe University, Melbourne. Furthermore, he is an editorial board member in Cell Death & Differentiation Journals and reviewing editorial board in Science Signalling Journals. Lastly, he is also a consultant in Anaxis. He has 168 publications with H-Index 65.

Abstract

TNF - "Quid Custos Ipsos Custodiet" Juvenal - Who Will Guard the Guards

Tumor necrosis factor (TNF) is an inflammatory cytokine that, upon binding to its receptor TNFR1, can drive cytokine production, cell survival, or cell death and is a major component of an organism's anti-pathogen repertoire. It is a major guardian against infection, but when its regulation goes awry it can result in chronic inflammatory diseases that are a huge health burden. My lab tries to understand, using a combination of genetics and molecular biology, how TNF signalling is regulated with the hope that this will lead to new therapeutic opportunities. In the first part of my talk I will discuss a recently published study¹ describing a new auto-inflammatory syndrome that results from loss of one level of regulation. And in the second I will discuss unpublished work that has led to the identification of a new type of post-translational modification that limits the ability of TNF to induce cell death and which may help it guard against viral infections, including coronavirus.

¹Lalaoui et al, 10.1038/s41586-019-1828-5; Mutations that prevent caspase cleavage of RIPK1 cause autoinflammatory disease, Nature 2020.





Prof. Takayuki Arai

Prof. Takayuki Arai was born on November 12, 1966. He pursued his undergraduate education at Faculty of Science and Technology, Sophia University. He then continued his education at Faculty of Science and Technology, Sophia University. Currently, he is a professor at the Department of Information and Communication Sciences, Sophia University, 7-1 Kioi-cho, Chiyoda-ku, Tokyo, Japan. He is also a member of academic societies such as International Speech Communication Association (ISCA), The Institute of Electrical and Electronics Engineering (IEEE), The Institute of Electronics, Information and Communication Engineers, Japan (IEICE), The

Acoustical Society of America (ASA), The Acoustical Society of Japan (ASJ), etc.

Abstract

What is a Speech Chain and How Can This Concept Be Applied to the Various Areas of Speech Communication in an Intelligent Society?

The concept of “Speech Chain” introduced by Denes and Pinson is widely used to interpret speech communication systems. The concept was originally aimed at human speech communication: a speaker first forms a message in his/her brain, the message is transformed into an acoustic signal that is sent to a listener, and the listener decodes the signal back into the original message. This simple situation can be extended to many scenarios. The acoustic signal can be fed into a telephone and transmitted over a telephone network. In human-computer communication, the speaker can be a speech synthesis system or the listener can be an automatic speech recognition system. For people who have lost the ability to talk, a speech synthesis system can improve their quality of life, and for people who have impaired hearing, an automatic speech recognition system can be a saviour. Communication with others is crucial as we live with other people in a society. As societies transform into intelligent societies, it is even more important to investigate speech communication systems from a scientific point of view and develop relevant applications in accordance with scientific findings. In this talk, the speech production mechanism will first be reviewed by using a set of vocal-tract models. Then, Speech Chain variations will be introduced for various areas in speech communication. Finally, application of the Speech Chain concept to an intelligent society through our “My Voice” project will be shared.

Keywords: Speech Chain, Speech Communication, Speech Production, Speech Perception, Vocal-tract Models, My Voice Project





Prof. Young Ho Kim Ph.D.

Prof. Young Ho Kim Ph.D. is a Professor College of Pharmacy in Chungnam National University, Daejeon 305–764, Korea.. He completed all of his education in College of Pharmacy, Seoul National University, Korea. He received several awards, such as Gasan Kwangdong Haksooldaesang in 2019, Good Teacher's Award (Chungnam National University) in 2018, and Haksooldaesang (Korean Society of Pharmacognosy) in 2016. He has 675 papers published and HIndex Scopus 66

Abstract

Bioactive Components from Ginseng-Like Medicinal Plants

Ginseng-like medicinal plants worldwide and plant-originated adaptogens have very similar phytochemical and pharmacological properties. Several members are belonging to the Araliaceae, the ginseng family of flowering plants, and economically very important in Asian country including Korea, Japan and China. In our ongoing research for Araliaceae family plants, we focused on the phytochemical constituents and their pharmacological activities from *Panax ginseng*, *Acanthopanax koreanum*, *Kalopanax pictus* and *Dendropanax morbiferus*.

P. ginseng is a perennial plant and popular traditional herbal medicine that has been used to increase vitality, prolong life, enhance the resistance of the human body and have various beneficial effects, such as anti-fatigue, anti-stress, anti-anxiety, anti-inflammatory, and anti-depression. From the several parts of ginseng roots, leaves and flower buds, many new dammarane-type saponins were isolated and evaluated on pharmacological activities including effects on the intracellular radical scavenging, the growth of HL-60 human leukemia cells, the lipopolisaccharide (LPS)-induced interleukin (IL)-12 production in bone marrow-derived dendritic cells, and the myocyte contraction, respectively.

A. koreanum is an indigenous plant in Korea and used for arthritis, rheumatism, lameness, high blood pressure and as a tonic. Several pimarane-type diterpenoids and lupane-type triterpenoids were isolated from roots, stems and leaves of *A. koreanum*. They were tested inhibitory effects on the LPS-stimulated production of pro-inflammatory cytokines in bone marrow-derived dendritic cells.

K. pictus is a deciduous tree growing in East Asian countries. The stem bark of *K. pictus* has been used in traditional medicine to treat rheumatic arthritis, neurotic pain, and diabetes mellitus. The anti-inflammatory activity of isolated compounds was evaluated through inhibition of a TNF α -induced NF- κ B luciferase reporter and by attenuation of TNF α -induced pro-inflammatory gene (iNOS and COX-2) expression in HepG2 cells.

D. morbiferus, an endemic species in South Korea, has been used as an alternative traditional medicine for several diseases, such as headache, dysmenorrhea, infectious disorders, and skin disorders, for a long time. The extract of *D. morbiferus* leaves significantly inhibited tyrosinase activity and melanin formation in MSH-induced B16-F10 cells. It reduced melanogenesis-related protein levels, such as microphthalmia-associated transcription factor (MITF), TRP-1, and TRP-2, without any cytotoxicity

This report provides scientific support to the therapeutic use of ginseng-like medicinal plants and rationale for further studies on the application of these medicinal plants and their chemical components in medical use.





Ferry Sandra

Ferry Sandra is a lecturer in Faculty of Dentistry, Trisakti University and an adjunct lecturer at the Faculty of Pharmacy, Padjadjaran University as well as the Faculty of Medicine, University North Sumatra. Apart from being a lecturer, he is also the editor in chief of the Indonesian Journal of Cancer Chemoprevention and a consultant at Prodia. He pursued his undergraduate education in Dentistry, University of Indonesia. Then, he continued his education at Oral and Maxillofacial Surgery, Kyushu University and Molecular and Cellular Biochemistry, Kyushu University. He has published 80 scientific papers over the last 10 years.

Abstract

Development of Dental Pulp Stem Cell and Its Application

Role of dental stem cells continues throughout life. The stem cells do not play a role in tooth development merely, but in tooth homeostasis and repair as well. Several types of dental stem cells, including dental pulp stem cell (DPSC), stem cell from apical papilla (SCAP), stem cell from exfoliated deciduous teeth (SHED), periodontal ligament stem cell (PDLSC) and stem cell from dental follicle (DFSC) have been investigated. Among these stem cells, DPSC is of the most well investigated. DPSC has been suggested as valuable seed cells for various pulp tissues regeneration, including blood vessels, nerves and hard tissues. Isolated DPSC was reported to express cluster of differentiation (CD)117, and have a high growth rate. However in the dental pulp regeneration, besides the stem cell, the tissue regeneration would also require infection control and biomaterial/scaffold. Infection could induce inflammatory signalling which would down-regulate the differentiation capacity of DPSC. Therefore the inflammatory signalling should be inhibited, so that the capacity of DPSC could be restored. Biomaterial as an important aspect, have been developed so that high numbers of DPSC could be produced and delivered at the targeted area/tissue. Exploration of the natural and synthetic biomaterials have been reported so far. Besides the dental pulp regeneration, DPSC has been explored to form/regenerate other tissues, in the dental surrounding or even distance parts. In bone regeneration, DPSC could form bone nodule on the third week culture. This highly bone forming capacity should be useful for articular or even maxilla/mandible regeneration. Due to its high capacity in nerve regeneration, DPSC has been developed to produce nerve tissue, including facial nerve and inner-ear hair cell. In the clinical trial scheme, DPSC is being investigated for treatment of acute Ischemic stroke. And due to current pandemic situation, DPSC is also being investigated for its safety and efficacy on severe COVID-19 cases.





Prof. Susy Tjahjani

Prof. Dr. Susy Tjahjani, dr., M.Kes was born on Bandung, 5 September. She pursued her undergraduate education in Medicine, Maranatha Christian University. Then, she continued her education at Padjadjaran University. Currently, she is a professor in Parasitology at Medical Faculty, Maranatha Christian University. Apart from professor, she also appointed as Chair of Maranatha Christian University Senate, assessment team for lecturer/assistant professor/associate professor/promotion, research reviewer of LLDikti IV and Maranatha Christian University,

and assessment team of BKD. She has published 3 books. Her latest book was published in 2020 with the title: Penelitian Biomedik dan Ilmu Kedokteran (Book Chapter). She has also published 18 scientific articles in journal over the past 10 years.

Abstract

Free Radicals and Antioxidants in Covid-19

Covid-19 is an acute infection via droplets into respiratory tract which causes pandemic condition and might go to severe disease attacking multiple organ. Its pathogenesis is closely related with hyperinflammatory, oxidative stress, and hemoglobinopathy condition and these ones are very closely correlated each other. This review might have a benefit in considering anti oxidant in the study of handling covid-19. Ineffectiveness of the respiratory system by invasion of the virus via ACE2 receptor which is rich in pneumocyte 2 is not only caused by the destroyed alveolar cell but also from the AT2 overproduction which causes hyperinflammatory condition as well as oxidative stress. Overproduction of AT2 is caused by ACE2 binding with viral spike protein which reduces ACE2 activation and inhibits conversion of AT2 to other type of angiotensin (angiotensin 1-7). AT2 binds to AT1R and stimulates NADPH oxidase to produce anion superoxide and it continues to produce mitochondrial ROS and damages mitochondria so that very little ATP to be produced. AT2 is also a potent proinflammatory mediator and might stimulate prostaglandin and VEGF to increase vascular permeability, and also might upregulate adhesion molecules (VCAM 1, P-selectin, and ICAM 1) on vascular endothelial cells and smooth muscle cells, activate monocytes to adhere, stimulate TNF alpha, IL6, IL8, ROS production. The ROS might activate also NF- κ B with further detrimental impact i.e. endothelial as well as organ dysfunction.

On the other side Covid might cause hemoglobinopathy leading to inefficient hemoglobin in transporting oxygen and also might release toxic free iron and produce ROS. Several antioxidants including natural ones are very interesting and might work against this oxidative stress in various mechanism of action such as a direct scavenger, via Nrf2 etc. The role of pro-oxidant and antioxidant in Covid-19 would be present in this seminar.

Key words: Covid-19, oxidative stress, antioxidants



ICEHUMS



Prof. Dr. Pim Martens

Born in June 29, 1968 at Heerlen, The Netherlands, Prof. Dr. Pim Martens has a PhD in applied mathematics and anthrozoology and holds the chair 'Sustainable Development' at Maastricht University. He is the Founding Director of the Maastricht University Graduate School of Sustainability Science (MUST), and initiated the M.Sc. program Sustainability Science and Policy. Prof. Martens is project-leader and principal investigator of several projects related to sustainability science and education, in the context of human-animal relationships, and environmental (climate) change and health. Pim Martens is member of the Editorial Boards of the scientific journals BioScience,

Sustainability: The Journal of Record, and Current Opinion in Environmental Sustainability. Furthermore, he serves as a member of the Advisory Board of the Life Science Zurich Graduate School, the Advisory Board (StAB) of the Natural Resources Institute in Finland, and the Executive Board House of Animals. For 9 years, he has been the director of the International Centre for Integrated assessment and Sustainable development (ICIS), Maastricht University, and was member of the Dutch Health Council. Finally, Dr. Martens is a Fulbright New Century Scholar within the programme 'Health in a Borderless World' and winner of the Friedrich Wilhelm Bessel-Forschungspreis. Pim Martens has been a Leverhulme professor at Aberystwyth University, Wales, a research professor at ETH Zürich, Switzerland and Leuphana University Lüneburg (Germany), and visiting scholar at the London School of Hygiene and Tropical Medicine (UK), Harvard University (USA), Heidelberg University, (Germany), ETH Zürich (Switzerland), Aberystwyth University (Wales), Leuphana University Lüneburg (Germany), and Shandong University (China).

Abstract

Our Sustainability Challenges: Climate Change, Biodiversity and Health for All

Our dominant current socio-economic and political systems have become decoupled from the larger ecology of life, and our relationship with our natural environment and the animals within has changed dramatically. This has led to various outbreaks of vector-borne and zoonotic diseases – with COVID-19 as the hard lesson learned (or not?). In this lecture, Pim Martens, Professor of Sustainable Development at Maastricht University, will discuss the complexities and connections between our own well-being and that of the animals with whom we live, and global environmental changes like climate change and biodiversity loss.





Dr. Dwinita Larasati, S.Sn., M.A

Born in Jakarta, 28 December 1972, Dr. Dwinita Larasati, S.Sn., M.A is a industrial designer, lecturer, researcher at Man & Industrial Product Design Research Group, Industrial Design Program, Faculty of Art and Design, Institut Teknologi Bandung (ITB), Indonesia. She pursued her undergraduate education at Design, Industrial Design Department, Institute of Technology Bandung (ITB), Indonesia in 1991-1997. She continued her master's education in Design Research / Industrial Design, Postgraduate Program, The Design Academy, Eindhoven, The Netherlands in 1998-1999. She pursued her doctoral education at Delft University of Technology, The Netherlands and graduated in 2007. She has published 12 journals and is now an Advisory Council Member in West Java Creative Economy & Innovation Committee (KREASI Jabar).

Netherlands in 1998-1999. She pursued her doctoral education at Delft University of Technology, The Netherlands and graduated in 2007. She has published 12 journals and is now an Advisory Council Member in West Java Creative Economy & Innovation Committee (KREASI Jabar).

Abstract

Co-Designing Our Common Future: from Sporadic Activism to Strategic Actions

In growing dense urban areas, community development mainly attempts to cope with issues around population growth and its impacts, such as disparity, poverty, access to basic services and infrastructure, mobility, solid waste management, and matters related to environmental qualities. In the case of Bandung City, whose dynamics are determined by its youth that dominates the demography, community development has taken various shapes; among which are initiatives that created numerous prototypes of urban solutions, which eventually managed to influence regulations and government policy at the city level. These practice-based improvements have led to the formulation of methods and concepts that keep being adjusted for acuity and relevance. This discussion covers the process of how a cross-community forum in Bandung utilises design thinking method and urban acupuncture concept in intervening public spaces and in conducting participatory development; how it maps crucial stakeholders to achieve common goals; and how its actions have elevated to another level, when the forum grew into a national-level hub that also contributes to the creative economy sector at the global level.





Prof. Chien-Hsu Chen Ph.D

Prof. Chien-Hsu Chen Ph.D is a professor at Industrial Design Department College of Planning and Design National Cheng Kung University, Taiwan. He completed his undergraduate education at Industrial Design National Cheng Kung University Taiwan. He continued his education at Computer and Information Syracuse University, NY, U.S.A and Industrial Engineering The University of Texas at Arlington, TS, U.S.A. He was once a Director General of Technology Transfer and Business Incubation Center (2017-2020). His areas of research is Interaction Design, Ergonomics and Design, and Augmented

Reality Application.

Abstract

Creative a Conceptual Design Thinking with Three Design Disciplines

Designers create product or service to satisfy customer needs and improve daily living conditions through a creation process. Conceptual design is essentially a creation process on early-stage design. This talk is going to explore the three design disciplines from product design, interaction design and service design perspective into the conceptual design process to promote creativity. We would like to create a processing of thinking to extend designers' creativity as an extension of their design. for better understanding of the creativity and creative process, the internet of things (IOT) design issue will be used to demonstrate how this thought can work on design concept.





Prof. Dr. Wilson Bangun, S.E., M.Si.

Prof. Dr. Wilson Bangun, S.E., M.Si was born in Batukarang (Karo-North Sumatra), January 31, 1964. He is a professor at Faculty of Economics, Maranatha Christian University. He also a President of the Senate in Faculty of Economics, Maranatha Christian University and Professor Forum Leader in Maranatha Christian University. He pursued his undergraduate education at the HKBP Nommensen University, Medan (1989) and continued his master education at the University of North Sumatra, Medan (1999). He then continued his doctoral education at Padjadjaran University, Bandung and graduated in 2005. He has published five books, and his most recent book is *Pembangunan Sumber Daya Manusia: Teori dan Kasus di Indonesia dan Negara-Negara Asean Lainnya*, which published in 2021.

Abstract

Human Resource Development: a Study in Indonesia on ASEAN

Human Resource Development is a process to improve the ability (knowledge and skills) to increase individual productivity in contributing to the prosperity of a countries society. Indonesia is currently focusing on Human Resource Development to solve development problems in realizing Indonesian 2045 vision, namely to become a developed country, prosperous people, sovereign, just and prosperous. One of the government's programs is to improve the quality of human life. President Joko Widodo was speech at the MPR-RI Annual Session, August 16, 2018 emphasized that Human Resource Development is an investment to the nation's future towards advanced Indonesia. Human Resource Development is a performance measure for a country through a three-dimensional approach: a long life, healthy, knowledge, and a decent life and each dimension is represented in each indicator. Various indicators in Human Resource Development in Indonesia show progress but are still below some countries in Southeast Asia. To meet human needs through the development process from various aspects, such as the construction of relevant facilities and infrastructure. The purpose of development is to create and adapt it to the environment to achieve well-being. Human Resource Development is expected to improve the quality of work to improve the welfare of the people of a country.

Keyword: Human Resource Development, long life, healthy, knowledge, decent life





Prof. Marcellia Susan

Prof. Marcellia Susan studied undergraduate education at the Faculty of Economics, Department of Management, Parahyangan Catholic University, Bandung. She continued her education at the Faculty of Engineering and Industrial Management, Department of Industrial Management, Bandung Institute of Technology and Doctoral Program in Business Management, Padjadjaran University, Bandung. Currently, she is a professor in Management Science at the Faculty of Economics, Maranatha Christian University, Bandung.

Abstract

Sustaining MSMEs: the Role of Financial Literacy

The economic growth of a country is supported by Micro, Small, and Medium Enterprises (MSMEs), especially for developing countries. In running their businesses, MSMEs need to make various business decisions. Some business decisions may affect the potential growth and the success of a business. The lack of MSMEs' financial knowledge often results in challenges in their operating, financing, and investing decisions. Proper financial decision-making requires an understanding of finances and the ability of money management. Ultimately, MSME owners/managers with substantial financial literacy would be able to sustain their business by managing financial resources through utilizing financial knowledge and skills



Technical Parallel Session

ICETES

ROOM A – Thursday, 1 July 2021, 10:30-12:00 WIB

Topic 1: Artificial Intelligence, Big Data, IoT, Robotics, Multimedia and Game

ABS-037

Naïve Bayes Classification of Nominal Value Detection System with Entropy, Contrast, Correlation, Energy, Homogeneity and Rupiah Paper Legality Detection, 2004-2021 RGB

Ratnadewi Ratnadewi¹, Aan Darmawan Hangkawidjaja², Agus Prijono³, Rudy Wawolumaja⁴, Kartika Suhada⁵, Maria Christine Sutandi⁶, Andrew Sebastian Lehman⁷, Elty Sarvia⁸, and Kervin Lusiano⁹

^{1,2,3,9}Department of Electrical Engineering, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia

^{4,5,8}Department of Industrial Engineering, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia

⁶Department of Civil Engineering, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia

⁷Department of Computer Engineering, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia

*Corresponding author: ratnadewi@maranatha.ac.id

Keywords: Naïve Bayes, Entropy, Contrast, Correlation, Energy, Homogeneity, RGB

Abstract: Money is one of the objects used by the public to carry out legal buying and selling transactions in a country. The problem is there are fake bills that are printed by irresponsible people, so everyone needs to be able to know that the banknotes received is fake or genuine. But not everyone can detect the authenticity of a banknote, so a tool is needed to detect the banknote is genuine or fake. In this paper, software has been designed to detect the authenticity of Indonesian currency (IDR). On the other hand, blind people also need a tool to find out the nominal value of banknotes received, so that an assistive device is also made to detect the nominal value of banknotes. In this paper, feature extraction of the gray level co-occurrence matrix with the features of entropy, contrast, correlation, energy and homogeneity is used to detect the nominal value of Indonesian banknotes and to detect the validity of Indonesian banknotes; the extraction of red-green-blue (RGB) features with features is used mean R, mean G and mean B. The detected Indonesian currency (IDR) was Indonesian currency (IDR) from 2004-2016, with nominal values of Rp. 1000, Rp. 2000, Rp.5000, Rp. 10000, Rp. 20000, Rp. 50000, and Rp.100000. The classification process uses Naïve Bayes. From the test results, the system works well for reading the nominal value of Indonesian banknotes and detection of the validity of the money can function properly.



ABS-047

Comparative Study of Convolutional Neural Networks-Based Algorithm for Fine-Grained Car Recognition

Joseph Sanjaya¹, Mewati Ayub¹ and Hapnes Toba¹

¹Faculty of Information Technology, Maranatha Christian University, Jl.Prof.drg. Surya Sumantri 65, Bandung, Indonesia

*Corresponding author: mewati.ayub@it.maranatha.edu

Keywords: Convolutional Neural Networks Model, Object Recognition, Vision Machines.

Abstract: The use of the Deep-Learning model for object recognition in vision machines has been widely applied. Convolutional Neural Network (CNN) is one of the algorithms which has achieved a significant progress in object recognition task. An algorithm that has good accuracy and speed is required to recognize a car specification. This research presents a comparative study of several CNN models for car recognition. This study is a continuation of previous study about data augmentation in car image recognition using ResNet architecture. In this study, the CNN architectures used in comparison are ResNet, SqueezeNet, and EfficientNet. The same dataset from previous study was utilized in this study. The aim of this study is to find an architecture with optimal performance in car recognition. The dataset used is a Cars Dataset provided by Stanford University. The methods consist of data pre-processing, model training and hyper parameter tuning, inferences and comparison. The metrics used are accuracy, model size, and speed. Training of each model was performed using computer with the same specification. The experimental results indicate that SqueezeNet model has the lowest model size and speed so that it is suitable for vehicle detection in real time. EfficientNet model gives the best result among other models in the context of accuracy, model size, and speed.



ABS-063

Estimation of Paddy Leaf Nitrogen Status Using a Single Sensor Multispectral Camera

Muliady Muliady¹, Tien Sze Lim², Voon Chet Koo², and Nathaniel Pius Winata¹

¹*Department of Electrical Engineering, Universitas Kristen Maranatha, Bandung, Indonesia*

²*Faculty of Engineering and Technology, Multimedia University, Malacca, Malaysia*

**Corresponding author: muliady@eng.maranatha.edu*

Keywords: Paddy Leaf Nitrogen Status, Single Sensor Multispectral Camera, Normalized Difference Vegetation Index (NDVI), SPAD Meter, Regression

Abstract: Rice consumption will be increased by 26% in the next 25 years since 2010. The common practice to achieve high rice production is fertilizing the paddy with a proper quantity of nutrients, especially nitrogen (N). A lot of previous researches were done to estimate the paddy N status, starting from using a simple Leaf Color Chart (LCC) to high technology hyperspectral images taken from a satellite. This research used a MAPIR Survey3 multispectral camera, which is affordable and gives the advantage of a quick and efficient practice. The problem came out due to the impossible to fully separate the spectral channels of the images, which causes low accuracy and imprecise data. This research objective is to correct the data by relating it with a SPAD meter. A total of 75 paddy plants were sampled in the panicle initiation stage from two paddy fields located at Margaasih and Cimahi, Jawa Barat, Indonesia. The Normalized Difference Vegetation Index (NDVI) for each image was calculated after calibrated, cropped, and segmented. The result is a regression of a 2nd order equation with 6.96% of mean error. The regression equation was used to create a SPAD color map to estimate the paddy leaf N status.



ABS-065

Taekwondo Poomsae-3 Movement Identification by using CNN

Novie Theresia Br. Pasaribu¹, Erwani Merry¹, Kalya Icasia¹, Jordan Eliezer¹,
Che-Wei Lin², Febryan Setiawan²

¹ Bachelor Program in Electrical Engineering, Universitas Kristen Maranatha, Jl. Prof. drg. Surya Sumantri,
MPh no. 65, Bandung, Indonesia

² Department of Biomedical Engineering, College of Engineering, National Cheng Kung University,
Tainan 701, Taiwan

*Corresponding author: novie.theresia@eng.maranatha.edu

Keywords: Taekwondo, Poomsae, OpenPose, Convolutional Neural Network (CNN)

Abstract: Taekwondo competition consists of three elements: Poomsae, sparring, and breaking. Poomsae is a set of movements consisting of punches and kicks and focuses on technique, breathing ability, balance, coordination and concentration. OpenPose is a library that can represent the human body, whether it's body, head, hands or feet. OpenPose is widely used in research related to the classification of human movement. This research will analyze the effect of OpenPose as an input for the identification of Taekwondo movements, especially in Poomsae-3 using a CNN. The image data of taekwondo movements were taken from video recordings. In this research, three types of classification models were designed to identify taekwondo movements, Model-1 with input in the form of taekwondo movement images, Model-2 with input in the form of taekwondo movement images and OpenPose, and Model-3 with input in the form of OpenPose. From the test results, Model-3 with input in the form of an OpenPose keypoint obtained the best accuracy results (amounting to 99.39%) compared to Model-2 (97.68%) and Model-1 (79.86%). For further research development, the identification of taekwondo movements can be done for input in the form of video, and analysis of the significant keypoints for the taekwondo movement.



ABS-076

Design and Implementation of a Path Finding Robot Using Modified Trémaux Algorithm

Semuil Tjiharjadi¹

¹Department of Computer System, Maranatha Christian University, Jl. Suria Sumantri 65, Bandung, Indonesia

*Corresponding author: semuiltj@gmail.com

Keywords: Trémaux algorithm, maze, pathfinding, Manhattan distance

Abstract: Using a robot to find a path to achieve a target location in an unknown maze requires a robot that can explore the maze and determine the direction of the intersection in the maze. The robot must map the maze, determine a route and try to reach its destination as fast as possible through the closest path. Trémaux algorithm is one of the maze solver algorithms that is used to explore a maze and its use to find a way out of the maze, meaning that this algorithm is designed for purposes that are on the edge of a maze and not in the middle of a maze. For this reason, Trémaux algorithm was modified by adding the Manhattan Distance algorithm to improve the ability of the robot to find targets in the middle of the maze. Using the Manhattan Distance algorithm made able to make better decisions compare to Trémaux random decision at branch position. The application of a combination of these three algorithms to the robot enables the robot to have the ability to search for paths in an unknown maze environment. The robot uses ultrasonic sensors to detect the walls of the maze and search for a path in the maze which is designed to have a size of 5 x 5 cells. After the robot explores and manages to map the path in the maze, the shortest path can be found to reach the target location. The success rate for the robot to explore and map the maze and find the shortest path to the destination is dramatically increased using a modified Trémaux algorithm.



ABS-091

Priority Petri Net Multimedia Model for Non-Deterministic Events of Multimedia Presentations

Marvin Chandra Wijaya¹

¹Departement of Computer Engineering, Maranatha Christian University, Jl. Suria Sumantri 65, Bandung, Indonesia

*Corresponding author: marvinchw@gmail.com

Keywords: Petri Net, Multimedia Model, Multimedia Authoring, Non-Deterministic Event.

Abstract: Nowadays, the use of multimedia for presentation needs has been widely used by various parties. Multimedia authoring translates the input data in the form of spatial and temporal layouts into a multimedia document. Multimedia documents are in the form of multimedia programming languages such as Synchronized Multimedia Integration Language. One of the problems in this translation process is the existence of a non-deterministic event which makes the translation process difficult. The objective of this study is to find a good method for translating multimedia authoring where the input is given has non-deterministic events and priority based on user input. The multimedia model needs to be modified to anticipate non-deterministic events in the temporal layout. In this study, a method called Priority Petri Net is proposed which is applied to a multimedia model. The results on multimedia authoring using the Priority Petri Net model obtained good results. However, the translation process takes a little longer time than using the regular Petri Net model. The use of the Priority Petri Net model makes the translation process better. Future research can be carried out by making various modifications to the multimedia model to obtain a good process and fast processing time as well.



ROOM B – Thursday, 1 July 2021, 10:30-12:00 WIB

Topic 2: Bio informatics, Medical and Veterinary Science

ABS-005

Anti-inflammatory Activities of Pineapple (*Ananas comosus*) Core Extract in Lipopolysaccharide-induced RAW264.7 Cell Line

Hanna Sari Widya Kusuma¹, Hartini Tiono², Philip Onggowidjaja², Selonan Susang Obeng², Wahyu Widowati^{2*}, Cintani Dewi Wahyuni¹, Cahyaning Riski Wijayanti¹, Muhamad Aldi Maulana¹, Tri Handayani¹, Rizal Rizal^{1,3}

¹ Biomolecular and Biomedical Research Center, Aretha Medika Utama, Jl. Babakan Jeruk II No. 9, Bandung 40163, West Java, Indonesia

² Faculty of Medicine, Maranatha Christian University, Jl. Prof. Drg. Surya Sumantri No. 65 Bandung 40164, West Java, Indonesia

³ Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Jl. Kampus UI, Depok 16426, West Java, Indonesia

*Corresponding Author: wahyu_w60@yahoo.com

Keywords: Anti-inflammatory; IL-1 β ; Pineapple; RAW 264.7 cell lines

Abstract: Inflammation is a biological response process by the immune system that may induce acute/chronic inflammatory and leading tissue damage or diseases. The effect of inflammation in the body is mediated by pro-inflammatory cytokines such as prostaglandin 2 (PGE-2), tumor necrosis factor (TNF)- α , interleukin (IL)-1 β . Pineapple (*Ananas comosus*) cores contain luteolin and bromelain compounds that have been investigated for anti-inflammatory properties and immunomodulator. This research aims to evaluate the anti-inflammatory potency of pineapple core extract (PCE) in lipopolysaccharide-induced macrophage cells (RAW 264.7). The viability assay of PCE was determined by MTS (3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulfophenyl)-2H-tetrazolium) to ensure the safe and non-toxic concentration in RAW 264.7 cells. The pro-inflammatory induction of RAW264.7 cell lines using 200 μ L of lipopolysaccharide (LPS). Levels of PGE-2 and proinflammatory cytokines IL-1 β and TNF- α levels were measured using enzyme-linked immunosorbent assay (ELISA). The treatment of PCE in LPS-induced RAW264.7 cells using some various concentrations were 4, 20, and 100 μ g/mL, negative control (untreated cells) and positive control (LPS-induced RAW264.7 cells). Both PCE 4 and 20 μ g/mL showed high viability (>90%) with the values 95.03 % and 92.94 %, respectively. In anti-inflammatory activities. PCE 20 μ g/mL showed the lower of PGE-2 level (507.68 pg/mL) compared to PCE 4 μ g/mL (795.37 pg/mL) and positive control (870.48 \pm 39.54 pg/mL). In TNF- α , PCE at concentration 20 μ g/mL showed the lower (345.90 pg/mL) compared to PCE 4 μ g/mL (474.19 pg/mL) and positive control (581.71 pg/mL) ($p < 0.05$), whilst in IL-1 β level PCE 20 μ g/mL showed the lower (217.63 pg/mL) compared to PCE 4 μ g/mL (350.78 pg/mL) and positive control (433.53 pg/mL). Pineapple core extract has beneficial for anti-inflammatory by downregulating inflammatory mediators including PGE-2, TNF- α , and IL-1 β in LPS-induced RAW 264.7 cell line.



ABS-008

Potential of Black Tea (*Camellia Sinensis* (L.) O. Kuntze) Extract as Anti-oxidant, Skin Anti-aging

Wahyu Widowati^{1*}, Rita Tjokropranoto¹, Cindy Damayanti¹, Hanna Sari Widya Kusuma²,
Tri Handayani², Rizal Rizal^{2,3}

¹*Faculty of Medicine, Maranatha Christian University, Jl. Surya Sumantri No. 65, Bandung 40164, West Java, Indonesia*

²*Biomolecular and Biomedical Research Center, Aretha Medika Utama, Jl Babakan Jeruk II No. 9, Bandung 40163, West Java, Indonesia*

³*Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Depok 16426, West Java, Indonesia*

*Corresponding author: wahyu_w60@yahoo.com

Keywords: Black tea, Anti-oxidant, Anti-aging, Free Radicals, Collagen

Abstract: Skin aging is characterized by features such as wrinkling, loss of elasticity, laxity, rough textured appearance, and phenotypic changes in cutaneous cells as well as structural and functional changes in extracellular matrix components such as collagen and elastin. Skin aging treatment usually with a synthetic compound with unknown side effect but with herbal such as black tea, these side effect will be minimalized. This research was conducted to evaluate the qualitative phytochemical screening assay, total phenolic and flavonoid contents, anti-oxidants, and skin anti-aging properties of black tea extract (BTE). This qualitative phytochemical content using the Farnsworth modified method. Total phenol content calculated using gallic acid equivalent (GAE), and total flavonoid content calculated using quercetin equivalent (QE). The anti-oxidant properties using 2,2 diphenyl 1 picrylhydrazyl (DPPH), 2,2'-Azinobis(3-Ethylbenzthiazoline-6-Sulfonate) (ABTS), hydrogen peroxide (H₂O₂) scavenging activities. The anti-aging properties were assayed using elastase and collagenase inhibition activities. The anti-oxidant properties of H₂O₂, ABTS, and DPPH scavenging activities and skin anti-aging of anti-elastase and anti-collagenase activities were calculated based on the median Inhibitory Concentration (IC₅₀). BTE contained terpenoids, triterpenoids, phenols, flavonoids, tannins. BTE contained phenol 52.81 µg GAE/mg, flavonoids 10.96 QE/mg. The IC₅₀ value of DPPH, ABTS, H₂O₂ scavenging activities was 15.29; 88.18; 17.21 µg/ml respectively. The IC₅₀ value of elastase and collagenase inhibition were 31.34; 123.74 µg/ml respectively. BTE has very active and active anti-oxidant and very active and moderate skin anti-aging activities.



ABS-009

Luteolin Possess Anti-Inflammatory Effect on LPS induced RAW 264,7 Cell Lines

Ervi Afifah¹, Hartini Tiono², Philips Onggowidjaja², Selonan Susang Obeng², Wahyu Widowati^{2*}, Cintani Dewi Wahyuni¹, Cahyaning Riski Wijayanti¹, Muhammad Aldi Maulana¹, Tri Handayani¹, Rizal Rizall³

¹*Aretha Medika Utama, Biomolecular and Biomedical Research Center, Jl. Babakan Jeruk 2, No. 9, Bandung, West Java, Indonesia 40163*

²*Faculty of Medicine, Maranatha Christian University, Jl Prof Drg Surya Sumantri No 65 Bandung, West Java, Indonesia 40164*

³*Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Depok, West Java, Indonesia 16426*

**Corresponding author : wahyu_w60@yahoo.com*

Keywords : Luteolin, anti-inflammatory, PGE-2, TNF- α and IL-1 β .

Abstract : Inflammation is a natural human reaction to potentially harmful effects such as tissue stress, trauma, and microbial infection. Extended inflammation is believed related to several chronic conditions, involving asthma, rheumatoid arthritis and even cancer. To avoid immune cells from causing more tissue damage, inflammatory responses must be regulated. Anti-inflammatory agents are particularly beneficial for these purposes. Luteolin is flavonoid and has potent anti-inflammatory effects. The study aimed to determine anti-inflammatory effect of luteolin on LPS induced RAW 264,7 cell lines. The MTS assay was used to determine the viability of cells and the nontoxic concentration of cell lines. The anti-inflammatory activity was assessed with Elisa assay of inflammatory parameters including PGE-2, TNF- α , and IL-1 β using secreted cytokine levels in culture supernatants of RAW 264,7 cell line. The toxic concentration of luteolin was 100 μ M/mL, so that the concentration was not used for treatment. Concentrations of 4 and 20 μ M/mL demonstrated high viability (>90%), they were suitable for treatment. Luteolin 4 μ M/mL significantly increased the inhibition of inflammatory cytokines PGE-2, TNF- α and IL-1 β compared to positive control. The research reported that Luteolin possesses the anti-inflammatory effect indicated by properties of inflammatory inhibition toward PGE-2, TNF- α and IL-1 β .



ABS-029

The Effect of Different Intensities of Treadmill Exercise on FGF23 Gene Expression in Gastrocnemius and Soleus Muscles of Wistar Rats

Julia Windi Gunadi^{1,2}, Diana Krisanti Jasaputra^{2,3}, Decky Gunawan¹, Ludovicus Edwinanto⁴,
Kwee Limdawati⁵, Harijadi Pramono¹, Adrian Suhendra⁶, Ghita Sariwidyantry⁴, Hanna
Goenawan⁷, Ronny Lesmana⁸

¹*Department of Physiology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia*

²*Maranatha Biomedical Research Laboratory, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia*

³*Department of Pharmacology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia*

⁴*Department of Biochemistry, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia*

⁵*Department of Internal Medicine, Immanuel Hospital, Jl. Raya Kopo, Bandung, Indonesia*

⁶*Department of Clinical Pathology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia*

⁷*Department of Biomedical Sciences, Faculty of Medicine, Universitas Padjadjaran, Jl. Raya Jatinangor, Bandung, Indonesia*

⁸*Division of Biological Activity, Central Laboratory, Universitas Padjadjaran, Jl. Raya Jatinangor, Bandung, Indonesia*

*Corresponding author: julia.windi@maranatha.ac.id

Keywords: FGF23, treadmill exercise, gastrocnemius, soleus.

Abstract : Fibroblast growth factor 23 (FGF23) acts as a hormone that regulate phosphate metabolism associated with kidney function, and an inducer of left ventricle hypertrophy. But the role of FGF23 as a myokine has not yet to be confirmed. The aim of this research is to investigate the effect of different intensities of treadmill exercise on FGF23 gene expression in gastrocnemius and soleus muscles of Wistar rats. Twenty male wistar rats were given different intensities of treadmill exercise (low, moderate, and high) for as long as 8 weeks. FGF23 gene expression in gastrocnemius and soleus muscles were examined using semi quantitative PCR. In this study, we obtained no change of relative FGF23 mRNA expression in gastrocnemius muscles ($p = 0.684$) compared to control. But interestingly, we found a significant increase of relative FGF23 mRNA expression in soleus muscles ($p = 0.030$). These results showed that different intensities of treadmill exercise do not stimulate FGF23 gene expression in gastrocnemius muscles of Wistar rats. While low intensity of treadmill exercise does not increase FGF23 relative mRNA expression, moderate and high intensities of treadmill exercise increase FGF23 gene expression Wistar rat's soleus muscles



ABS-038

Antioxidant Properties of *Salacca zalacca* (Gaertn.) Voss Peel Ethanollic Extract Compared to Chlorogenic Acid

Ermi Girsang¹, Chrismis Novalinda Ginting¹, I Nyoman Ehrich Lister¹, Cahyaning Riski Wijayanti², Wahyu Widowati³, Rizal Rizal^{2,4}

¹Faculty of Medicine, Universitas Prima Indonesia, Jl. Belanga No. 1 Simp. Ayahanda, Medan 20118, North Sumatera, Indonesia

²Biomolecular and Biomedical Research Center, Aretha Medika Utama, Jl. Babakan Jeruk 2 no 9, Bandung 40163, West Java, Indonesia

³Faculty of Medicine, Maranatha Christian University, Jl. Surya Sumantri no 65, Bandung 40164, West Java, Indonesia

⁴Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Depok 16426, West Java, Indonesia

*Corresponding author: ermigirsang@unprimdn.ac.id

Keywords: Antioxidant, chlorogenic acid, flavonoid, phenolic, *Salacca zalacca*

Abstract: Oxidative stress from free radicals can cause a variety of chronic and degenerative diseases. The use of antioxidants from natural products is one of the breakthroughs. Residues and parts of non-edible fruits are believed to be a potential source of antioxidants because they are rich in polyphenols. *Salacca zalacca* (Gaertn.) Voss is one of the tropical fruits that have biological activities that are important for human health. This study aims to determine total phenol content (TPC) and flavonoid content (TFC), also the antioxidant activity of *Salacca zalacca* peel ethanollic extract (SEE) compared with chlorogenic acid (CGA). SEE was extracted by maceration method using 70% ethanol, then total phenolic and flavonoid content was measured and followed by 2,2'-azinobis-3-ethylbenzo-thiazoline-6-sulfonic acid (ABTS), H₂O₂, NO, OH scavenging, and ferric reducing antioxidant power (FRAP) assay to determine the antioxidant properties. The results showed that SEE TPC value is 6.97 µg GAE/mg extract and the TFC value is 3.92 µg QE/mg extract. The IC₅₀ value of ABTS, H₂O₂, NO, OH scavenging activity of SEE were 57.71; 103.84; 38.09; 27.77 µg/ml respectively compared to CGA 7.76; 13.07; 27.15; 13.71 µg/ml respectively. The FRAP activity of SEE, CGA respectively 240.08; 399.21 µm Fe(II)/µg at the highest concentration (50 µg/ml). SEE contain phenolic and flavonoid have antioxidant potential. However, SEE and chlorogenic acid as its compound has antioxidant properties through ABTS, H₂O₂, NO, OH scavenging activities and ferric reducing antioxidant power.



ABS-043

Analyse Protein Model of the SARS-CoV-2 Virus Using Data Mining Methods

Tiur Gantini¹ and Hans Christian²

^{1,2}*Department of Information Technology, Maranatha Christian University, Jl Suria Sumantri No.65, Bandung, Indonesia*

**Corresponding author: tiur.gantini@it.maranatha.edu*

Keywords: bioinformatics, data mining, J48, naïve bayes, WEKA

Abstract: The National Centre for Biotechnology Information (NCBI) located in Bethesda, Maryland, and was established in 1988 through sponsored by the government of the United States. The NCBI houses a series of databases relevant to biotechnology and biomedicine which are known as bioinformatics databases too. In 2005 was introduced the My NCBI tool, which retains user information and database preferences to provide customized services for many NCBI databases (Smith, 2019). Since December 2019, the SARS II Covid 19 virus pandemic worldwide, NCBI has also recorded information related to this virus in its database. This research focuses on identifying dataset the protein of the species Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), genus BETACORONAVIRUS, and family CORONAVIRIDAE from NCBI database by a data mining model using a classification based naïve Bayes and J48 algorithms which were recorded from December 1, 2019, to April 13, 2021, with 1.149.217 data. The dataset that has been cleaned is data of SARS II Covid 19 + virus in humans with a total record of 517.834 consisting of data on nucleotide length, nucleotide completeness, geographic location, and protein. This data used for the data training. Then we used 475 for data testing which chosen randomly. The result is the entire protein can be predicted using the J48 algorithm but cannot be predicted using Naïve Bayes. From the data mining results, it can be concluded that the best method that can be used to predict protein in humans affected by the SARS II Covid 19 + virus is the J48 algorithm than the Naive Bayes algorithm.



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ROOM C – Thursday, 1 July 2021, 10:30-12:00 WIB

Topic 2: Bio informatics, Medical and Veterinary Science

ABS-067

Antioxidant Properties of Soybean (*Glycine max*) Extract and Its Compounds

Didik Priyandoko^{*1}, Wahyu Widowati², Cintani Dewi Wahyuni³, Hanna Sari Widya Kusuma³, Rizal Rizal^{3,4}

¹ Faculty of Mathematics and Natural Sciences Education, University of Education Bandung, Jl. Dr. Setiabudi No. 229, Bandung, 40154, West Java, Indonesia

² Faculty of Medicine, Maranatha Christian University, Jl. Surya Sumantri no 65, Bandung 40164, West Java, Indonesia

³ Biomolecular and Biomedical Research Center, Aretha Medika Utama, Jl. Babakan Jeruk 2 no 9, Bandung 40163, West Java, Indonesia

⁴ Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Depok 16426, West Java, Indonesia

*Corresponding Email: didikpriyandoko@upi.edu

Keywords: Soybean extract, isoflavones, antioxidant, oxidative stress

Abstract: **BACKGROUND:** Free radicals caused oxidative stress in the body, which leads to various chronic and degenerative diseases. The negative effects of free radicals can be neutralized by natural antioxidants. Soybean (*Glycine max*) extract contains isoflavones that have several biological activities, including antioxidants. **OBJECTIVE:** This study aimed to determine the antioxidant activity of Soybean (*Glycine max*) extract (SE) compared with isoflavones. **METHODS:** Antioxidant activity of SE was evaluated using 2,2-diphenyl-1-picrylhydrazyl (DPPH), 2,2'-azinobis-3-ethylbenzo-thiazoline-6-sulfonic acid (ABTS), H₂O₂, NO, and ferric reducing antioxidant power (FRAP) assay. **RESULTS:** The results showed that IC₅₀ value of DPPH, ABTS, H₂O₂, NO, of SE were 246.51; 35.96; 289.41; 39.74 µg/mL respectively. While the IC₅₀ value of isoflavones were 71.37; 23.57; 259.50; 11.59 µg/mL respectively. The FRAP activity of SE and isoflavones were 196.89 and 177.78 µM Fe(II)/µg at the highest concentration of 50 µg/ml. **CONCLUSION:** Even though the antioxidant activity of SE is lower than isoflavones, SE still has antioxidant potential.



ABS-083

Significance of Antioxidant Properties of *Curcuma longa* L. and *Curcuma xanthorrhiza* rhizomes

Dian Ratih Laksmi¹, Diah Ika Pratami¹, Wahyu Widowati², Hanna Sari Widya Kusuma³,
Cahyaning Riski Wijayanti³, Cintani Dewi Wahyuni³, Ervi Afifah³, Rizal Rizal^{3,4}

¹Faculty of Pharmacy, Pancasila University, Jl. Raya Lenteng Agung No.56-80, Srengseng Sawah, Jakarta 12640, Indonesia

²Faculty of Medicine, Maranatha Christian University, Jl. Surya Sumantri no 65, Bandung 40164, West Java, Indonesia

³Biomolecular and Biomedical Research Center, Aretha Medika Utama, Jl. Babakan Jeruk 2 no 9, Bandung 40163, West Java, Indonesia

⁴Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Depok 16426, West Java, Indonesia

*Corresponding Author: dian.ratih@univpancasila.ac.id

Keywords: Antioxidant, *Curcuma longa* L., *Curcuma xanthorrhiza*, free radical, oxidative stress

Abstract: Oxidative stress can lead to tissue damage and result in disease or aggravate existing disease. To protect cells from damage caused by free radicals, antioxidants are needed. *Temulawak* (*Curcuma xanthorrhiza* L.) and turmeric (*Curcuma longa* L.) are natural ingredients with polyphenol compounds found in them. Polyphenols have antioxidants that can neutralize free radicals by donating an electron or hydrogen atom. This study aims to compare the antioxidant properties of temulawak extract (TLE) and turmeric extract (TE). The methods used in this research are total phenol content (TPC), total flavonoid content (TFC), 2,2-diphenyl-1-picrylhydrazyl (DPPH), 2,2'-Azinobis(3-Ethylbenzthiazoline-6-Sulfonate) (ABTS), hydrogen peroxide (H₂O₂), NO (Nitrogen Oxide) scavenging and ferric reducing antioxidant power (FRAP). **RESULT:** The results showed that the TPC of TE is 10.93 ± 0.05 µg/ml extract and TLE is 10.93 ± 0.05 µg/ml extract. The TFC of TE is 5.67 ± 0.37 µg/ml extract and TLE is 2.68 ± 0.46 µg/ml extract. DPPH method shows that IC₅₀ of TE is 300.87 and TLE is 197.50 µg/ml. The FRAP activity of TE, TLE respectively 493.75; 451.00 µm Fe (II)/µg at the highest concentration (50 µg/ml). The ABTS method shows that the IC₅₀ value of TE (39.19 µg/ml) is lower than TLE (82.55 µg/ml). The H₂O₂ method shows that IC₅₀ of TE is 86.83 mg/ml and TLE is 164.26 µg/ml. The NO scavenging activity method shows that IC₅₀ of TE is 88.03 µg/ml and TLE is 164.26 µg/ml. In conclusion, turmeric has higher antioxidant properties than temulawak, both turmeric and temulawak are potential natural antioxidants.



ROOM C – Thursday, 1 July 2021, 10:30-12:00 WIB

Topic 3: Dental Science and Advanced Dentistry

ABS-034

The Effect of Agarwood Leaves Ethanol Extract on *Porphyromonas Gingivalis* Growth Inhibition and in Vitro Cytotoxicity Assay on Fibroblast

Vinna Kurniawati Sugiaman¹, Henry Yonatan Mandalas², Ethan Yeshael Tanamal³, Nathalia Cahya Calista³, Natallia Pranata^{1*}

¹Department of Oral Biology, Maranatha Christian University, Bandung, Indonesia

²Department of Periodontology, Maranatha Christian University, Bandung, Indonesia

³Faculty of Dentistry, Maranatha Christian University, Jalan Prof. Suria Sumantri, Bandung, Indonesia

*Corresponding author: natallia.paranata@dent.maranatha.edu

Keywords: Aquilaria malaccensis Lamk., *Porphyromonas gingivalis*, Inhibition Assay, Fibroblast, Cytotoxicity.

Abstract: Periodontitis is an inflammatory disease of the tooth supporting tissue caused by microorganisms in the oral cavity, with *Porphyromonas gingivalis* as one of the main pathogens. Agarwood leaves (*Aquilaria malaccensis* Lamk.) has main chemical compound, namely flavonoid and several other compounds including alkaloids, tannins, saponins, and steroids / triterpenoids. These compounds play a role in antibacterial activity and can be used in the treatment of periodontitis due to *Porphyromonas gingivalis* infection. Other than that, the chemical compounds in *Aquilaria malaccensis* Lamk. also works as antioxidant and anti-inflammatory that could be used as wound healing agent. Wound healing is a complex process of reaction-interactions between various cells and mediators. Fibroblast as an important component in wound healing, works in supporting the normal healing process. Agarwood leaves cytotoxicity needs to be assessed before its clinical and pharmacological uses. It is necessary to examine the inhibitory ability of agarwood leaves ethanol extract against *Porphyromonas gingivalis* as periodontal pathogen so this study can be a reference for developing this material as an alternative treatment toward periodontitis. This was a laboratory experimental study post-test only control group design. Agarwood leaves were obtained from Ibum Garden, Majalaya District, West Java. Sample identified and determined by Biology Research Center, Lembaga Ilmu Pengetahuan Indonesia. Extraction and phytochemical test were conducted at Aretha Medika Utama BBRC Bandung and Balai Penelitian Tanaman Rempah dan Obat Bogor. Fibroblast ATCC 3T3 Balb/C obtained and cultured at Aretha Medika Utama BBRC Bandung. Cytotoxicity test was carried out by using MTS Assay method, and the results are adjusted to ISO 10993-5. IC₅₀ was obtained using PROBIT analysis. Inhibitions assay was carried out by well-diffusion method and the results are adjusted to Davis and Stout criteria. Research was carried out at Microbiology Laboratory Faculty of Dentistry, Universitas Padjadjaran. *Porphyromonas gingivalis* used in this study was ATCC 33277 and obtained by Microbiology Laboratory Faculty of Dentistry, Universitas Padjadjaran. Results were analysed with ANOVA. The results of inhibition assay indicate that the ethanol extract of agarwood leaves had weak inhibitory ability at a concentration of 1.56%, 3.13%, 6.25%, 12.50%, 25%, and 50% as well as moderate inhibition at a concentration of 100% against *Porphyromonas gingivalis*. The cytotoxicity results showed that the ethanol extract of agarwood leaves had no toxic effect at concentrations of 62.5 µg/mL, 31.25 µg/mL, 15.63 µg/mL, and 7.81 µg/mL. The highest percentage of fibroblast viability after treatment was at concentration of 7.81 µg/mL. The IC₅₀ was obtained using PROBIT analysis at a concentration of 215.54 µg/mL. Agarwood leaves had weak to moderate inhibitory ability on *Porphyromonas gingivalis* growth and had toxic effect towards fibroblast.



ABS-087

Comparison of Two Dental Age Estimation Methods: the London Atlas and the Schour & Massler Atlas in 3-23 Years Old Indonesian

Aprianisa Obsidiany Daisy Tarigan¹, Hendra Polii² and Rosalina Intan Saputri²

¹ Undergraduate Program, Faculty of Dentistry, Maranatha Christian University, Jalan Surya Sumantri 65 Sukajadi, Kota Bandung, Indonesia 40164

² Faculty of Dentistry, Maranatha Christian University, Jalan Surya Sumantri 65 Sukajadi, Kota Bandung, Indonesia 40164

*Corresponding author: rosalina.is@dent.maranatha.edu

Keywords: dental, age estimation, Schour and Massler, London Atlas, forensic odontology

Abstract: Age estimation is an important process in forensic odontology identification, especially when there is insufficient antemortem information. Teeth is one of the strong variables which could be used in estimating the age of living or deceases. Non-invasive methods are preferred for dental age estimation, including dental radiographs, which have the advantage of uncomplicated application without damaging the oral and surrounding tissues. The aim of this research was to compare two radiographic dental age estimation methods, which were the London Atlas by Al Qahtani and the Schour & Massler Atlas in 3-23 years old Indonesian population. Two hundred and fifty-three panoramic radiographs from 156 females and 97 males with age ranged between 3-23 years old were retrospectively collected from a Dental Hospital. Age estimation was performed on the radiographs using the London Atlas and the Schour & Massler Atlas. Mann-Whitney U test was used to compare the chronological age and estimated age from two methods. Age estimation was performed by two observers with mean inter-rater reliability of 76%. There was an insignificant difference between estimated age by the London Atlas and Schour & Massler Atlas ($p > 0.05$). Furthermore, there was also insignificant differences between estimated age of both Atlas and the chronological age ($p > 0.05$). The performance of London Atlas and Schour and Massler Atlas were equivalent in estimating 3-23 years old Indonesian in present study population.



ABS-095

The Effect of Apple Vinegar as an Irrigation Solution to Dental Root Canal Microstructure

Rudy Djuanda¹, Eliza Madyanty², Almira Anggarini Witjaksono², Vinna Kurniawati Sugiama³, Natallia Pranata³

¹*Department of Restorative Dentistry, Faculty of Dentistry, Maranatha Christian University, Jalan Prof. Suria Sumantri, Bandung, Indonesia*

²*Faculty of Dentistry, Maranatha Christian University, Bandung, Indonesia*

³*Department of Oral Biology, Faculty of Dentistry, Maranatha Christian University, Bandung, Indonesia*

**Corresponding author: natallia.paranata@dent.maranatha.edu*

Keywords: Irrigation, Apple Vinegar, SEM, Microstructure, Erosion, Smear Layer.

Abstract: Irrigation during root canal treatment has a chemical and mechanical effect. Sodium Hypochlorite (NaOCl) and Ethylene Diamine Tetraacetic Acid (EDTA) is the standard irrigation solutions used. However, long-term use can cause unwanted effects. Apple vinegar has long been used in traditional medicine, has an antibacterial effect, and is acidic so that at a certain pH it can cause demineralization. This research was conducted to determine the effect of apple cider vinegar as an irrigation solution on the dentin microstructure of the root canals. This research is a laboratory experiment with a posttest only control group design. 24 post-extraction mandibular premolars were prepared using the crowdown technique, divided into 8 groups. The irrigation solution used was 2.5% NaOCl as a positive control, 100%, 75%, 75%, 25%, 12.5%, 6.25% of apple vinegar, and aquadest as a negative control. The microstructural changes observed with the Scanning Electron Microscope (SEM) at a magnification of 2000 times, were the cleanliness and erosion of the dentin in the apical third of the root canal. The assessment of cleanliness used the Hulsmann scoring system while the erosion score was in accordance with the criteria of Torabinejad et al. Root canal cleanliness in the positive control had an average score of 1. The 100% apple vinegar solution group had a score of 1.67. In the lower apple vinegar concentration group had a greater average score, 2.67 at a concentration of 75% and 3.33 at a concentration of apple cider vinegar less than equal to 50%. The average dentin erosion scores of each group were compared with the positive control with p-value ≥ 0.05 . The group that had a score close to NaOCl was 75% apple vinegar with an average dentin erosion of 1.42. Apple vinegar as an irrigation solution affects the dentin microstructure of the root canal. There was no erosion, but the cleanliness of the smear layer increased according to the increase in the concentration of apple vinegar.



ROOM D – Thursday, 1 July 2021, 14:00-15:30 WIB

**Topic 4: Electrical, Electronics, Computer
Engineering and Science**

ABS-049

**The Color Dissimilarity Based Method among Other
Segmentation Methods: a Comparison**

I Gede Made Karma¹, I Ketut Gede Darma Putra², Made Sudarma³ and Linawati³

¹ Doctoral Program of Engineering Science, Faculty of Engineering, Udayana University

² Information Technology, Faculty of Engineering Udayana University

³ Electrical Engineering, Faculty of Engineering Udayana University

*Corresponding author: igmkarma@pnb.ac.id

Keywords: Segmentation, Color Dissimilarity, Ground-Truths, Object Detection

Abstract: The segmentation process plays a very important role in the process of detecting and recognizing objects in an image. Although many segmentation methods have been developed, there is no method that can give good results and is generally accepted. This study aims to find a better segmentation method in finding patterns or ground-truths of objects in an image, so that these objects can be easily recognized. Based on the results shown by all the methods being compared, several methods were not successful in showing the pattern of objects contained in the sample image. The segmentation method based on color dissimilarity, which is a method that emulates the way humans recognize an object based on visible color differences, shows the best results compared to other methods. This method is a very suitable method to be used in the process of detecting and recognizing objects in an image.



ABS-054

Safety Driving Behavior of Adolescents Pre-Owning Driving License (SIM)

Sodikin¹, Hendramawat Aski Safarizki¹

¹Department of Civil Engineering, Universitas Veteran Bangun Nusantara, Sukoharjo, Indonesia

*Corresponding author: hendra.mawat@gmail.com

Keywords: Driving License, Safety Riding, Signs, Traffic, Youth

Abstract: Several studies on the causes of traffic accidents show that the main causes of accidents include road conditions, vehicles, environment or weather, and people. Humans as the main cause of accidents have hereditary factors, including lack of skills and experience, behaviour that neglects safety, carelessness, and fatigue. This study was conducted to determine the level of understanding of traffic signs and driving safety in adolescents who were not yet 17 years old. This age group generally already uses motorbikes for various travel activities even though it is prohibited and this age group is not allowed to have a driving license (SIM). The specific target to be achieved in this study is to know the description and understanding of the dangers of traffic by motorized vehicles for those under 17 years of age. This research was conducted through a media questionnaire containing questions related to adolescent behaviour in driving motorized vehicles. The results showed that almost some respondents understand traffic signs and safe driving, as indicated by the wrong answers in the range below 35%. There needs to be a review of the driving behaviour for adolescents related to understanding safety in driving a motorized vehicle.



ABS-064

Virtual Reality Stimulants of Motor Ability through the Virtual Reality-Based Game

Erwani Merry Sartika¹, Novie Theresia Br. Pasaribu¹, Richard Setiawan¹, Reynaldy Felicius Gunawan¹, Dion Melvern Siswanto¹, Che-Wei Lin², Febrian Setiawan²

¹Bachelor Program in Electrical Engineering, Universitas Kristen Maranatha, Jl. Prof. drg. Suria Sumantri, MPH no 65, Bandung, Indonesia

²Department of Biomedical Engineering, College of Engineering, National Cheng Kung University, Tainan 701, Taiwan

*Corresponding author: erwani.ms@eng.maranatha.edu

Keywords: Stimulant, Virtual Reality, Bilateral Movement, Alternating Movement

Abstract: To improve the physical body, the motor function of the non-dominant hand also needs to be considered in order to increase productivity. Virtual Reality is widely used as a video game, but it is widely used as a means of doing physical exercise. In this research, the improvement of non-dominant motor skills through VR-based games used bilateral and alternating movement methods. The game "Rowing movements" represents the bilateral movements methods which is considered the most relevant to be implemented, while the game "Climbing" represents the alternating movements method. The game design process that is carried out is setting the VR on Unity, making the environment, making game objects, player, time display, game object position, movement of game objects. Hitbox design is also designed, with the aim of knowing the performance of the rowing game, while the performance of the climbing game uses the integral difference between the dominant and non-dominant hand climbing movements of the research subject which is scaled in a cartesian field. The results show that the use of VR stimulates user interest so that it improves motor skills if done regularly both for movement using the bilateral method and alternating movement (the deviation is decreasing).



ABS-094

Implementation of Battery Energy Storage System at Cirata PV Solar Floating for Reducing the Electricity Cost Production on Jamali Grid

Zainal Arifin¹, Linda Fitri²

¹ PT PLN (Persero), Jakarta Selatan 12610 Indonesia

² Institut Teknologi PLN, Jakarta Barat, 11750 Indonesia

*Corresponding author: zainal.arifin22@pln.co.id; linda1810017@itpln.ac.id

Keywords: Battery Energy Storage System (BESS), Load Shifting, Load Smoothing, Levelized Cost of Electricity, Cost Reduction.

Abstract: Along with the exponential growth of renewable energy penetration to the grid, the role of battery energy storage to create grid more flexible has been significantly increasing. There are two main functions of battery storage on grid; load shifting and load smoothing. The utilization of battery storage does not only create some technical beneficial such as reliability and flexibility but also a financial cost saving. This study investigates the implementation of lithium-ion battery storage system at PV floating farm for reducing the electricity cost production on the grid system. The financial feasibility is conducted through a spread sheet financial modelling based on life cycle cost and levelized cost of electricity. The impact of PV floating with BESS to the grid is tested by a power system tool ETAP. This study found that the implementation of BESS at PV floating farm is potentially reducing the electricity cost production based on both full store and partial store scenarios. The difference of financial cost saving between both scenarios is not significant. Other finding is the implementation of BESS with PV floating does not affect significantly the grid system stability. The result of study is useful for energy developer and buyer or off taker to define the right cost of power purchasing agreement for battery energy storage system application. It also supports the utility firms that want to utilize the storage technology for achieving more flexible, reliable and resilient of their grid. Further research is recommended to study a capacity optimization of battery storage to the PV farm, to investigate more unit analysis, to asses various capacity of battery and to analyse it at different grid system



ROOM D – Thursday, 1 July 2021, 14:00-15:30 WIB

Topic 9: Process Automation, Scheduling and Adaptive Industrial Engineering

ABS-068

Design of Bilateral Hand Movement Device

Novie Theresia Br. Pasaribu¹, Vivi Arisandhy², Christina², Elty Sarvia²,
Rainisa Maini Heryanto², Erwani Merry Sartika¹, Audyati Gany¹,
Olga Catherina Pattipawaej³, Richard Setiawan¹, Jessica²

¹Bachelor Program in Electrical Engineering, Universitas Kristen Maranatha, Bandung, Indonesia

²Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Bandung, Indonesia

³Bachelor Program in Civil Engineering, Universitas Kristen Maranatha, Bandung, Indonesia

*Corresponding author: novie.theresia@eng.maranatha.edu

Keywords: Bilateral Movement, Design Thinking, Quality Function Deployment, Anthropometric data.

Abstract: Bilateral movement exercise will get better results comparing to unilateral movement in increasing muscle strength. This research aim is to define the need for exercise program standard for both hands and the device design to help to do that activity. This research used Design Thinking, which consisted of empathize, define, idea, prototype, and test. On the empathize stage, the customer needs were identified by doing the interview and observation. On the define and idea stage, Quality Function Deployment was used to deploy the customer needs into technical requirements in the Product Planning Matrix and critical part requirements in Part Planning Matrix to make the detailed design. The prototype stage was realized by 3D Modelling. In Part Planning Matrix, there were top 2 contribution values: Notice and Virtual Reality (VR). This research had an outcome of a device design that had the aim to increase the motoric function of the non-dominant hand, combined with VR to make it fun while doing the exercise. Future research might include vibration alert in doing the exercise, water flow to burden the rower, to make the exercise more real, material test to determine the material for the exercise device, and rowing game software.



ABS-081

Experimental Design of Driving with Distractions at Urban Area using Simulator Driving

Winda Halim^{1*}, Rainisa Maini Heryanto¹, Santoso¹, Christina¹, Erwani Merry Sartika²,
Audyati Gany², Andrew Sebastian Lehman³ Anggie Ervany Haryono¹, Vieri Candhya
Wigayha²

¹*Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha,
Jl. Prof. drg. Surya Sumantri MPH No. 65, Bandung, Indonesia*

²*Bachelor Program in Electrical Engineering, Universitas Kristen Maranatha,
Jl. Prof. drg. Surya Sumantri MPH No. 65, Bandung, Indonesia*

³*Bachelor Program in Computer Engineering, Universitas Kristen Maranatha,
Jl. Prof. drg. Surya Sumantri MPH No. 65, Bandung, Indonesia*

**Corresponding author: winda.halim@eng.maranatha.edu*

Keywords: Traffic Accident, Driving, Distraction, Experimental Design, Simulator Driving

Abstract: Driving activity is a complex activity and requires the full focus of the driver. However, in reality, there are many distractions that drivers often encounter while driving. The distractions can come from the driving activity itself or secondary tasks that has nothing related with driving. Traffic accidents can come from the drivers, vehicles and environment. Based on statistical data, the driver's factor influenced for almost 94% of road accidents. In Indonesia, especially in urban areas, the number of traffic accidents that have passed in the last three years has increased by 5.63%. This study conducted an experimental design simulation to find out the effect of the distractions experienced by the driver. This experimental design simulation will used a simple driving simulator and game that portray the conditions of urban roads in Indonesia. The use of a driving simulator is carried out because it does not safe to direct testing in the field. The purpose of designing this experiment is to obtain various things that affect the driver while on the highway which can be measured by the speed and break reaction time. This experimental design was created by collecting various secondary data and a literature review that examines the various factors that can cause a driver to make a mistake while driving. Based on data collection and literature review that has been done, there are several factors that can influence a driver. These factors include the environmental characteristics (location, time of driving and crowd), characteristics of the main vehicle or other vehicles in the surrounding, individual characteristics (age, gender, driving experience, etc.), as well as the distraction characteristics obtained. Based on these, the experimental design is made using urban road conditions, daytime conditions, moderate crowds, the main type of vehicle is a city car and other vehicles and other vehicles around it are typical of urban vehicles, the age of the driver is the productive age, with the distraction received is in the form of a static and dynamic obstacle for the main task, and comes from the cell phone for the secondary task. The experimental design of this study is expected to describe the real conditions experienced by driver's while on the urban road, so that it can describe the effects, responses, and recommendations that driver should do while driving. The desired long-term result, of course, is to reduce the number of accidents that occur on the road



ROOM E – Thursday, 1 July 2021, 14:00-15:30 WIB

**Topic 5: Geo informatics, Building Structure,
Landscape and Architecture**

ABS-021

**Experimental Study on Velocity Profiles due to Ecological
Barriers**

Robby Yussac Tallar¹, Teofilus Sawang¹

¹*Civil Engineering Department, Maranatha Christian University (Universitas Kristen Maranatha), Jl. Prof. drg. Surya Sumantri, M.P.H. No. 65 Bandung 40164, Jawa Barat, Indonesia*

**Corresponding author: robby.yt@eng.maranatha.edu*

Keywords: Ecological Barriers; Experimental Study; Velocity Profiles

Abstract: Streams are very complex system. In stream restoration projects, the existence of ecological structures should be considered as an important variable in the project. A lot of previous research focused on ecological aspects only, therefore the main purpose of this paper is to examine the velocity profile due to ecological barriers in downstream area of weir. A laboratory study to investigate the effect of ecological barriers in terms of velocity profile in 8 m length x 40 cm width a rectangular channel is presented. The study consists of an extensive set of rectangular flume experiments for flows with certain The results show that the average velocity ($v=0.35$ m/sec) was occurred for without ecological barriers condition. By comparing the scenarios, this study showed that ecological barriers ($d_l = 25$ cm) has the highest velocity ($v = 0.41$ m/s), meanwhile scenario 5 ($v=0.36$ m/s) has the nearest velocity with the scenario 1 ($v=0.35$ m/s). It indicated that the existence of ecological barriers had given the higher velocities in streams. The distance length between ecological barriers showed that the farther the distance length used the lower the formed velocity profiles.



ABS-025

Comparative Study of Riprap Model Design for Scour Protection of Bridge Pier

Cut Talitha Salsabila Nurapili¹, Robby Yussac Tallar¹ Alexander Yovan Suwono¹

¹*Civil Engineering Department, Maranatha Christian University (Universitas Kristen Maranatha), Jl. Prof. drg. Surya Sumantri, M.P.H. No.65 Bandung 40164, Jawa Barat Indonesia*

**Corresponding author: robbyyussac@yahoo.com*

Keywords: Comparative study, Local Scouring Riprap, and Model design

Abstract: Streams have an important function for humankind by providing drinking water, food, irrigation, electricity, and transportation. Streams also have the sediments within that typically flow following the direction of water velocity. The Characteristics of stream systems were originally defined by morphological and channel processes that took place over time. The differences in characteristics among streams have also been clear since it can be changed easily due to climate change, weather, or other natural factors and/or by human activities. Streams also can change in dimension according to the surrounded environmental conditions, for example local scouring caused by bridge pier. The most common countermeasure used to prevent local scouring at bridge pier is utilization of riprap. Riprap is a method that can be used to prevent erosion in streams or other conditions that have water flows with high velocity. Therefore, the purpose of this study is to compare two models riprap design around the pier for scour protection. The riprap models that were compared are rectangular and circle shaped. The condition used in this study is clear water condition, under sediment-based layer design, and riprap layer thickness. The experimental study was used to compare two models riprap design. The result of this study indicates that circle shape model riprap is better than a rectangular shape. Further studies are necessary regarding the effect of flow type, cross-sectional shape and the size of bridge pier, and other related variables.



ABS-026

The Experimental Study of Optimum Thickness on Riprap Layer Design

Dea Lidya¹, Robby Yussac Tallar¹, Alexander Yovan Suwono²

¹Civil Engineering Department, Maranatha Christian University (Universitas Kristen Maranatha), Jl. Prof. drg. Surya Sumantri, M.P.H. No. 65 Bandung 40164, Jawa Barat, Indonesia

*Corresponding author: robbi.yt@eng.maranatha.edu

Keywords: Riprap, Riprap layer thickness, Scouring.

Abstract: Flow velocity in rivers may have significant effects on flow pattern and velocity distribution, especially for horizontal flow. In river engineering, hydraulics engineering, and river restoration project, it is essential to consider in the analysis if there is a change or modification in the waterway such as the pier of the bridge. The existence of a bridge pier causes a change in the pattern of river flow to vertical water flow, this can cause local scouring. Riprap is one of the protection methods concerning local scouring. Therefore, the main purpose of this study is to determine the optimum thickness of the riprap layer within a certain diameter in the flow under clear water conditions and under sediment-based riprap layer. The experimental study was used to inquire the resulted optimum thickness on the riprap layer design. This study used a cylindrical-shaped of bridge pier to study the scouring pattern, failure mechanism, and riprap stability. This study offered several scenarios. The result indicated that the thickness of the riprap layer affected the depth of local scouring. Further study, it is essential to investigate the relationship among variables of riprap, pier, hydraulics characteristics. The application of the riprap design method is very useful for the long-term protection of river structures.



ABS-027

The Effect of Seismic Masses in Calculation of 17th Building Structures

Daud Rahmat Wiyono¹, Roi Milyardi², YosafatAji Pranata³ and Robby Y Tallar³
^{1,2,3,4}*Department of Civil Engineering, Universitas Kristen Maranatha, Bandung, Indonesia*
 *Corresponding author: hwiesiong@gmail.com

Keywords: Mass Source, Self and specified mass, From loads, Equivalent Lateral Force, Story shear, Story drift

Abstract: The seismic weight according to code will be used for seismic calculation and define by mass source. The application in ETABS there are 3 ways to define seismic mass: 1. From self and specified mass, 2. From loads. 3. From self and specified mass and loads. If mass source is not defined properly, seismic forces will not be calculated correctly and so the base shear value will also be incorrect. The purpose of this article are to obtain the mass source from 3 ways in ETABS which near to Mass calculated manual and it is effect. The case study is a multi-storey building 17th, and from the results of the analysis and discussion it is concluded that: the lowest period, equivalent lateral force, story shear, story drift are From self and specified mass, after that From load with DL + 0,5 LL, next is Self and specified mass and load with DL + 0,5 LL, the last is Self and specified mass and load with DL + LL. From load with DL + 0,5 LL is near to Mass calculated manual with DL + LL and corresponding with recommendation by ASCE 7 – 10.



ABS-030

Identification of Risk Factors for Delayed Time Schedule in Summarecon Serpong Playfield Preschool Project

Deni Setiawan¹, and Stefanny Abigail²

¹*Department of Civil Engineering, Faculty of Engineering, Universitas Kristen Maranatha, Bandung, West Java, Indonesia*

²*Bachelor Degree Student of Civil Engineering, Faculty of Engineering, Universitas Kristen Maranatha, Bandung, West Java, Indonesia*

*Corresponding author: deni.setiawan@eng.maranatha.edu

Keywords: Delay, Risk Factors, Risk Identification, Project, Construction.

Abstract: Construction tasks are generally carried out beneathneath an surroundings characterised with the aid of using various diploma of hazard and uncertainties, which could end result from ‘acknowledged’, ‘acknowledged- unknown’, and ‘unknown-unknown’ situations (CII, 1989; Smith, 1999). Failure to thoroughly cope with those uncertainties has been proven to reason price and time overruns in production tasks (Thompson and Perry, 1992). Delays withinside the mission that may be as a result of numerous elements, each inner and outside elements. However, it can't be denied that during Indonesia stage of mission put off is pretty excessive and may be as a result of numerous elements, each inner and outside elements. The motive of this take a look at is to investigate the elements of put off withinside the implementation of the Playfield Preschool Summarecon Serpong mission. Final effects of the take a look at there are variations of opinion concerning the elements inflicting mission delays among mission people and teachers who're specialists withinside the area of production control. Based at the descriptive take a look at effects of the 6 classes of put off, it changed into discovered that the thing inflicting the best put off changed into the monetary class. More certain studies is wanted which may be analyzed greater deeply into the elements inflicting mission delays aside from the monetary class.



ROOM F – Thursday, 1 July 2021, 14:00-15:30 WIB

**Topic 5: Geo informatics, Building Structure,
Landscape and Architecture**

ABS-033

Flood Risk Assessment of Heritage Building in Semarang City

Roi Milyardi¹, Deni Setiawan² and Tri Octaviani Sihombing³

^{1,2,3}*Department of Civil Engineering, Universitas Kristen Maranatha, Bandung, Indonesia*

**Corresponding author: roi.milyardi@maranatha.edu*

Keywords: Flood Risk Assessment, Heritage Building, Disaster Risk Management, Hazard, Vulnerability

Abstract: The preservation of heritage building is very important, as a medium for cultural heritage to save cultural values from the past. The existence of a heritage building is currently in various conditions, ranging from still functioning to non-functioning. With the importance of preservation and the various conditions of heritage buildings, it is necessary to carry out a building risk assessment in order to determine the safety limits of the building. In disaster-prone areas, natural disaster risk assessment in heritage buildings is needed as a preventive measure for the preservation of heritage buildings. Semarang City as one of the cities in Indonesia which is a flood-prone area, has historic buildings that are still functioning, including heritage temple building. This study aims to carry out a risk assessment of flood disasters in historical buildings that are still functioning in the city of Semarang. The methodology used is a risk assessment carried out with a Risk assessment instrument from the guidelines of the Indonesia's National Disaster Management Agency (BNPB) which is elaborated with several previous studies conducted on 6 case studies of heritage temple building in Semarang City, which are in the area near the river. The variables used in this risk assessment are flood hazard (consisting of a history of flood height), Vulnerability (involving of proximity to the river, building area, building elevation from the road, building materials and conditions), and capacity (comprising of flood prevention efforts). The results of the flood risk assessment showed that 2 temples had a low risk of flooding, and the others were at moderate risk. The findings in this study, although the 6 case studies are located close to river, the impact of flood risk can be controlled significantly by the financial sustainable management of cultural heritage buildings as one of the flood preparedness.



ABS-052

Identification of Risks in Making Decision for Overseas Expansion by Indonesian State-Owned Construction Enterprise

Jeffrey Limas Lim¹, Ayomi Dita Rarasati¹, and Mohammad Ichsan²

¹*Department of Civil Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia*

²*Management Department, BINUS Bussiness School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia*

*Corresponding author: jeffrey.limas@gmail.com

Keywords: Risk, Overseas, Construction, Stated-Owned Enterprise

Abstract: Construction markets in developing countries such as ASEAN, Africa, Middle East, and Timor Leste are the main targets of Indonesian state-owned construction enterprises in developing their business internationally. But the international construction market can be described as complex, uncertain, and risky. Project risk greatly affects the expected profit. For this reason, Indonesian state-owned construction enterprises must identify risks and how to deal with them before operating abroad. The main goal of conducting this research is to identify risks in making decisions for overseas expansion. This study uses a quantitative approach by distributing closed questionnaires about overseas construction risks to experts and respondents and the data will be analyzed by descriptive statistics. This research analyzed risks that occurred in international projects and 10 high risks have been identified. These risks are cash flow unbalance (0.72), late construction (0.72), currency exchange rate fluctuation (0.56), unclear requirements (0.56), funding shortage (0.56), productivity decreases (0.56), unclear boundaries of work (0.56), revolution (0.40), complex planning and permit procedures (0.40), inconsistencies in design / construction (0.40). This research has positive implications for Indonesian state-owned construction enterprises in developing their business overseas. The implication is to provide an overview of the risks that may occur hence Indonesian state-owned construction enterprises can formulate strategies to overcome them.



ABS-053

Pull-Out Resistance of Glued-In Rod Embedded Parallel to Grain in Laminated Bamboo with Two Edge Distance Variations

Widiya Anistiya K. Rumasoreng¹, Karyadi¹ and Nindyawati¹

¹Department of Civil Engineering, Universitas Negeri Malang, Jalan Semarang, Malang, Indonesia

*Corresponding author: karyadi.ft@um.ac.id

Keywords: Bamboo, glued-in rod, pull-out, two edge distance

Abstract: The purpose of this study was to find the pull-out strength of the glued-in rod embedded parallel to the grain in laminated bamboo with variations in the two edge distance. An experimental method was used in this research. The dimensions of the laminated bamboo specimen were 160 mm x Xd mm x 100 mm, where Xd was the variation of the two edge distance of the steel rod depending on the diameter of steel rod. The embedded length of steel rods was 40 mm with a 3 mm thickness of adhesive. The results showed that the smallest two edge distance of steel rods before experiencing a decrease in the pull-out strength at diameters of 8 mm, 10mm, and 12 mm, were, respectively, 4d; 3.5d; 3d. This study's slip modulus was not influenced by the two edge distance of the steel rods. The study concluded that the greater the two edge distance of the steel rods at the same diameter, the higher the pull-out strength value. Also, the larger the diameter of the steel rods used, the smaller the two edge distance before experiencing a decrease in the value of pull-out strength.



ABS-066

Experimental Study of Shear Strength of *Purus Lobang Berkait* (PLB)-Masonry Wall

*Marwahyudi^{1,2}, Senot Sangadji¹, Halwan Alfisa Saifullah¹ and Stefanus Adi Kristiawan¹

¹Civil Engineering Department, Faculty of Engineering, Sebelas Maret University, Surakarta, Indonesia

²Sahid University, Jl. Adi Sucipto, Surakarta Indonesia

*Corresponding author: (yudhie_dsg@student.uns.ac.id)

Keywords: brick, bed joint, head joint, masonry, shear strength,

Abstract: The earthquake caused damage to buildings, especially simple houses that were not designed according to engineering rules. Damage caused by earthquakes is often found in the form of cracks to the collapse of masonry walls. Damage due to earthquake forces can be anticipated by increasing the strength of columns, beams, and brick walls. Especially for brick walls, this can be done by increasing the strength of the brick unit, mortar, and brick design that optimizes the function of the mortar. The increase in mortar bearing capacity in masonry is determined by the bonding of the bed joint and head joint area. The regular brick stacking pattern produces a square bed joint and head joint area, while the hook-hole purus brick stacking pattern produces a square bed joint and an upright cylindrical head joint that connects from top to bottom. This cylinder forms mortar pegs and serves to resist horizontal directional forces. This study aims to determine the effectiveness of the use of PLB masonry in increasing the shear strength of the wall through laboratory tests using two groups of test objects. The first group is the test object with PLB bricks and the second group with ordinary stone as a control. Laboratory test results were analysed to determine the shear strength of masonry walls based on the SNI formula. Based on the results of laboratory tests, it can be concluded that PLB bricks have a strength of 13.64% greater than ordinary bricks.



ABS-073

Engineering Education: Measuring the Relationship Between Knowledge and Confidence to the Student Performance

Noek Sulandari¹, Cindrawaty Lesmana¹ and Cindy Maria Setyana²

¹Department of Civil Engineering, Universitas Kristen Maranatha, Jl. Prof. drg. Surya Sumantri, M.P.H. No. 65 Bandung 40164, Jawa Barat, Indonesia

²Department of Psychology, Universitas Kristen Maranatha, Jl. Prof. drg. Surya Sumantri, M.P.H. No. 65 Bandung 40164, Jawa Barat, Indonesia

*Corresponding author: cindra@eng.maranatha.edu

Keywords: Engineering Education, Confident, Learning, Knowledge.

Abstract: The current practices of engineering education are students require solving many engineering problems. It is assumed that by solving those problems, the students can perform well in the study as well as in the practices. However, the gaps between the obtaining knowledge in school and skills in practices are still large. It is a challenge to find improvement in the education model so that the students can perform well both in school and future practices. This study aimed at investigating the relationship between knowledge and confidence to the engineering students' achievement through confidence-based testing. This method has been widely used to enhance the quality of the multiple-choice questions. The survey was distributed to the students who were taking structural analysis course. It is a basic course for the building structure analysis. The tests were scored and run using Partial Least Square Structural Equation Modelling to obtain the inter-relationship between all action. The results showed the confidence did not directly affect the students' achievement, but the knowledge did. The highly confidence can make students to gain highly or lower achievement. The highly confidence with the true knowledge developed potential from the students to get higher achievement. The findings showed highly achievement can be increased if the trainer can continuously make the students realize their false knowledge in their highly confidence. The highly confidence with the correct knowledge will impact in how the engineer behave in solving the engineering's problems.



ABS-097

Bio-Cord as an Ecotechnological Wastewater Treatment for Productive and Attractive Urban Open Spaces

Ferlina Sugata¹, Nathalia Yunita Sugiharto¹, Nina Nurviana¹, Seriwati Ginting¹, Isabella Isthipraya Andreas¹, Shirly Nathania Suhanjoyo¹, Andi A. Hamzah¹ and Heddy Heryadi¹

¹*Faculty of Art and Design, Universitas Kristen Maranatha, Surya Sumantri, Bandung, Indonesia*

**Corresponding author: ferlina.sugata@art.maranatha.edu*

Keywords: Bio-Cord, Urban Open Space, Wastewater Technology, Sustainable Architecture.

Abstract: Bandung, the capital city of West Java province has a great variety urban space within the city as urban fabric. The utilization, protection, creation, and development of those urban spaces is one of the key elements to achieve sustainable urban development. But the rapid urban population leads to a rapid destruction. Therefore, there is an urgent need to optimize the utilization of existing open spaces become more productive and attractive. This study attempts to examine and identify the potential and capability of open space along Babakan Irigasi stream zones to optimize the spatial around their neighbourhood. The hypothesis is that by using Bio-Cord as wastewater treatment will develop the sustainable characteristics and reshaping urban open spaces, it will help to be productive and liveable spaces. The paper presents the field data contains all open spaces along *Babakan Irigasi* stream, Bandung, and the variable aspects that optimize urban open spaces that consists of quality aspects, functional aspects, and ecological-environmental aspects. Then, analyse the design strategies as the impact of the wastewater treatment along the stream with Bio-Cord technology to achieve sustainable urban development, and find values of productive and attractive urban open spaces. The Bio-Cord as an ecotechnological treatment plays a key role in the environmental design and sustainable development of the urban structure. This study showed that productive and attractive open spaces are great importance for urban spatial structure that can support sustainability. The transformation of waste land to a productive and attractive open space is one of the city urban renewal plans.



ROOM G – Friday, 2 July 2021, 10:30-12:00 WIB

**Topic 6: Health informatics, Public Health, and
Clinical Research**

ABS-016

**Relationship between Low Birth Weight (LBW), Birth Length,
Basic Immunization History and Stunting in Children Age 9 - 60
Months in *Kabupaten Purwakarta***

July Ivone¹, Stella T Hasianna² and Victor Yohanes S³, Vilia Ruthy W⁴

^{1,3,4} *Department of Public Health, Faculty of Medicine, Maranatha Christian University, Bandung*

² *Department of Physiology, Faculty of Medicine, Maranatha Christian University, Bandung*

**Corresponding author: julyivone@gmail.com*

Keywords: stunting, factors, relationship, children

Abstract: Childhood stunting has considerable human and economic costs. It increases the risk of child death, adversely affects child development and learning capacity, increases the risk of infections and non-communicable diseases, and reduces productivity and economic capability in adulthood. Three main factors that cause stunting are birth weight, birth length, caregiving methods including infant immunization. According to the Ministry of Health 2017, approximately 8000 children in Purwakarta are considered stunted. Three sub-districts have > 20% prevalence of under-five stunting; Bungursari (20.9%), Sukasari (24.1%), and Darangdan (23.6%). The study aims to discover the relationship between Low Birth Weight (LBW), birth length, basic immunization history, and stunting in children age 9 - 60 Months in Depok Village, Kecamatan Darangdan, Kabupaten Purwakarta. This is a community-based cross-sectional study established in Kabupaten Purwakarta from April to May 2019. Data was collected by interviewing 54 mothers of 9 to 60 months children in Depok Village, Kecamatan Darangdan, Kabupaten Purwakarta, followed by measurement of length/height. Data were analyzed using the Chi-Square test with $\alpha = 0.05$ using SPSS. Bivariate analysis showed that low birth weight (OR=3.178; p value=0.042), birth length (OR=3.067; p=0.050), and history of immunization (OR=0.25; p value=0.042) are associated with the incidence of stunting in Depok Village, Kecamatan Darangdan, Kabupaten Purwakarta (p <0.05). There was a relationship between low birth weight, birth length, and basic immunization history and stunting in Kabupaten Purwakarta



ABS-040

Application of Freeze-thaw Harvest for SARS-CoV-2 PCR EQA Panel Material

Nur Ika Hariastuti^{1*}, Nike Susanti¹, Hana Apsari Pawestri¹ and Kartika Dewi Puspa¹

¹*Center for Research and Development of Biomedical and Basic Health Technology,
National Institute of Health Research and Development, Ministry of Health
Jl. Percetakan Negara 23, Jakarta, Indonesia*

**Corresponding author: nurika_hariastuti@yahoo.co.id*

Keywords: Freeze-thaw, SARS-CoV2, Quality Assurance Panel.

Abstract: Currently there are more than 700 testing laboratories for COVID-19 in Indonesia. To ensure that the laboratory has a good performance, a proficiency test panel for external quality assurance program was conducted. The production of panels derived from virus isolate from cell culture, generally does not contain ribonuclease protein (RNP) as in clinical samples. To produce a panel that resembles clinical samples, we conducted experiments to produce panels containing RNP by freeze-thaw protocol. SARS-CoV-2 virus cultures were performed in the NIHRD BSL-3 laboratory facility. Harvesting is carried out on the 3rd, 6th, and 9th days with: no freeze-thaw process, 1 freeze-thaw process, 2 freeze-thaw processes, and 3 freeze-thaw processes. On the 3rd day of observation, the Ct isolates had reached an average of 11.53 and did not increase with the increase in incubation time. Meanwhile, the viral Ct became smaller in the presence of freeze-thaw treatment. RNP began to be detected on day 3 with an average Ct of 35.40 and improving with the addition of days and the number of freeze-thaw treatments. Freeze-thaw treatment can be used to improve the value of Ct however, the detected Ct RNP value was still higher than the viral Ct.



ABS-046

Suicide and Narcissistic Personality Traits: a Review of Emerging Studies

Charissa Lazarus, Khamelia Malik

Department of Psychiatry, Faculty of Medicine, Universitas Indonesia – Cipto Mangunkusumo Hospital, Jakarta, Indonesia.

Keywords: Suicide, Narcissistic, Trait

Abstract: Suicide is one of the leading causes of death worldwide. According to the World Health Organization (WHO), there were 800,000 documented suicides worldwide in 2015. In Indonesia there were roughly 9,000 suicides per year. Suicide is a complex phenomenon that is commonly linked with psychiatric disorders, namely personality disorder. Evidently, emerging studies have begun to point out the role of narcissistic personality traits in suicidal behavior, with only few studies currently reviewing this phenomenon. Therefore, we aim to review the current literature to elucidate the link between narcissistic personality disorder and suicide. We selected studies published in Pubmed, Scopus, Proquest databases, using keywords 'suicid*' AND 'narcis*', 'narcissistic personality', 'narcissistic personality disorder', 'narcissistic personality trait*', focusing on narcissistic personality traits suicidal behavior, and using standardized instruments. Suicidal behavior is associated with narcissistic personality traits, especially narcissistic vulnerability. In regard to suicide attempts, this population shows a higher risk of lethality. Current evidence showed that problems with perfectionism, dysfunction in self-regulation, emotion dysregulation, shame, isolation, narcissistic injury, and anger as factors that influence the link between narcissistic personality traits and suicidal behavior. Narcissistic personality traits are associated with suicidal behavior, potentially as a marker of suicide risk. Close monitoring of this population group may be beneficial to prevent suicides in general. Future research need to elaborate contributions of culture and ethnicity.



ABS-058

Expected Attributes to Design Sleeping Facilities for the Elderly Based on the Potential Stakeholders Point of View

Elty Sarvia¹, Elizabeth Wianto^{2,3}, Erwin Ardianto Halim⁴, and Elvira Natalia¹

¹ Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Bandung, Indonesia

² Industrial Design Department, National Cheng Kung University, Tainan, Taiwan

³ Bachelor Program in Visual Communication Design, Universitas Kristen Maranatha, Bandung, Indonesia.

⁴ Bachelor Program in Interior Design, Universitas Kristen Maranatha, Bandung, Indonesia

*Corresponding author: elizabeth.wianto@art.maranatha.edu

Keywords: design aspect, elderly, ergonomics, Kano, sleeping facilities, Mann-Whitney-U

Abstract: Adequate sleep to rest is a beneficial activity to maintain health; therefore, the facilities that support this activity need to be appropriately designed. Correlating the elderly's shrinking anthropometric proportion if compare with adult anthropometric and the fact that the elderly population usually has at least one prevalence of certain diseases, the decline in health levels should be suppressed to maintain the functional ability of this vulnerable group. In accordance with the fact that after entering retirement age, the elderly often supported by their adult children, so most of the time the costs of fulfilling the necessities of life will be handle by their children. This condition raises the idea that buying sleeping facilities (e.g., bed and mattress) can be dominated by their children's decision even though the user is an older person. This study seeks to analyse the perceptions of the two main stakeholders, namely: potential target buyers (children) and target users (parents) of sleeping facilities that can differ from one another related to the expected value. This study explores the expected design attributes to achieve good sleeping suited for the elderly using an in-depth interview with the selected participants, and get 22 valid and reliable attributes by sharing to 70 pairs of children-parents using non-parametric Mann Whitney-U. As a result, these two different generations perceived the proposed attributes as similar one to another. The further analysis using the Kano method found out that two attributes need to be fulfilled by design. Otherwise, both parties will not be satisfied: (1) sliding the bed; (2) the lower area of the bed should be cleaned easily. These two attributes will be further discussed by the perspective related to the custom and habits of Indonesian communities.



ABS-093

Potential of Wharton's Jelly Mesenchymal Stem Cells as an Alternative Candidate for Covid-19 Therapy

Wahyu Widowati^{1*}, Teresa Liliana Wargasetia¹, Fanny Rahardja¹, Rimonta F Gunanegara¹, Hanna Sari Widya Kusuma², Seila Arumwardana², Cintani Dewi Wahyuni¹, Cahyaning Riski Wijayanti², Tri Handayani², Rizal Rizal^{2,3}

¹Faculty of Medicine, Maranatha Christian University, Jl. Surya Sumantri No. 65, Bandung 40164, West Java, Indonesia

²Biomolecular and Biomedical Research Center, Aretha Medika Utama, Jl Babakan Jeruk II No. 9, Bandung 40163, West Java, Indonesia

³Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Depok 16426, West Java, Indonesia

*Corresponding author: wahyu_w60@yahoo.com

Keywords: Wharton's Jelly Mesenchymal Stem Cells, Covid-19,IDO, secretome, cytokine storm

Abstract: The emerging COVID-19 disease caused by SARS-COV-2 infection is a serious health problem. SARS-CoV-2 stimulates cytokine storm in the lung, followed by edema, air exchange disorder, acute respiratory distress syndrome, and secondary infection from acute cardiac injury that may cause serious organ damage and death. Several studies have shown that human Wharton's Jelly Mesenchymal Stem Cells (hWJMSCs) and its secretome contain various proteins including cytokines, growth factors, and angiogenic factors. The hWJMSCs are able to modulate the microenvironments with anti-inflammatory, antimicrobial, and immunomodulatory functions. This led to the idea of investigating potential uses of hWJMSCs to treat COVID-19. This research was carried out to isolate hWJMSCs, characterized hWJMSCs in various passages, and characterized hWJMSCs secretome in various conditions of hWJMSCs. The hWJMSCs have been isolated from the human umbilical cord using an explant method and characterized using a flow cytometer to detect the cell surface markers CD105, CD73, CD44, CD90, and negative lineage expression of hWJMSCs. The hWJMSCs secretome was characterized by measuring the level of indoleamine 2,3-dioxygenase (IDO) in various starving cells. The isolated umbilical cord hWJMSCs showed positive expression of CD105, CD73, CD44, CD90, and negative lineage expression from 5, 10, and 15 passage. The hWJMSCs IDO secretion level was 5.86 ng/mL for non-starving cells, 6.84 ng/mL for 24 hours starving cells, 9.59 ng/mL for 48 hours starving cells, and 13.32 ng/mL for 72 hours starving cells. The early, medium, and old passage of hWJMSCs have the same characteristics, including positive expression of CD105, CD73, CD44, CD90, and negative lineage expression. Longer starvation periods up to regulate the IDO level in hWJMSCs secretome are one of method as an alternative Covid-19 therapy.



ROOM H – Friday, 2 July 2021, 10:30-12:00 WIB

**Topic 10: Software Engineering, Information and
Communication Technology**

ABS-011

**Factors Affecting Success of Team Members in Indonesia
Scrum Implementation**

Apriliana Fajri Wibowo¹ and Yova Ruldeviyani²

¹Faculty of computer science, University of Indonesia, Salemba, Jakarta, Indonesia

² Faculty of computer science, University of Indonesia, Salemba, Jakarta, Indonesia

*Corresponding author: apriliana.fajri@gmail.com

Keywords: Scrum, Teamwork Quality, Team Member's Success, Structural Equation Modelling (SEM)

Abstract: The Indonesian government continues to encourage the community to build start-up. Various training and assistance programs are published to educate the community of the software development concept. One of the most popular concepts in Indonesia is the Scrum methodology. This methodology can rapidly generate a product and easily adjust to the market needs. However, Scrum, as a method that implements the Agile concept, has a high failure degree. Agile implementation failure is caused by human unreadiness; therefore, studies have generated factors affecting the success of Agile implementation team members. However, factors affecting the success of Scrum team members remain unknown. Therefore, this study aimed to discover factors affecting the success of Scrum team members in Indonesia. The Structured Equation Model (SEM) was utilized to discover the correlation between teamwork quality and Scrum team success. The SEM method was selected based on its ability to reveal the significance between supporting variables. Analysis results show that factors significantly affecting Scrum team member success were Balance of Member Contribution, Effort, and Cohesion. The analysis test results show that endogenous latent variables between TWQ and the success of Scrum team members had a sufficient value equal to an R-squared value of 0.732 or 73.2%.



ABS-013

The Application of Digital Module Design of East Sumba Woven Fabric on Interior Accessories

Erwin Ardianto Halim¹, Monica Hartanti¹, Maresha Caroline Wijanto², Yosepin Sri Ningsiha¹,
Hendra Setiawan¹, Yudita Royandi¹, Yunita Setyoningrum¹, Berti Alia Bahaduri¹, Aulia Wara
Arimbi Putri¹

¹Faculty of Arts and Design, Maranatha Christian University, Surya Sumantri, Bandung, Indonesia

²Faculty of Information Technology, Maranatha Christian University, Surya Sumantri, Bandung, Indonesia

*Corresponding author: erwin.ardianto@art.maranatha.edu

Keywords: Design Module, Digital application, East Sumba Fabric, Interior elements.

Abstract: Indonesia's creative industries need to be supported by technological advances, especially in this digital era. Indonesia is rich in the diversity of its fabric. The motif of the fabric can be applied in a variety of product designs, one of which is the design of accessory products and interior elements that need to be customized by incorporating local characteristic of Indonesian culture. Hence, it is necessary for the design to be unique and identifiable as an Indonesian product. As a pilot project, the Indonesia's cloth chosen is the one of East Sumba, one of Indonesia's local products with unique motifs, patterns, and colors. Interior design elements have various forms and additional materials with diverse shapes and patterns. To make it easier for designers to mix and match Indonesia's fabrics with additional materials, so that a good, attractive, and localized design could be created, a website-based application is needed. The features in this application have been categorized according to the interior product design principles of DK Ching. The novelty of this application is that its features are equipped with East Sumba fabric motif assets appropriate to be applied to the design of accessories and interior elements. This application uses HTML 5 technology which will produce design assets combined with East Sumba fabrics. Its assets can be used to design interior spaces by using existing design applications



ABS-057

The Use of Technology in Indonesian K-6 Education during Covid-19 Pandemic: a Review

Bayu Rima Aditya¹, Dina Fitria Murad^{2*}, Oscar Karnalim³, Aditya Permadi⁴, Andrisyah⁵,
Fathul Jannah⁶, and Irawan Nurhas⁷

¹ School of Applied Science, Telkom University, Bandung, Indonesia

² Information Systems Department, Bina Nusantara University, Jakarta, Indonesia

³ Faculty of Information Technology, Maranatha Christian University, Bandung, Indonesia

⁴ Fakultas Keguruan dan Ilmu Pendidikan, Universitas Mandiri, Subang, Indonesia

⁵ Fakultas Ilmu Pendidikan, IKIP Siliwangi, Cimahi, Indonesia

⁶ Pendidikan Guru Sekolah Dasar, Universitas Lambung Mangkurat, Banjarmasin, Indonesia

⁷ Institute of Positive Computing, Hochschule Ruhr West, Bottrop, Germany

*Corresponding author: (dmurad@binus.edu)

Keywords: Online Learning, Covid-19, Early Childhood, Primary School, Indonesia.

Abstract: The Covid-19 outbreak suddenly forces all on-site classroom activities to be moved online, as the physical distance is strongly encouraged to curb the spread of the virus. This unexpected shift creates challenges and problems for both teachers and students in Indonesia, as they were not used to conducting these classroom activities online. For K-6 students (early childhood and primary school), it becomes even more difficult. Students are easily distracted and need to be supervised by their parents when using technology in a digital learning environment. Therefore, this study focuses on Indonesian K-6 education to show how recent progress has been made in adopting online learning. More specifically, based on a literature review, this study aims to shed light on the use of technology in teaching-learning processes in preschool and elementary education in Indonesia during the Covid-19 pandemic. Furthermore, the findings of this review study present a better understanding of the opportunities and challenges for future online learning in Indonesian K-6 education.



ABS-060

Build Software of Information Management Community Service Events

Febrina Anastasha¹, Teddy Marcus Zakaria¹

¹Universitas Kristen Maranatha, Jl. Surya Sumantri No.65, Bandung, Indonesia

*Corresponding author: febrinaanastasha@outlook.com

Keywords: Community Service , Event Management, Framework, Website, PHP

Abstract: AbdimasFIT is a website that used to manage community service data at the Faculty of Information Technology at Universitas Kristen Maranatha, Bandung. Not only collecting data on community service, but also seeing reports on community service activities. In this report feature, users are expected to be able to summarize the results of all or part of the data on community service activities, so that they can help the Faculty of Information Technology in solving problems around community service. These problems can be in the form of speakers who should be invited, what topics are most frequently held, who are lecturers who often contribute to community service activities, the number of activities per period, what activities are involved if many users are involved, and so on. Web-based applications that are made generally based on Laravel. Laravel is one of the many PHP frameworks. This web-based application has been activated on the server so that it can be accessed online from anywhere and anytime. AbdimasFIT will be tested by several testers and blackbox testing will be carried out to see if there are still some errors on the AbdimasFIT website. The final result of AbdimasFIT, namely AbdimasFIT can facilitate the Faculty of Information Technology in solving problems regarding community service activities.



ABS-096

User Interactions Analysis on a Moodle-based online Learning Management System during Pandemic

Bernard Renaldy Suteja¹, Wilfridus Bambang Triadi Handaya²

¹Department of Information Technology, Universitas Kristen Maranatha, Surya Sumantri 65, Bandung, Indonesia

²Department of Informatics, Universitas Atma Jaya Yogyakarta, Babarsari 44, Yogyakarta, Indonesia

*Corresponding author: bernard.rs@it.maranatha.edu

Keywords: Academic, Moodle, Learning Management System

Abstract: The Covid19 pandemic in Indonesia has provided a concise overview and practical understanding of how technology might aid educational continuity. This pandemic presents a unique challenge for academic innovation in establishing the optimum technology-based distribution strategy. Moodle was one of the most popular LMS sites for providing an online learning experience during the pandemic. However, not all educational institutions are subject to the government's online learning model. This study uses a sample dataset from Moodle, a learning management system (LMS) platform used in the odd semester of 2020/2021. Start on September 21, 2020, until February 5, 2021. During the study, data was collected from only three departments at Universitas Kristen Maranatha. According to the statistics, most Informatics Engineering undergraduate departments interact with LMS for 17200 hours and 11455 times throughout a semester.



ROOM I – Friday, 2 July 2021, 13:00-14:30 WIB

Topic 8: Nutrigenomics and Food Science

ABS-019

Bioactivity of Soybean *Tempeh* against Diarrhea Associated Pathogen is More Correlated with the Number of Total Bacteria than Specific Major Bacterial Phylum

TE Pramudito*¹, EGA Putri, E Paluphi, G Florencia, MR Gunawan, MP Pratiwi and Y Yogiara²

Faculty of Biotechnology, Atma Jaya Catholic University of Indonesia, Jl. Raya Cisauk Lapan No.70, Tangerang, Banten 15345, Indonesia

**Corresponding author: theodorus.eko@atmajaya.ac.id*

Keywords: Soybean Tempeh, ETEC, Anti-diarrhea, RT-PCR, Yeast Agglutination Assay

Abstract: Soybean tempeh can reduce the severity of travellers' and weanling diarrhoea through the inhibition of enterotoxigenic *Escherichia coli* (ETEC) adhesion to intestinal cells. This bioactivity is due to the presence of bioactive oligosaccharides derived from the degradation of soybean matrix by fungi. Tempeh also contains other microorganisms such as bacteria and there has been no report whether bacteria can also influence the anti-adhesion bioactivity of tempeh extract against ETEC. In this research, we quantified bacterial population in tempeh samples using the real time polymerase chain reaction (RT-PCR) method and measured the anti-adhesion bioactivity against ETEC of the extract using yeast agglutination assay. Data from both analyses were compared to see if there is any correlation between the two variables. Bacterial quantification with RT-PCR was focused on the enumeration of total bacteria and two specific major bacterial phyla in tempeh: Firmicutes and γ -Proteobacteria. There was a significantly strong positive correlation ($R = 0.733$) between the total number of bacteria with anti-adhesion bioactivity of tempeh. However, there was no strong correlation between the number of Firmicutes and γ -Proteobacteria with anti-adhesion bioactivity. Our finding indicates that the anti-adhesion bioactivity of tempeh tends to increase following the abundance of bacteria but is not significantly affected by any specific major bacterial phylum.



ABS-031

Effects of Herbal Ingredients (*Allium Sativum*, *Punica granatum*, *Curcuma longa*, *Curcuma xanthorrhiza*) on FATP3 Gene Expression in Aorta of High Fat Diet-fed Rats: a Preliminary Study

Diana Krisanti Jasaputra^{1,2}, Julia Windi Gunadi^{2,3}, Penny Setyawati Martioso⁴, Larissa⁴, Yenny Noor⁵, Irna Permanasari Gani⁶, Erik Dwikurnia Saiman⁷, Desman Situmorang⁸, Andi Haryanto⁹

¹Department of Pharmacology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

²Maranatha Biomedical Research Laboratory, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

³Department of Physiology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

⁴Department of Clinical Pathology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

⁵Department of Ophthalmology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

⁶Department of Psychiatry, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

^{7,8}Department of Obstetric Gynecology, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

⁹Department of Obstetric Internal Medicine, Faculty of Medicine, Maranatha Christian University, Jl. Suria Sumantri, Bandung, Indonesia

*Corresponding author: dianakjasaputra67@gmail.com

Keywords: curcuma, allium sativum, punica granatum, fatp3

Abstract : FATP (Fatty Acid Transport Protein) is a protein that facilitate uptake of LCFA (Long Chain Fatty Acid) by activating it into CoA-thioester and trapping them in the cell. FATP3 is critical for LCFA uptake in endothelial cells. Herbal ingredients are well known as anti-hyperlipidemic and anti-atherosclerotic agents, but molecular mechanism for these effects are still unclear. Twenty eight male Wistar rats used in this study were divided into negative control, positive control (HFD), and treatments (175 mg/kgBW *Allium sativum*, *Punica granatum*, *Curcuma longa*, *Curcuma xanthorrhiza*, and 1.8 mg/kgBW Rosuvastatin), each groups consisted of 4 rats. The rats were given vitamin D 700.000 mg/kgBW single dose to all groups except for negative control, continued with HFD combined with herbal ingredients for twelve weeks. After treatments, the rats were sacrificed, RNA were extracted from aorta to perform semi quantitative PCR (FATP3 and GAPDH). We found no significant differences of FATP3 gene expression between all groups. In summary, herbal ingredients (*Allium sativum*, *Punica granatum*, *Curcuma longa*, *Curcuma xanthorrhiza*) do not influence FATP3 gene expression in aorta of high fat diet-fed rats.



ABS-055

Biochemical Characteristics of Ground Robusta Coffee under Various Postharvest Technologies and Processing Parameters

Sri Wulandari¹, Makhmudun Ainuri² and Anggoro Cahyo Sukartiko²

¹*Department of Agro-Industrial Technology, Faculty of Agricultural Technology, Universitas Gadjah Mada Jl.*

Flora 1 Bulaksumur, Yogyakarta 55281 Indonesia

**Corresponding author: dun@ugm.ac.id*

Keywords: Caffeine, Chlorogenic acid, Sucrose, Lipid, Roasting, Milling, Full wash, Honey, Natural, Robusta Coffee

Abstract: Biochemical characteristic of ground coffee, which representing its quality, is determined by postharvest technologies and processing parameters. The purpose of this study was to analyze the biochemical characteristics of ground robusta coffee under various postharvest technologies and processing parameters and to find out the best treatment combination. The orthogonal array notation of the Taguchi method used was $L_9 (3^4)$ with four factors and three levels from postharvest (full wash, honey, and natural), temperature (150 °C, 175 °C, 200 °C), roasting time (10 minutes, 12.5 minutes, and 15 minutes) and milling (80 mesh, 100 mesh, and 120 mesh). The tested biochemical characteristics were moisture, caffeine, chlorogenic acid, sucrose, and lipid contents. ANOVA for the mean and SNR values was performed to determine significant differences between treatments. At the same time, the best conditions were carried out by Grey Relational Analysis, which furthermore tested with a confirmation test. The analysis results showed that the effectiveness of the treatment had significant differences from each treatment from parameters: moisture content, caffeine, chlorogenic acid, and lipid where $F\text{-ratio} \geq F\text{-Table}$, but were not significantly different for the mean on the sucrose parameter. The best conditions were the combination of postharvest technologies (full wash), temperature and roasting time (150 °C and 12.5 minutes), and milling (100 mesh) with moisture content (3.21%), caffeine (0.81%), chlorogenic acid (8.1%), sucrose (2.58%), lipids (8.5%) and these results have been confirmed



ABS-092

Substantially Improved Antioxidant Activity of Modified Polymeric Nanostructure Entrapping Curcumin

Deni Rahmat^{*1}, Wahyu Widowati², Etik Mardiyati³, Eny Kusri⁴, Abdi Wira Septama⁵, Yati Sumiyati¹, Mita Restinia¹, Sjaikhurizal El Muttaqien³, Cintani Dewi Wahyuni⁶, Hanna Sari Widya Kusuma⁶, Muhammad Aldi⁶, Tri Handayani⁶, Rizal Rizal^{6,7}

¹ Faculty of Pharmacy, Pancasila University, Jl. Srengseng Sawah, Jagakarsa, Jakarta Selatan, 12640, West Java, Indonesia

² Faculty of Medicine, Maranatha Christian University, Jl. Surya Sumantri no 65, Bandung 40164, West Java, Indonesia

³ Pharmacy Technology and Medic Center of BPPT, Kawasan Puspiptek Serpong Tangerang Selatan, Banten, Indonesia

⁴ Faculty Engineering, Department of Chemical Engineering, Faculty of Engineering, Universitas Indonesia, Depok 16424, West Java, Indonesia

⁵ Chemistry Research Center, LIPI, Kawasan PUSPITEK, Serpong, Tangerang Selatan, 15314, Banten, Indonesia

⁶ Biomolecular and Biomedical Research Center, Aretha Medika Utama, Jl. Babakan Jeruk 2 no 9, Bandung 40163, West Java, Indonesia

⁷ Biomedical Engineering, Department of Electrical Engineering, Faculty of Engineering, Universitas Indonesia, Depok 16426, West Java, Indonesia

*Corresponding Author: mangnden78@yahoo.com

Keywords: Curcumin, nanoparticle, antioxidant, free radicals

Abstract: **BACKGROUND:** Chronic and degenerative diseases due to free radicals cause oxidative stress in the body. The body requires natural antioxidants to cope with the negative effects of free radicals. Curcumin is a compound that has been shown to have pharmacological potential, such as antioxidant, anti-inflammatory, and anti-tumor properties. In recent years, the nanoparticle system for drug administration has become one of the most frequently studied methods of treating the disease. **OBJECTIVE:** This study aimed to formulate nanocurcumin (NC) to enhance its antioxidant activity. **METHODS:** The antioxidant activity of NC was evaluated using 2,2-diphenyl-1-picrylhydrazyl (DPPH), 2,2'-azinobis-3-ethylbenzo-thiazoline-6-sulfonic acid (ABTS), H₂O₂, NO, and ferric reducing antioxidant power (FRAP) assay. **RESULTS:** The results showed that the median Inhibitory Concentration (IC₅₀) for DPPH, ABTS, H₂O₂, NO scavenging activities of NC was 0.68; 15.59; 24.98; 19.61 µg/mL, respectively. While the IC₅₀ value for curcumin was 3.20; 18.54; 38.40; 24.94 µg/mL, respectively. The FRAP activity of NC and curcumin was 502.92 and 256.50 µM Fe(II)/µg, respectively, at the highest concentration of 50 µg/mL. **CONCLUSION:** The antioxidant activity of the NC was higher than that of curcumin alone. Thus, the nanoparticle system may enhance the antioxidant activity of curcumin.



ROOM J – Friday, 2 July 2021, 13:00-14:30 WIB

Topic 7: Machine Learning, Edge Computing, Deep and Federated Learning

ABS-032

Breast Cancer Histopathological Image Classification using Progressive Resizing Approach

Hendra Bunyamin¹, Hapnes Toba¹, Meyliana², and Roro Wahyudianingsih³

¹Informatics Engineering, Maranatha Christian University, Indonesia

²Accounting Department, Maranatha Christian University, Indonesia

³Faculty of Medicine, Maranatha Christian University, Indonesia

*Corresponding author {hendra.bunyamin, hapnes.toba}@it.maranatha.edu, meyliana oey@yahoo.com, rorodiana pa@yahoo.com

Keywords: breast cancer histopathological image classification, deep learning, convolutional neural network, progressive resizing, vahadane image normalization

Abstract: Breast cancer (BC) is a lethal disease which causes the second largest number of deaths among women in the world. A diagnosis of biopsy tissue stained with hematoxylin & eosin, commonly named BC histopathological image, is a non-trivial task which requires a specialist to interpret. However, in developing countries, such as Indonesia, the ratio of physician to population is still lower than the WHO-recommended figure; moreover, ongoing geographical disparities exist which exacerbate the shortage of physicians. Recently, the advance in machine learning techniques driven by deep learning techniques and competition datasets has enabled the automation and prediction of histopathological images interpretation. Each different competition dataset has its own state-of-the-art technique; therefore, this paper explores an avenue of research by merging popular BC histopathological images research datasets and searching for the best performing models on the unified dataset. The merging process maintains similar classes among the datasets; consequently, the unified dataset has three classes and the prediction problem is cast into multi-class classification problem. We propose a combination of Vahadane preprocessing technique and training method using progressive resizing approach. Our approach demonstrates that both utilizing Vahadane image normalization and utilizing our progressive resizing technique achieve around 99% in F_1 score, which is comparable among other state-of-the-art models. The unified dataset is also provided online for advancing research in histopathological images interpretation. The dataset and codes are available at <https://github.com/hbunyamin/2020-ice-tes-bc-dataset>.



ABS-082

Multi-objective Bees Algorithm for Feature Selection

Natalia Hartono¹

¹Department of Mechanical Engineering, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK

*Corresponding author: (nxh886@student.bham.ac.uk)

Keywords: Bees Algorithm, Classification, Feature Selection, Machine Learning, Multi-objective

Abstract: In machine learning, there are enormous features that can affect learning performance. The problem is that not all the features are relevant or important. Feature selection is a vital first step in finding a smaller number of relevant features. The feature selection problem is categorised as an NP-hard problem, where the possible solution exponentially surges when the number of n-dimensional features increases. Previous research in feature selection has shifted from single-objective to multi-objective because there are two conflicting objectives: minimising the number of features and minimising classification errors. Bees Algorithm (BA) is one of the most popular metaheuristics for solving complex problems. However, none of the previous studies used BA in feature selection using a multi-objective approach. This paper aims to present the first study using the Multi-objective Bees Algorithm (MOBA) as a wrapper approach in feature selection. The MOBA developed for this study using basic combinatorial BA with combinatorial of swap, insertion and reversion as local operators with Non-Dominated Sorting and Crowding Distance to find the Pareto Optimal Solutions. The performance evaluation using nine Machine Learning classifiers shows that MOBA performs well in classification. Future work will improve the MOBA and use larger datasets.



ABS-089

Eye Abnormality Automatic Detection Using Deep Learning based Model

Audyati Gany^{1*}, Meilan Jimmy Hasugian^{1,2} Erwani Merry Sartika¹ Novie Theresia Br. Pasaribu¹ Hannah Georgina¹

¹Department of Electrical Engineering, Maranatha Christian University, Surya Sumantri 65, Bandung, Indonesia

²Department of Electrical Engineering, Chung Yuan Christian University, Zhongli, Taiwan

*Corresponding author: (audyati.gany@eng.maranatha.edu)

Keywords: Ocular disease, Fundus retina, Deep learning, Convolutional neural network

Abstract: In the World Report on Vision 2019, WHO stated that approximately 2.2 billion people worldwide have visually impaired, and almost fifty percent among them could have been prevented. The world faces considerable challenges in terms of eye care, including inequalities in the coverage and quality of prevention, treatment, and rehabilitation services. Early detection and diagnosis of ocular pathologies would enable to forestall of visual impairment. One challenge that limits the adoption of a computer-aided diagnosis tool by the ophthalmologist is, the sight-threatening rare pathologies such as central retinal artery occlusion or anterior ischemic optic neuropathy and others are usually ignored. The aim of this research is to develop methods for automatic detection of eye abnormality caused by the most common ocular disease along with the rare pathologies. For this purpose, we developed the deep learning-based model trained with Retinal Fundus Multi-disease Image Dataset (RFMiD). This dataset consists of a 1920 fundus retina images captured using three different fundus cameras with 46 conditions annotated through adjudicated consensus of two senior retinal experts. The model is built on the top of some prominent pretrained convolutional neural network (CNN) models. From the experiment, the model could achieve the accuracy level and recall 0.87, whereas precision and F1 score are 0.86, and area under receiver operating characteristic (AUROC) is 0.90. The proposed model built in deep learning structure could be a promising model in automatic classification of ocular disease based on fundus retina images



ICEHUMS

ROOM K – Thursday, 1 July 2021, 10:30-12:00 WIB

Topic 1: Family, Gender and Intergenerational Issues

ABS-26

Female Representation in *Legenda Tangkuban Perahu*: a Transitivity Analysis

Jeanyfer¹, Eva Tuckyta Sari Sujatna¹, Susi Yuliawati¹ and Trisnowati Tanto^{2d}

¹Fakultas Ilmu Budaya, Universitas Padjajaran, Jl. Raya Bandung Sumedang KM 21, Bandung, Indonesia

²Fakultas Bahasa dan Budaya, Universitas Kristen Maranatha, Bandung, Indonesia

*Corresponding author: jeanyfer20001@mail.unpad.ac.id

Keywords: transitivity, systemic functional linguistics, Indonesian folktale, representation, gender, corpus linguistics

Abstract: Legends and folktales are inherent in every culture as it is one of the ways to impart wisdom to the younger generation. It also serves as a portrayal of the society at a certain period of time and provides the community with some understanding about what is acceptable and/or how something should work in the society. One of the issues that seem to be present in these stories is gender representation, something that may have shifted a lot since the creation of the original story. While most analysis on legends and folktales focus on their themes and/or main messages, this paper attempts to examine the representation of female in a popular legend from West Java, *Legenda Tangkuban Perahu*. This study applies the mixed method approach that combines the quantitative and qualitative approach analyze the processes and the participant roles connected to the portrayal of the female character in the story by using the Transitivity System proposed by Halliday and Participant Roles theory of Toolan's. The finding suggests that despite having been assigned to active participant roles in the system, the main female character is still represented as a passive role in the story and thus establishes the view of a more traditional gender role in the society, a finding which is quite different from a previous study done on female characters archetype in Indonesian folklores. The result of this present study is believed to be the ground for developing the younger generation's understanding and establishment of our traditional culture and helps to build the sustainable development goals in terms of gender and intergenerational issue



ABS-36

How do Indonesians perceive Marriage? Semantics Analysis of Marriage as a Concept and its Relation with the Well-Being

Afifah Zulinda Sari, Destie Nurainy Ramadhan* , Minerva Patricia, Pingkan Cynthia Belinda Rumondor 1 , and Farah Mutiasari Djalal 2
Department of Psychology, Bina Nusantara University, Jakarta, Indonesia
**Corresponding author: destienurainyramadhan.9akh@gmail.com*

Keywords: Marriage, concept, semantics, well-being, relationship satisfaction.

Abstract: In Indonesia, being married is considered a desirable social status and associated with well-being. However, there is a lack of research on marriage as a concept in Indonesia's context. This study aims to explain how Indonesians perceive marriage and how it differs from Western cultures. A total of 388 Indonesian adults, who were at least 18 years old, generated the meaning of marriage using a feature generation task (i.e., What is marriage according to you?). Their well-being levels (level of subjective happiness, satisfaction with life, and relationship satisfaction) and demographics (age, gender, educational background, marital status, and relationship status) were also collected to see whether a marriage was perceived differently based on these data. Descriptive analysis was employed. The generated features were coded, counted, and classified based on participants' well-being levels in the three scales (happiness, life satisfaction, and relationship satisfaction). In general, marriage was perceived uniformly and primarily as 'the union of two parties, along with 'involves commitment', 'is a state and religion legal bond', and 'involves love', regardless of their well-being levels. In other words, the marriage concept has no association with the level of well-being. The generated features also shown a significant overlapping with the marriage definition by Indonesian law. Theoretical implications and comparable results from the previous (Western) studies of relationships are described in detail.



ABS-50

Desire to Have Children Assessed from Socioeconomic Context Post Disaster in Palu

Abd. Rahman¹, Sri Rum Giyarsih,² and Sigit Herumurti BS³

¹*Student of Doctoral Program in Population Study of the Postgraduate School of Gadjah Mada University and
Lecturer of Public Health Study Program FKM University of Tadulako*

²*Lecturer of Doctoral Program of Population Study Program at the Postgraduate School of Gadjah Mada
University and Geography Study Program, Faculty of Geography, Gadjah Mada University*

³*Lecturer of Doctoral Program of Population Study Program at the Postgraduate School of Gadjah Mada
University and Geography Study Program, Faculty of Geography, Gadjah Mada University*

Keywords: Socioeconomic; Desire to Have Children

Abstract: Geographical impacts can create instability, risk, and uncertainty in the process population that can occur in communities in an area. One geographic impact that happened was a natural disaster. An earthquake measuring 7.4 on the Richter Scale rocked the central part of Indonesia in Palu, Sigi, and Donggala on September 28, 2018. The earthquake that was accompanied by the tsunami and liquefaction caused 4,340 fatalities people including children. This study aims to look at the socio-economic role (age, education, occupation, income and ethnicity) on the mother's desire to have children after the disaster in Palu City. This research was conducted in Palu and the participants in this study were 382 mothers who were included in the inclusion criteria were fertile age couples and were affected by the natural disaster (earthquake/tsunami/liquefaction). The sampling technique uses Propositional stratified random sampling. Data analysis using linear regression analysis. Research result shows that socioeconomic factors (age, education, occupation, income, and ethnicity) simultaneously contribute to the desire of mothers to have children, and age become the most dominant factor in a role. The conclusion of this study shows that the age group at risk of pregnancy and childbirth, high education, have a job, / have worked have an increased desire to have children. The results of this study are expected to be a reference or guide in predicting fertility and the desire to have children in areas affected by natural disasters, especially earthquakes, tsunamis and liquefaction, viewed from the socio-economic context. If it happens in other places with the same type of disaster, you can find out the picture of mothers who desire more children



ABS-59

Family Resilience: Traits, Positivity and Close Relationship in Adolescents

O.Irene Prameswari Edwina¹, Tesselonika Sembiring², Cindy Maria³, Jean Esparanci⁴

^{1,2,3,4}*Department of Psychology, Maranatha Christian University, Jl. Surya Sumantri No.65, Bandung, Indonesia,*

**Corresponding author: tessalonika.sembiring@maranatha.edu*

Keywords: Family Resilience, Traits, Close Relationship, Positivity, Adolescents

Abstract: Family has a function to develop each member of the family. In the family as a system, there is mutual connection and dependence between subsystems. High stress can be experienced by all family members, including adolescents. This can cause the family to function less optimally, and interfere with the adaptation of each family member. A family that has resilience is one solution for the family can still adapt well when experiencing strong pressure. The purpose of this study is to determine the role of traits in family resilience, with the mediator of close relationship and positivity. Data were collected using the reliable instruments. The research participants consisted of 312 adolescents aged 15-18 years. The data were processed by using the mediation analysis technique using Model 4 from Hayes PROCESS. The results showed that the five traits did not have a direct role on family resilience. The role of the five traits on family resilience can occur if mediated by the mediator variables. From the three mediators, namely close relationship, positive emotions, and negative emotions, it was found that positive emotions had the strongest role as a mediator of the five traits on family resilience. Implications for theory and practice are discussed.



ABS-60

Predicting Retention: Sociodemographic, Motivational, and Perceived Social Support Factors

Ria Wardani¹, Ira Adelina², Helianny Kiswantomo³

^{1,2,3}Fakultas Psikologi, Universitas Kristen Maranatha, Jl. Prof. drg. Suria Sumantri 65, Bandung 40176

*Corresponding author: riawardani_p@yahoo.co.id

Keywords : motivation, sociodemographic, social support, student retention.

Abstract: Low student retention becoming problematic issue in many education institutions in the midst of increasingly fierce competition in higher education. Low student retention reflects educational providers capability in equipping their students to prepare their future. This study examines this issue through sociodemographic factors, motivational, and perceived social support so that strategies can be formulated to increase student retention. Using quantitative research method with first-year student research respondents, the research employed questionnaire in assessing students demographic properties, Academic Motivation Scale (AMS-Indonesian), Academic Retention Scale (ARS), and Multi-dimensional Social Support Scale (MSPSS). Statistical analysis showed that internal motivation and social support contribute significantly toward student retention; while sociodemographic factors do not contribute directly toward student retention. However, there are some interesting findings: 1) Levels of spending is positively correlated with motivation, especially intrinsic and amotivation (reversed); 2) Mother's level of education, but not father's, is positively correlated with intrinsic motivation; 3) Students' whose mothers are working tend to have higher retention on self related aspect, and motivation on both intrinsic and extrinsic. The conclusion is that first-year students with clear academic goals and perceived sources of support for their academic activities will help to survive and therefore avoid dropping out of college.



ABS-64

The Representation of Gender in Garner's Politically Correct Bedtime Stories: a Critical Stylistic Analysis

Fenty Lidya Siregar¹, Henni² Silvanni Comara³
^{1,2,3}*Universitas Kristen Maranatha, Indonesia,*
 *Corresponding author: fenty.siregar@outlook.com

Keywords: Gender, Inequality, Representation, Garner, Ideology

Abstract: Gender equality is essential for a sustainable world; therefore, it is included in United Nation's Sustainable Development Goals. However, unequal portrayals of female characters are still present in many sectors of our lives. These phenomena have generated concern especially among educators, parents, and feminists. Thus, many studies are needed to keep uncovering gender inequality and how one can play a role in lessening the inequality. With this in mind, this study reports on an analysis of ideologies and gender representation in two short stories in Garner's (1994) book entitled Politically correct bedtime stories: Modern tales for our life and times. The study used critical stylistic approach to reveal gender representations of characters in the stories. The study found that Garner constructed the stories of Cinderella and Snow White to challenge the stereotyped representation and hegemonic ideals of males and females. He used pseudo-generics in naming and feminist word choices when addressing his characters. He also deleted marriage as a happily-ever-after end of common fairy tales and changed it into a new end: Cinderella and Snow White having their own businesses. He also contradicted the concept of beauty and highlighted undesirable qualities of men. The findings indicated that Garner offered his ideology that females can free themselves from the unrealistic standard of beauty and it is possible to be subversive toward traditional gender roles. The study is expected to inform readers the texts' constructions of gender roles and make them aware of the ideologies embedded in the given gender roles.



ROOM L – Thursday, 1 July 2021, 10:30-12:00 WIB

**Topic 2: Financial Models, Accounting, Marketing
and Economic Growth**

ABS-20

**Using Educational Game for Improving Students' Knowledge
and Interest in Investing in the Capital Market**

Tan Ming Kuang¹, Lidya Agustina¹ and Yani Monalisa²

¹*Department of Accounting, Universitas Kristen Maranatha, Prof. Drg. Surya Sumantri no. 65, Bandung,
Indonesia*

²*Department of Management, Universitas Kristen Maranatha, Bandung, Indonesia*

**Corresponding author: tm.kuang@eco.maranatha.edu*

Keywords: simulation games, educational games, card games, capital market

Abstract: A recent Indonesian national survey reveals that the level of capital market literacy is one of the lowest compared to other financial sectors in Indonesia (OJK, 2019). Hence, this study examines the impact of using a card simulation game named STOCKLAB to improve students' knowledge and interest in investing in the capital market. Additionally, this study examines the effects of adding explanation—where an instructor explains the educational contents of the game to the players—during the game. A total of 172 undergraduate students from three private universities in Indonesia participated in this study and a randomized control trial with a three-group pretest/posttest research design was used. The results showed that STOCKLAB with explanation is more effective than STOCKLAB without explanation in assisting students in acquiring knowledge about capital market, but it is as effective as traditional approach. The three approaches are equally effective for improving students' interest in investing in the capital market. However, both STOCKLAB with and without explanation group reported a significantly higher level of agreement that the game is an interesting way to study capital market compared to the traditional group. This study implies that STOCKLAB can be used as an alternative approach to introduce capital market to the students if it is coupled with explanation.



ABS-24

Green Microfinance and Renewable Energy: Empowering the Role of Women in Rural Areas

Apriani D.R Atahau¹, Imanuel Madea Sakti², Andrian D. Huruta³, Min-Sun Kim⁴

^{1,2} Department of Management, Satya Wacana Christian University, Jl Diponegoro 52-60, Salatiga, 50711, Indonesia

³ Department of Economics, Satya Wacana Christian University, Jl Diponegoro 52-60, Salatiga, Indonesia

⁴ International Undergraduate Program in Business and Management, Chung Yuan Christian University, 200 Zhong Bei Rd, Taoyuan City, 320314, Taiwan, ROC

*Corresponding author: manuel.sakti@uksw.edu

Keywords: Renewable energy, gender, green microfinance, East Sumba

Abstract: The transformation of women's small rural microfinance activities into a green microfinance practice requires more research to increase global awareness in promoting eco-friendly activities. Hence, this paper tries to enlighten by investigating the interrelationship of green microfinance, renewable energy, and women empowerment in East Sumba rural areas since Sumba is set as an iconic island with abundant renewable energy potentials. Using data of 150 respondents collected from distributing questionnaires and analyzed by Covariance Based-Structural Equation Modelling (CB-SEM), the findings show that the presence of renewable energy positively impacts women empowerment and green microfinance development. The findings provide supporting evidence for promoting renewable energy to develop green microfinance and increase women's empowerment in rural areas.



ABS-34

Utilization of Digital Marketing after Covid-19 Pandemic in Indonesia Businesses

Yenni Merlin Djajalaksana¹ and Doro Edi²

¹Information Systems Program, Maranatha Christian University, Jl. Surya Sumantri No. 65, Bandung, Indonesia

²Information Systems Program, Maranatha Christian University, Jl. Surya Sumantri No. 65, Bandung, Indonesia

*Corresponding author: yenni.md@maranatha.ac.id; doro.edi@maranatha.ac.id

Keywords: COVID-19 Impact, COVID-19 Pandemic, Digital Marketing, Indonesia Businesses.

Abstract: The positive momentum of Indonesia rapid economic development in the beginning of 2020 was halted completely by the arrival of COVID-19 Pandemic in Indonesia from March 2020. The sudden lockdown orders from the government for approximately 3-months period caused great impacts towards Indonesia economy, especially for the small to medium businesses that cannot avoid the loss of revenues while the costs of doing businesses only slightly decreased. In the midst of the difficult business atmosphere, Digital Marketing turned out to be a significant help for the businesses that were forced to reach out to the customers using online means. This study investigated the impact of COVID-19 Pandemic towards the use of Digital Marketing Tools in Indonesia Businesses. The 106 survey participants responded were Indonesia-based Business Owners from small to medium scale contacted through Instagram Direct Messages, Facebook Instant Messengers, Facebook Groups, WhatsApp Groups and Telegram Groups. The selection of participants conducted with purposive sampling method. Statistical Tabulation of the responses and correlations analysis on the characteristics of the businesses and the usage behavior of the business on digital marketing tools are identified. The study presented the results that 68% of the respondents had experienced a decrease in revenue performance due to the COVID-19 Pandemic. The top three most effective marketing tools to get new customers were Instagram ads (27%), Whatsapp (27%), Facebook Ads (9%) and the most effective marketing tools to generate revenues were Whatsapp (31%), Instagram (25%), and Search Engine Ads (9%). The top four reasons why the respondents wanted to utilize digital marketing tools include the "Ability to reach larger market" (26%), the "Savings on printed marketing materials" (16%), the "Ability to target market with certain characteristics" (16%), and the "Right targeting to reach the market wanted" (16%). The top three reasons in choosing a certain digital marketing tools were "Number of Active Users in the Digital Marketing Tools in Indonesia" (19%), "Ease of Use" (17%), and "Success in Improving Sales" (16%). The top three challenges that the respondents chose were "Do not have a staff focusing on digital marketing tasks" (20%), "Do not have time to create content" (19%), and "Do not fully understand how to use Digital Marketing Tools effectively" (18%). There was a significant difference among the use of different marketing media before and after COVID-19 Pandemic ($F=18.30$, $p<0,05$), however, there was no significant difference of the use of the same digital media between before and after COVID-19 ($F=0,08$, $p>0,05$). There was no evidence of the difference of marketing expenditure before and after COVID-19 ($F=0$, $p>0,05$).



ABS-41

Assessing Business Performance of the Traditional Market Trader: the Role of Buyer-Supplier Relationship and Dynamic Capabilities

Moh Farid Najib¹,

¹*Business Administration Department, Bandung State Polytechnic, Indonesia*

**Corresponding author: mohfaridnajib@polban.ac.id*

Keywords: Buyer-supplier Relationship, Dynamic Capabilities, Business Performance.

Abstract: Traditional market competition is not only facing the development of modern markets, and competition among traders. Therefore, the importance of buyer-supplier relations and the dynamic capabilities of traders is driving their business performance. The purpose of this study is to empirically examine the impact of the buyer-supplier relationship on business performance, and the mediating effect of dynamic capabilities. This study is based on empirical data collected from a survey of 840 traditional market traders in West Java, Indonesia on 69 traditional markets. Structural equation modelling (SEM) was used to test the research question by using the two stages. The first measuring the model by confirming the loading factor, cronbach's alpha, variance extracted, construct reliability and discriminant validity. Secondly, testing the structural model. This study provides evidence that the business performance of traditional market traders is significantly linked to the buyer-supplier relationship and dynamic capabilities. The buyer-buyer relationship can build the dynamic capabilities of traditional market traders, which in turn can improve their business performance. This research contributes to the literature by providing empirical evidence that buyer- supplier relationship and dynamic capabilities of traditional market traders need to be continuously improved to ensure the availability of products and the competitiveness.



ABS-51

Comparison of Financial Literacy for Micro, Small and Medium Enterprises Entrepreneurs at *Bojong Soang* upon Using Financial Planning Application "*SAKA (peSAK Abdi)*"

Maya Malinda¹, Asni Harianti² Yolla Margaretha³, Henky Lisan Suwarno⁴, Kaleb Immanuel Yahya⁵, and Miki Tjandra⁶

^{1,2,3,4,5}Department of Management, Maranatha Christian University, Jl Suria Sumantri No 65, Bandung, Indonesia

⁶Department of Visual Communication Design, Maranatha Christian University, Jl Suria Sumantri No 65, Bandung, Indonesia

*Corresponding author: (maya.malinda@eco.maranatha.edu)

Keywords: Financial Literacy, Financial Planning, MSME Entrepreneurs, *SAKA (peSAK Abdi)*, *Bojong Soang*

Abstract: Financial literacy – the cognition and skills in managing financial resources is one of the elements that determine the success of a business. It deals with the understanding on how to manage money, especially when the money for doing the business is assisted by financial services such as banks, insurance, pawnshops, and pension funds. In Micro Small Medium Enterprise (MSME), financial literacy plays a significant role. Thus, the Indonesian government pays serious attention to improve the financial literacy of entrepreneurs involved in MSMEs, to ensure that the enterprise can survive. MSMEs are supported by the government as their existence is in accordance with one of the government's sustainable development goals, that is to alleviate poverty. Accordingly, this research is done to gain insight on MSME entrepreneurs' financial intelligence by measuring their level of financial literacy and to find out problems that the entrepreneurs have in understanding finance. The respondents of the research is MSME entrepreneurs in *Bojong Soang*. The data is gained through Financial Fitness Quiz (FFQ) to measure the entrepreneurs' financial behaviour and literacy. The data is taken twice, before and after they are trained to use the Financial Planning Application "*SAKA (peSAK Abdi)*". The before and after data are compared using the paired sample t test. The result shows a significantly different result before and after the training. Hence, the use of "*SAKA (peSAK Abdi)*" application shows a breakthrough in increasing the level of financial literacy of the MSME Entrepreneurs in *Bojong Soang*.



ABS-57

Testing the Internal Control of Simda Application in Effort to Improve Public Accountability

Rhosalina Damayanti¹, Adrian Izaak Rompis² and Aprina Nugrahesthy Sulistya Hapsari³
*Accounting Department, Faculty of Economics and Business, Universitas Kristen Satya Wacana, Jl. Diponegoro
 No.52-60, Salatiga, Indonesia*

**Corresponding author: 232018046@student.uksw.edu*

Keywords: Internal Control, Information System, Accountability

Abstract: Openness and easiness on accessing informations are currently one of the ways to encourage sustainable community development. It is necessary to have proper internal control in the management of information systems so that the easiness on accessing informations is in line with the quality of the information presented. The purpose of this research is to assess the implementation of internal control in the SIMDA in improving public accountability. This research was conducted using a qualitative descriptive approach with data collection methods through in-depth interviews and observations on the implementation of the SIMDA at Dinas Pengendalian Penduduk Keluarga Berencana Pemberdayaan Perempuan dan Perlindungan Anak (Dinas PPKBPPPA) Kabupaten Sragen. The benefit of this research is to enrich the literature for further researches and provide recommendations for improvement of the existing internal control system in Dinas PPKBPPPA Kabupaten Sragen. Data analysis techniques used in this research were data reduction, data presentation, and conclusion drawing. The results of this research indicate that the applied information system already has adequate internal controls. The conclusions obtained from this research include the unavailability of a system-operation-manual book so that if an error occurs in the system, the operator must report it to Pemerintah Kabupaten Sragen for assistance. Moreover, there is no routine maintenance schedule regarding the software or hardware used in system operation. In practice, the input process is also carried out without prior data validation so that if there are any errors, corrections will be made after the input process is completed. The impact of these two things is that information cannot be generated in real time and will reduce the level of effectiveness and efficiency in system operation



ROOM M – Thursday, 1 July 2021, 10:30-12:00 WIB

**Topic 2: Financial Models, Accounting, Marketing
and Economic Growth**

ABS-62

**Does Socioeconomic Factors drive Peer to Peer Lending?
Analysis in Indonesia**

Rima Kusuma Rini¹ and Nanda Ayu Wijayanti²

^{1,2}*Department of Accounting, Universitas Indonesia, Depok, Indonesia*

**Corresponding author: rimakusumarini@gmail.com*

Keywords: Fintech lending, Peer to peer lending, borrowers, social-economics

Abstract: This study aims to analyse the determinant of p2p lending by examine the social and economy factors to accumulated loan disbursement. P2p lending is the process of lending and borrowing among individuals in financial online platform that allowed by law. Since 2015, this platform has significantly increase in Indonesia. The increasing number lender and borrower indicates the higher potential to grow. P2p lending has existed as the alternative of funding aside from traditional financial services which society needs democratic, transparent, efficient, and affordable. Hence, this study examines the factor affected significantly in p2p lending transactions. This study uses empirical approach to provides evidence of determinant of p2p lending. The data extracted from Financial Service Authority (OJK) report from 2019- 2020 and The National Socioeconomic Survey (Susenas) from Central Bureau of Statistics (BPS). The analysis method using OLS (*ordinary least square*) regression to test each of hypothesis. This study verified that there is relationship between social and economic factor especially formal labour and high education with accumulated loan of borrower. The result leads the regulation and fintech platform to make analysis of social-economic matter regards financial technology-based service. The result of this study has significant implication to p2p lending theoretically since it analyses the social and economic determinant factor by using the secondary data. Practically, the findings of the study could give additional information to reach and engage the user by identify social and economic factors. Few studies identified the determinant by using empirical analysis. Previous study mainly identified the determinant from qualitative reviews and the majority of the studies employ interview to addressed the determinant factor.



ABS-65

Bibliometric Analysis of Product-Service System Related to Life Cycle

Christina Wirawan

Industrial Engineering Department, Maranatha Christian University, Prof. drg Suria Sumantri 65, Bandung, Indonesia

**Corresponding author: christina.wirawan@eng.maranatha.edu*

Keywords: Bibliometric analysis, Life cycle, Product-service system, Sustainability

Abstract: The product-service system (PSS) concept is a concept that offers an alternative consumption pattern by shifting the consumption of tangible products into one product and service bundle. This concept appears to address the sustainability problem. In a company, the PSS concept is closely related firm life cycle. This paper aims to provide an overview of the bibliometric literature on PSS in terms of the life cycle. The methodology used is a bibliometric literature review and article mapping using VOSviewer software. The articles studied Scopus indexed articles, found on scopus.com based on the keywords 'product-service system' and 'life cycle'. From the results of the research conducted, it can be concluded that the articles were originally in the field of product development as well as product and service developed towards industrial management and competitive advantage. This study provides an appropriate basis for further research and a research road map on 'product service systems' related to 'life cycles'. By mapping the bibliometric, researchers can find out what areas need to be further developed. Further research can be conducted with recent articles to always track the dynamics of the research related.



ABS-77

Analysis of Factors Affecting the Sustainability of Village-Owned Enterprise in the Province of West Sumatera

Elvira Luthan¹, Yulia H. Yeni², Eri Besra³.

Andalas University, Kampus UNAND Limau Manis, Padang, Indonesia

¹ & ²Accounting Dept & ³Management Dept.

*Corresponding author: viraluthan@gmail.com

Keywords: Financial Literacy, Village Owned Enterprise (BUMDes), Business Sustainability, Competitive Advantage

Abstract: This study aims to examine the effect of financial literacy & competitive advantage on the sustainability of BUMDes from the perspective of improving the village economy. For the current situation, the existence of BUMDes to create an independent village economy is very much needed. Through BUMDes, it is hoped that institutions in rural areas will work together to maximize the welfare of the community and improve the village economy. This is quantitative descriptive verification research. This study uses primary data by distributing questionnaires and interviews. Researchers obtained 37 BUMDES whose data was complete for analysis. The results of this study show that financial literacy and competitive advantage have a significant effect on the sustainability of BUMDes, with a determination coefficient (Adj R²) of 69.90%. Partially, financial literacy has a positive and significant effect on the sustainability of BUMDes. This is also the same as the competitive advantage variable. The level of understanding of respondents' financial literacy is still not good. Socialization and financial literacy training is needed for BUMDES managers so that the goal of establishing BUMDES to improve the welfare of village communities can be achieved.



ABS-80

The Importance of Internal Control on Accounting Information System's Quality: Survey on Banking Sector

Ita Salsalina Lingga

Department of Accounting, Maranatha Christian University, Jl. Prof.drg. Suria Sumantri 65, Bandung, Indonesia

**Corresponding author: itasalsalinafeukm@gmail.com*

Keywords: Internal Control, Accounting Information System's Quality

Abstract: In today's world that relies more on information technology, all business organizations need accounting information systems (AIS) to be able to compete and survive. The phenomenon of unqualified AIS occurs in various organizations including banks. A qualified AIS will have an impact on accounting information's quality. Thus internal control must be developed to ensure proper data entry process, processing techniques, storage methods and information generated. It is needed to ensure that AIS operates as it should so that the risk of deviation from predetermined objectives can be avoided. This study aims to analyze the effect of internal control effectiveness towards AIS's quality. The research survey was conducted on regional development banks, located in 27 provincial capitals throughout Indonesia. Data were collected through a questionnaire. Partial Least Square SEM method was used in data processing and analysis. The results proves that there is an effect of internal control effectiveness on AIS's quality. Internal control that was conducted showed a gap which means that they have not yet been implemented effectively in order to enhance AIS's quality. Internal control effectiveness is very important to enhance AIS's quality which will have an impact on accounting information's quality.



ABS-99

The Roles of Organizational Politics and Fairness in the Relationship between Relative Performance Evaluation and Managerial Performance

Ilham Pranata¹, SeTin SeTin²

^{1,2}*Accounting Department, Universitas Kristen Maranatha, Bandung, Indonesia*

²*Corresponding author: setin2005@yahoo.com*

Keywords: relative performance evaluation, organizational politics, fairness, managerial performance

Abstract: The purpose of this study is to investigate if the perceptions of organizational politics and perceptions of fairness mediate the relationships between relative performance evaluation and managerial performance. Data collected from a survey of 125 managers of manufacturing companies in Indonesia are used to test the models. Data analysis is undertaken with Partial Least Square (Structural equation modeling). Results from structural models indicate that the use of relative performance evaluation has a positive impact on three forms of organizational politics. In addition, the finding suggest that perceptions of general political behavior and perceptions of the politics of going along to get ahead has a negative impact on managerial performance, but perceptions of politics on pay and promotion policies have no impact on managerial performance. The results also indicate that general political behavior and politics of going along to get ahead significantly mediate the relative performance evaluation and managerial performance relationship. In contrast, the mediating effects of politics on pay and promotion policies on the relationship between relative performance evaluation and managerial performance is insignificant. We also find that the use of relative performance evaluation has a negative impact on perceptions of fairness; and perceptions of fairness is positively related to managerial performance. Specifically, the results find that fairness perceptions significantly mediate the use of performance relative evaluation and managerial performance relationship. The study provides empirical evidence on how the use of relative performance evaluation can affect employee perceptions of organizational politics and fairness. It helps organizations to understand how this evaluation can affect managerial performance.



ABS-110

Sustaining Customer Loyalty in Higher Education

Marcellia Susan¹, Jacinta Winarto¹, Agus Aribowo¹, Yusuf Osman Raihin¹, Martalena²,
Herlina², Herman Kambo³, and Eddy Prayogo³

¹Department of Master of Management, Maranatha Christian University, Jl. Prof. Drg. Suria Sumantri, MPH no. 65, Bandung, Indonesia

²Department of Management, Maranatha Christian University, Jl. Prof. Drg. Suria Sumantri, MPH no. 65, Bandung, Indonesia

³Department of Accounting, Maranatha Christian University, Jl. Prof. Drg. Suria Sumantri, MPH no. 65, Bandung, Indonesia

*Corresponding author: Jacinta Winarto (jacinta.win@gmail.com)

Keywords: Educational Service, Student Loyalty, Student Satisfaction, Higher Education

Abstract: Service providers conduct various efforts to achieve more than just short-term targets. Their efforts not only focus on providing the best value for customers but also to obtain their loyalty. In the context of higher education, customer loyalty implicitly indicates the existence of a long-term relationship between higher education institutions and their students. The study aims to determine the effect of student satisfaction related to various aspects provided by higher education institutions on their loyalty. Data were collected from respondents through questionnaires which were then processed using multiple regression methods to determine the interrelationship between research variables. The results show the impact of student satisfaction on student loyalty and it is expected to be beneficial to higher education institutions to obtain an overview of student satisfaction with both academic and non-academic aspects that can sustain student loyalty and prioritize their decision based on these factors.



ROOM N – Thursday, 1 July 2021, 14:00-15:30 WIB

**Topic 2: Financial Models, Accounting, Marketing
and Economic Growth**

ABS-135

**The Interactive Effects of Superior Trust and Subordinate
Involvement in Decision Making on Budget Gaming and Budget
Value**

Rifal Hijira¹, SeTin SeTin^{2*}

^{1,2}*Accounting Department, Universitas Kristen Maranatha, Bandung, Indonesia*

**Corresponding author: setin2005@yahoo.com*

Keywords: superior trust, subordinate involvement in decision making, budget gaming, budget value

Abstract : Considering that there are still very few studies on budget value and budget gaming so that the practical solution to the budgeting problem that has yet to be resolved, therefore, this study aims to investigate if the interaction between superior trust and subordinate involvement in decision making has impact on budget gaming and budget value. A survey questionnaire was conducted and 145 Indonesian managers' from manufacturing companies answered-questionnaire. Partial Least Square (Structural equation modeling) was used to test the hypotheses. Results from structural models indicate that superior trust has a negative effect on budget gaming. In addition, the finding suggests that superior trust is stronger in reducing the budget gaming when interacting with subordinate involvement in decision making. In contrast, the relationship between superior trust that interacts with subordinate involvement in decision making and budget value is insignificant. The results also indicate that superior trust has a positive effect on budget value. We also find that the budget gaming significantly mediates the relationship between superior trust and budget value. Specifically, the results find that budget gaming significantly mediates the relationship between budget value and superior trust that interacts with subordinate involvement in decision making. The study provides empirical evidence on how the interactive between superior trust and subordinate involvement in decision making can be stronger in reducing budget gaming behaviour and increasing budget value compared to if there is no involvement of subordinates in decision making. It helps organizations to solve budget problems, such as budget gaming and budget value.



ABS-139

Measuring Ease of Use Aspects of Shopee Usage Behavior During Pandemic Using PLS-SEM Approach

Michael Christian¹, Lasmerly RM Girsang² and Henilia Yulita³

^{1,2,3}Faculty of Social and Humanities, Universitas Bunda Mulia, Jl. Lodan Raya No. 2 Ancol, Jakarta, Indonesia

*Corresponding author: michaelchristianid@gmail.com

Keywords: Attitude, Ease of use, e-commerce

Abstract: The emergence of various types and brands of e-commerce which is also followed by intense competition has made Indonesia one of the countries with the most attractive e-commerce market globally. To become a market leader like Shopee needs skills to analyse the complexity and unpredictability of young users' behavior. Studies have revealed that the ease of e-commerce platforms provides user satisfaction, although some explain the opposite since users are increasingly technology literate. This study aims to explain the behavior of e-commerce users (Attitude towards using and Actual system usage) as measured by the Perceived ease of use. The fussiness of young users especially in big cities like Jakarta underlies the sample of this study. Since the population size is unknown, this study uses 100 samples by multiplying the number of indicators which are then collected randomly. The PLS-SEM approach was used as an analytical tool. This study reveals that the ease-of-use factor significantly still affects usage behavior which then affects further decision-making. The tastes of young consumers that tend to change rapidly, supported by technological developments and the online community determine purchase intentions. Therefore, this factor is worthy enough to be a suggestion for further research.



ROOM N – Thursday, 1 July 2021, 14:00-15:30 WIB

Topic 6: Psychological, Education and Social Resources in the New Normal

ABS-75

The Role of Adult Attachment and Spiritual Well-Being Towards Wife's Marriage Satisfaction in the Muslim Community of Bandung

Yuspendi¹, Trisa Genia C. Zega², Indah Soca R. Kuntari³, Lie Fun Fun⁴, and Ida Ayu N. Kartikawati⁵

^{1,2,3,4,5}Departement of Psychology, Maranatha Christian University, Jl. Surya Sumantri no. 65, Bandung, Indonesia,

**Corresponding author: trisagenia@gmail.com*

Keywords: Adult Attachment, Spiritual Well-Being, Marriage Satisfaction, Muslim Community

Abstract: This study examined the role of adult attachment and spiritual well-being on marriage satisfaction. The research method used in this study is non-experimental with 399 respondents from wives in several Muslim communities in Bandung. The measuring instruments used are the adult attachment questionnaire by Brennan, Clark and Shaver, the spiritual well-being scale by Ellison and Paloutzian, and the marital satisfaction level's Rusbult. We run multiple regression on wife who had been married for at least 2 years and were still bound in a monogamous marriage in the Muslim community. We tested three hypotheses. The first results showed that adult attachment and spiritual well-being significantly affect wives' marriage satisfaction in the Muslim community (R. 483, Sig. 000). We found that adult attachment has a significant role in the satisfaction of the wife's marriage in the Muslim community (R. 355, Sig. 000). In the third result, we found that spiritual well-being related significantly to the wife's marriage satisfaction in the Muslim community (R. 373, Sig. 000). This means that a romantic relationship with a secure partner makes the wife closer and less anxious about her partner. In addition, a wife having a dimension of good religiosity towards God can increase the satisfaction of a wife's marriage. The implication of this study, it is necessary to create a balance between romantic relationships with a partner and to maintain a close relationship with God in increasing marriage satisfaction.



ABS-109

Potential Relationship between Students' Satisfaction on University Attributes and Positive or Negative Word-of-Mouth (WOM) and Its Correlation with their Recommendations

Imelda Junita¹, Fanny Kristine², Sherlywati³, Rizki Muhammad Sidik⁴

Department of Management, Maranatha Christian University, Suria Sumantri 65, Bandung, Indonesia

**Corresponding author: imelda.junita@eco.maranatha.edu*

Keyword: attributes of students' satisfaction, positive and negative word-of-mouth, students' perception, recommendation

Abstract: Prospective students willing to further their education are expected to gather adequate information, compare and evaluate the benefits and disadvantages of various universities in a competitive academic atmosphere. One of the numerous ways of gathering information is through Word-of-Mouth (WOM) from family members, relatives and friends. Positive or negative WOM is generally formed from university students' experiences. The purpose of this study is to investigate specific attributes likely to enhance students' satisfaction regarding a university through Word-of-Mouth (WOM). This is a quantitative and qualitative research with data obtained from 57 students of a private university in Bandung, Indonesia, from a questionnaire and Focus Group Discussion (FGD). The results showed that students were most satisfied with the campus facilities and academic advising and least satisfied with financial policy. Meanwhile, the results of correlation analysis indicated that 14 attributes had positive correlation significantly, 7 had negative correlation significantly, and another 7 were not related. Furthermore, FGD was used to extract data on students' perceptions, opinions, attitudes towards the experiences gained at the university. The results showed a significant positive correlation between positive WOM and recommendations by students to others, with no negative WOM. Based on the study, implications for the university are discussed, and suggestion for future research is provided.



ABS-115

Addressing the Independent Learning Curriculum (*Kurikulum Merdeka Belajar*) as a Form of Positive Disruption to Empower the Community

Purnama E.D. Tedjokoesoemo¹, Poppy Firtatwentyna Nilasari^{2,2} and and Sriti Mayang Sari^{3,3}

¹*Interior Design Department, Universitas Kristen Petra, Jl. Siwalankerto 121-131, Surabaya, Indonesia*

**Corresponding author: esa@petra.ac.id*

Keywords: community engagement, rusunawa, sociopreneurship, design thinking, Kurikulum Merdeka Belajar

Abstract: The emergence of COVID-19 in early 2020 demands strategic policies to accelerate. The strategic policy in education was responded to by the Independent Learning Curriculum (Kurikulum Merdeka Belajar), which is commonly known as virtual learning. Virtual learning has become a challenge to implement community service as one of the threefold missions of higher education. Rumah Langit is a learning house that serves the pre-prosperous children in Rusunawa Urip Sumoharjo Surabaya. This object is the pilot project to study the implementation of community service with Independent Learning Curriculum for final project students' of interior design programs. The research was conducted in a qualitative method to learn the implementation of the design thinking method used in design development. The study showed that high flexibility in the final project stage may not be any different to previous final projects in older curriculum. However, this curriculum forces students to sharpen soft skills rather than mere design skills. The output not only focuses on solving the interior problems but also to equip the community. Therefore, the Independent Learning Curriculum can be said as a positive disruption that offers acceleration and bridging the needs of education and industry that has been requested for a long time.



ABS-134

Model of Student Development by Chickering Theory

Robert O. Rajagukguk¹, Candra Sinuraya², Jane Savitri³, Kristin Rahmani⁴, Stephanie Andamari⁵

^{1,2,3,4,5}Faculty of Psychology, Maranatha Christian University, Suria Sumantri 65, Bandung, West Java, Indonesia

*Corresponding author: robert.or@psy.maranatha.edu or roberto_psych@yahoo.com

Keywords: Seven Vectors, Student Development, Chickering, Higher Education.

Abstract: Studying in college is a period of transition towards a higher level of maturity for students. Therefore, a structured and measured pattern of student development is very important to be designed and implemented in campus life. This study aims to describe freshmen' self-development in one of the tertiary institutions in Bandung based on The Seven Vectors of Student Identity Development according to Chickering (1993). This study examined whether the theoretical model expressed in previous studies, between areas of competence, managing emotions, interdependence, and mature interpersonal relationships, contributes to area of identity development, which in turn could increase purpose and integrity. There were 4,857 freshmen of class 2017, 2018, 2019, and 2020 who filled out the student development questionnaire. Descriptive, comparison, correlation, and path analysis analyses were used. Results show the level of student self-development in all areas of development is at a moderate level, hence needs to be developed more. The model fit evaluation showed that the theoretical model regarding the effect of vectors in the Student Development construct on freshmen at "X" Bandung University was suitable (RMSEA = 0.080; TLI = 0.990; NFI = 0.995). Suggestions for universities to provide more focused and effective student self-development programs.



ROOM O – Thursday, 1 July 2021, 14:00-15:30 WIB

**Topic 3: Hybrid Approaches to Create Sustainability
in Arts and Design**

ABS-8

**The Role of Sustainable Packaging Design for West Java Local
Products**

Elizabeth Wianto¹, Monica Hartanti²

¹*Faculty of Arts and Design, Universitas Kristen Maranatha, Bandung, Indonesia*

²*College of Planning and Design, Industrial Design Department, National Cheng Kung University, Tainan, Taiwan*

**Corresponding author: Elizabeth.wianto@art.maranatha.edu*

Keywords: Local Products, MSME, Packaging Design, Sustainability

Abstract: Sustainability should become a concern in creative industries, including local food industries. Local food as souvenirs from a specific area commonly produced from the natural resources combined with their local culture, which directly affect their economy. To attract consumers and compete with other modern substitute products then this local product arguably able to stand out by defining its unique features of the local culture ingenuity. Local indigenous as the core of the unique character of local food products in this research will be presented in packaging through sustainable aspects of Micro, Small, and Medium Enterprises (MSME) in Indonesia. This experiment used two-sample of local food that represents authentic snacks from West Java: Brondong and Wajit. Each snack is packaged into four types of packaging, which contain two contradictory variables: traditional look-modern look and reusable-single use packaging. The non-parametric Mann-Whitney U-test, Kruskal Wallis test and descriptive statistics were used to analyses respondent's specific souvenir food packaging preferences. A more detailed discussion explained the variables studied using the ATUMICS theory, which divides macro and micro design elements. The research output revealed that most consumers prefer traditional packaging combined with plastic, although it will have a higher price than single-use cheaper packaging.



ABS-16

Spiritual Value: a Mythological Figure in Keraton Kanoman Cirebon

Ariesa Pandanwangi¹, Dewi Isma Aryani², Belinda Sukapura Dewi³, Ismet Zaenal Effendi⁴,
Wawan Suryana⁵, Miky Endro Santoso⁶, Leonardo⁷, Beni Sasmito⁸
^{1,2,3,4,5,6} Universitas Kristen Maranatha, Indonesia

*Corresponding Author: dewi.ia@art.maranatha.edu

Keywords: Acculturation, Hybridity, Mythological figure, Paksi Naga Liman, Spirituality

Abstract: Keraton Kanoman Cirebon has preserved a lot of priceless authentic cultural assets that are displayed in a public area and in Ruang Ndalem Keraton. One of the artefacts is a mythological figure called Paksi Naga Liman which represents the great value of the teachings and wisdom which are respected and inherited by all the members of Keraton Kanoman Cirebon and its people. This mythological figure is chosen due to its uniqueness and the fact that it can only be found in Keraton Kanoman Cirebon. Besides, it represents an artwork having the hybridity of the acculturation of Islam, China, and Hindu (through the figures of the bird or paksi or burok, a dragon, and an elephant respectively). This research aims to describe (1) the visualization concept, (2) the spiritual value, and (3) the implementation on contemporary arts and designs. The research method used is descriptive qualitative and the data are collected through library research, historical review, observation, and interviews. The results show that the visual concept of Paksi Naga Liman is the expression of the spirituality that guides human relationships horizontally (immanent) and vertically (transcendental) through space and time. The spiritual value is shown by the appreciation of the cultural wealth which continuously inspires contemporary arts and designs to this day.



ABS-40

Multidiscipline Hybrid Approach in Art and Design Education to Support the Sustainability of Batik Cimahi

Christine Claudia Lukman¹, Krismanto Kusbiantoro², Irena Vanessa Gunawan³, Lois Denissa⁴, Elliati Djakaria³, I Nyoman Nathanael¹, Grace Carolline Sahertian⁴, Wenny Anggraini Natalia⁴

¹*Department of Visual Communication Design, Universitas Kristen Maranatha, Bandung, Indonesia*

²*Department of Architecture, Universitas Kristen Maranatha, Bandung, Indonesia*

³*Department of Interior Design, Universitas Kristen Maranatha, Bandung, Indonesia*

⁴*Department of Fashion Design, Universitas Kristen Maranatha, Bandung, Indonesia*

Keywords: application, art and design projects, Batik Cimahi, experiment, sustainability

Abstract: Batik Cimahi is a new type of Batik that was developed in mid-2008 and introduced to the public on June 21st, 2009 on the 8th anniversary of the City of Cimahi. Batik Cimahi consists of 5 different visual motifs: *Cirendeu*, *Ciawitali*, *Curug Cimahi*, *Pusdik*, and *Kujang* that represent the identity and the geographical indication of the city. The existence of Batik Cimahi encourages the Batik industry by absorbing many skilled laborers in Cimahi and improving the regional income. The Covid-19 outbreak in March 2020 pandemic struck the economy down towards recession. Almost all industries, including Batik Cimahi industry, are experiencing the downturn due to the decreasing buying power of the society. In order to support the sustainability of Batik Cimahi, experiments and application series of art and design projects were done in studios. These projects were done by students, supervised by lecturers and followed by comprehensive analysis using the ATUMICS method. Various design projects such as implementing the visual style of Batik Cimahi in font design, still life and animation composition and also as façade elements of architecture are discussed on this paper as result of creative ideas and process during design education in studios. This experimental project is conducted to introduce the young generations to the richness of the culture and support the sustainability of Batik Cimahi as a cultural artifact as well.



ABS-46

Changes in Interior Design Programming at Residentials after Covid-19 Pandemic

Greysia Susilo¹, Veila Venisia²

¹*Interior Design Department, Universitas Pradita, Scientia Business Park, Banten, Indonesia*

²*Interior Design Department, Universitas Pradita, Scientia Business Park, Banten, Indonesia*

*Corresponding author: greysia.susilo@pradita.ac.id,

Keywords: COVID-19, programming change, residential design, buffer zone

Abstract: At the beginning of 2020, we are taken by surprise because of COVID-19 pandemic virus. This malignant and contagious virus infected respiratory system by direct or indirect interactions. It also spread by airborne and vapor. Quick infection at many levels lead to major change in every aspects of life. Lots of health protocol systems introduced nationally and internationally. Health protocols systems for preventing virus spread are enforced in public places and applied in residentials. Restrictions are enforced for people's activities in public areas, such as offices, markets, malls, and other places. These restrictions enhance more time spend in residentials. Houses turn back their older functions, as centre of human activities. These activities resulting in the change of interior design of residential spaces. House no longer retain only its modern functions – as refugee and resting place. House has to accommodate working, learning, relaxing, and survival functions. Its design has to maintain good vibes and moods, security, and calm; and most important – healthy. This research aims to gather basic aspects that change in residential interior design based on experts' recommendations and Jabodetabek's respondents. We will discuss design programming and materials' decisions. This research using mix methods research to gain most benefit to educate and inspire designers to future trends. Minor adjustment and major solutions for rooms concept, size, functions, circulations, and materials – indoors and outdoors are expected to meet new needs for 'new normal' human life.



ABS-82

JFC Timeless Uses Hybrid Codes in Costumes for Reaching Sustainable Identity

Lois Denissa¹

¹*Diploma Program of Fine Arts and Design Study Faculty of Art and Design, Maranatha Christian University,
Prof.drg. Suria Sumantri Street, MPH no. 65, Bandung Indonesia
Corresponding author: lois.denissa@art.maranatha.edu

Keywords: costume, hybrid code, JFC, sustainable identity

Abstract : Jember Fashion Carnaval is a fashion carnival that was aspired by the late Dynand Fariz who elevated the prestige of his hometown parallel to world-class carnival cities. A hope that has finally come true, JFC become the 3rd largest street carnival in the world has been achieved in the short journey of his life. Fariz died in 2017, after 14 years of struggle he succeeded in creating a completely new identity. Jember as a world carnival city, differs from its previous identity as a Tobacco City, caused its rich geographical indications, from Dutch colonial history. This research uses descriptive analytical method to the phenomenon of the annual extravagance costume which has been consistently implemented since 2003 until now. The costumes displayed enrichment in code hybridity in the aspects of form, material, texture, color, technique, composition, culture and ideology. JFC has mobilized young generations from educated and non-educated circles, young mothers and toddlers to create extraordinary costumes as the main dish of the carnival. Management that is credible, consistency and the involves of the district government as role of legality is a magnet that invites international professional photographers to visit and promoted the momentum every year. JFC activities are not limited to fashion carnival runways, but also exhibitions of local artists' works, creative economy, bazaars, domestic and foreign roadshows and designing costumes for the Indonesian Princess. The purpose of this research is to provide awareness that JFC is able to create a sustainable art field between young artists, the government, artist communities, photographers and world-class beauty event communities through fashion. The entire costume features an unusual crossover of fashion code as hybrid codes. The people of Jember have proven their city image as a carnival city that is recognized by the world. Since its establishment in 2003 until now, the hybrid code has become a vehicle for the people of Jember, proving its sustainable identity.



ABS-87

The Improvement of *Jamu* Appeal Using Creative Sales Strategy and Contemporary Design

Isabella Isthipraya Andreas¹, Shirly Nathania Suhanjoyo², Andi Aulia Hamzah³, Heddy Heryadi⁴, Ferlina Sugata⁵, Nathalia Yunita Sugiharto⁶, Nina Nurviana⁷, and Seriwati Ginting⁸

^{1,2}Interior Design Department, Universitas Kristen Maranatha, Bandung, Indonesia

³Three-Year Diploma Program in Arts and Design, Universitas Kristen Maranatha, Bandung, Indonesia

^{4,7,8}Visual Communication Design Department, Universitas Kristen Maranatha, Bandung, Indonesia

^{5,6}Architecture Department, Universitas Kristen Maranatha, Bandung, Indonesia

*Corresponding author: isabella.ia@art.maranatha.edu

Keywords: Contemporary design, Creative, *Jamu*, Restaurant, Sales

Abstract: *Jamu* is a nutritious traditional beverage that is a representation of the cultural richness and gastronomy of Indonesia. Although it was not popular because it was considered a beverage for old people, these days *jamu* has returned to be a beverage that is much sought after by the public even among young people. This cannot be separated from creativity in the sales strategy of *jamu* and an increase in awareness of the health benefits of *jamu*. The popularity of *jamu* is currently also starting to increase because it is sold in restaurants or cafes with contemporary interior designs and presentation methods, either when enjoyed on location or brought in packs. *Jamu* is also sold in the marketplace. Not only sold in the physical space but now *jamu* is also sold online. Previously stagnant sales of *jamu* are now popular again and are looking for new forms since they are sold with creative sales strategies. *Jamu* is sold in restaurants or cafes with contemporary interior designs. The visual design of packaging, menus, publications on social media, and the words used for imaging and promotion of *jamu* are even more creative. The purpose of this research is to find a variety of design creativity that is applied in the sale of *jamu*. Besides, the values of local wisdom in traditional *jamu* products that are transformed in contemporary culture are also discussed here. The method used in this research is a combination of qualitative and quantitative research methods. Qualitative research methods are carried out using case study methods, grounded theory, and phenomenology related to the development of *jamu* sales in contemporary restaurants and cafes. The quantitative research method used in this research is a quantitative descriptive method by using the data from the questionnaire. The results of discussions and observations in contemporary designed restaurants and cafes show that *jamu* is no longer seen only as a traditional drink but also as a nutritious drink that is not old-fashioned and answers the needs of the Indonesian people today. *Jamu* has started to find a new form to become part of the lifestyle of today's society. With this development, *jamu* is expected to become a global icon of Indonesia and prove that local wisdom can continue to have an impact and not be eroded by time.



ROOM P – Thursday, 1 July 2021, 14:00-15:30 WIB

**Topic 3: Hybrid Approaches to Create Sustainability
in Arts and Design**

ABS-105

**Preservation of the Tasikmalaya *Batik* Motif with Turtle
Graphics**

Ratnadewi Ratnadewi¹, Ariesa Pandanwangi², Agus Prijono³, and Andrew Sebastian Lehman⁴

^{1,3}*Department of Electrical Engineering, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia*

²*Department of Art and Design, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia*

⁴*Department of Computer Engineering, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia*

**Corresponding author: ratnadewi@maranatha.ac.id*

Keywords: Turtle graphics, Tasikmalaya Batik, motif

Abstract: Tasikmalaya batik is predicted existed since the Tarumanegara Kingdom in the 7th to 9th centuries. The discovery of the Tarum tree as a material for making batik made this assumption even stronger. The split-up of the Mataram Kingdom in the 17th century caused many residents of Kudus, Pekalongan, Tegal, and Banyumas, the majority of whom were batik craftsmen, to migrate to Tasikmalaya. This affected Tasikmalaya city batik. The characteristic of Tasikmalaya batik is the use of bright colours due to the influence of coastal batik. The problem here is because the Tasikmalaya batik motif has not been digitally documented in the digital vector image. The vector image is good quality if it enlarged or reduced and requires less storage memory. Therefore, digital vector image documentation is needed. Turtle graphics is one of the algorithms that can generate vector images. In this article, we will explain Bilik motif, Tasikmalaya umbrella motif, and Sukapura motif. Each motif is formed in a different path will be presented in the form of a pseudocode. The comparison of the turtle graphic result and the original motif shows similarities.



ABS-121

Local Potential as the Source of *Batik* Design Using Turtle Graphics

Ariesa Pandanwangi¹, Ratnadewi², and Agus Priyono³

¹Department of Art and Design, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia

^{2,3}Department of Electrical Engineering, Universitas Kristen Maranatha, 65th Suria Sumantri Street, Bandung, Indonesia

*Corresponding author: ratnadewi@maranatha.ac.id

Keywords: Batik Motifs, Plered, Purwakarta Batik, Turtle Graphics.

Abstract: The Indonesian government actively keeps on promoting several areas which are well known for their batik. The motifs are promoted a lot through the local potentials. This research focuses on how to promote the local potentials through a typical batik design which is made using turtle graphics. Turtle graphics are vector graphics (which become the function on the programming tools) of the Lindenmayer system developed to model geometric objects, one of which is the jug shape. The research aims to develop the potentials of Purwakarta so that they become the region's outstanding values through the batik design made by using a turtle graphics program. The method used in the research is a combination of descriptive qualitative and quantitative methods. The descriptive qualitative method is applied to describe the local potentials that become the idea of the batik motif design, while the quantitative method is applied to design the turtle graphics. The research sample is the Plered motif of Purwakarta batik. The research results in the creation of batik designed using the turtle graphics program which has the novelty in the national scale as this is expected to help the documentation system because it uses a digital application for batik agents.



ABS-151

Arumawa Ilé: New Normal and Sustainable Café Concept in Turirejo, Malang, East Java

Hayu Puspasari Saputri¹

¹Department of Interior Design, Petra Christian University, Siwalankerto 121-131, Surabaya, Indonesia

*Corresponding author: hayu.pusparisaputri@gmail.com

Keywords: new normal, sustainability, café design

Abstract: The Covid-19 Pandemic has affected every part of the world, including Indonesia. This situation had influenced interaction activity by evolving it from social activity to digital technology activity. This article is one of the creative activities of students during the pandemic in the form of conceptual ideas for the interior design of public space particularly, cafes. Arumawa ilé is a sustainable design concept focused on spaces supported by technology to minimize physical contact to support new normal habits. Arumawa ile embraces naturalism with the implementation of open space organization and circulation to maximize natural light which is expected to create energy-efficient space and also heeds the need to fulfil the health aspects for the users. Arumawa ile twines modern design with the utilization of local resources and manpower to create a sustainable space that can provide comfortable, healthy and safe space for the users in the new normal era. The design thinking method is used in the designing process. The result of the process is the design concept of Arumawa ile café by following the 17 Sustainable Development Goals namely, regarding good health and well-being and also covers sustainable cities and communities focusing on utilizing local human resource and material.



ABS-152

Transformation of a Chinese Cultural Heritage House in Bandung: Towards Sustainability

Elizabeth Susanti Gunawan¹, Krismanto Kusbiantoro² and Sugiri Kustedja³

¹Faculty of Arts and Design, Universitas Kristen Maranatha, Jln..Suria Sumantri no. 65, Bandung, Indonesia

*Corresponding author: elizabeth.susanti@yahoo.com

Keywords: Chinese, contemporary culture, heritage, sustainability, transformation

Abstract: Chinese settlement in Bandung is an inseparable entity that existed along with the development of the historical city. But due to the rapid development of the city and cultural restrictions policy, especially Chinese culture during the New Order era, Chinese settlements are intentionally immersed socially by modernization and even neglected. Political changes by the end of the 1990s provide an opportunity for Chinese cultural practitioners to start preserving a culture that has long been restricted. Many methods are conducted to conserve valuable heritage. One of them is to transform a Chinese heritage house into a public building so that it can educate society as well about the richness of the culture. The case study is the house of Mr. Lin Che Wei at *Gang Basalamah* that was transformed into an art house. This paper aims to describe the transformation of the house and shows the physical elements that exposed Chinese contemporary culture. The research will be qualitative research based on purposive chosen sample on the house as the main object and explore the idea of sustainability that emerged from the transformation decision done by the owner. The research findings are the optimization of cultural revitalization as a result of the transformation of the house.



ABS-153

Development of Weaving Craft Motif Designs as a Diversification Attempt for Nias Local Souvenir Products

Kezia Clarissa Langi¹, Dian Widiawati², Setiawan Sabana³ and Tusita Metadevi Jayamangalanid⁴

¹Doctoral Program of Art and Design, Bandung Institute of Technology, Ganesha Street No. 10, Bandung, Indonesia

^{2,3,4}Faculty of Art and Design, Bandung Institute of Technology, Ganesha Street No. 10, Bandung 40132

*Corresponding author: kezialangi91@student.itb.ac.id

Keywords: craft industry, motif, Nias traditional weaving, product development

Abstract: This paper presents initial findings from an ongoing research project that explores possibilities for Nias traditional weaving motif's exploration. Nias is well-known for their handicrafts by carving on stone and wood, constructing earthquake-proof houses, producing gold jewellery, and producing clothes along with war implements. One of Nias hidden local wisdoms is the culture of Nias women and their weaving activities. Traditionally, Nias weaving is divided into three types of weaving, *Nila'e-lae* (plain weaving), *Nisora* (combination of several motifs with colors), and *Ni'otarawa* (see-through weaving). Although the technique of traditional Nias weaving is a local knowledge, the exploration of the traditional motifs are limited. This study proposes to develop woven design innovation so that it can be used as a reference in forming products that can be resold by the community as Nias local souvenirs. This research uses visual ethnographic approach. The data collection stage was carried out by collecting references on weaves, materials, including small and medium industry issues regarding the manufacture and function of Nias traditional weaving in Gunungsitoli. At this stage, an analysis of the results of the information is carried out, which becomes the basis for exploration of woven designs. Next, the exploration stage of the woven design is carried out with the introduction of manual materials and efficient working techniques. Current study can contribute to uncovering hidden potential of Nias traditional weaving for sustainable craft design.



ABS-154

Self-taught Online Graphic Designer in Salaman, Magelang: Between Art Work, Decent Work and Vulnerable Work

Petrus Gogor Bangsa¹, Wening Udasmoro² and Christian Budiman³

^{1 2 3}Gadjah Mada University, Yogyakarta, Indonesia

*Corresponding author: petrus.gogor.bangsa@mail.ugm.ac.id

Keywords: self-taught graphic designers, decent work, vulnerable work.

Abstract: Digital economy has opened up opportunities for anyone who mastered this technology to join in digital capitalism. The subject of this study was the self-taught online graphic designer community in Salaman, Magelang, Central Java. By take part in the contest at the 99designs crowdsourcing platform, they have experienced expansion of opportunities that provide financial empowerment. Initially they were workers in the informal sector that had difficulty entering established economic sectors. But empowerment they get from this online platform overshadowed by the issue of labour relations blurred boundaries. The issue of working hours, work status, wages, rights and work protection are blurred. Moreover, association of professional designers classified this activity as a speculative job that is vulnerable to be misused by third parties. But they did not question this because mainly their financial condition was much better. Even the government welcomed this situation as a local achievement in the international world. This research was conducted during the period of 2020 in Kaliabu village, Salaman District, Magelang Regency, Central Java as the basis for the self-taught online graphic designer community with the largest members in Indonesia. Data collected by observation, interviews with relevant interviewees, focus group discussions, and literature study. Indeed, the digital industry promises to change the level of the economy for the better, but there is a threat of vulnerability to digital workers, especially regarding relationships and work status.



ROOM Q – Friday, 2 July 2021, 10:30-12:00 WIB

Topic 4: Law and Legal Systems for Sustainable Development

ABS-9

Urgency in Using Indonesia Language on Business Contracts and Potency of Investment Dispute (the Study of Supreme Court Decision Number 601 K/ Pdt/2015)

Johannes Ibrahim Kosasih¹, Yohanes Hermanto Sirait²

¹*Universitas Warmadewa, Bali, Indonesia*

²*Universitas Kristen Maranatha, Bandung, Indonesia*

**Corresponding author: yohannessirait1988@gmail.com*

Keywords: Business Contract; Indonesian Language, Investment Dispute.

Abstract: Supreme Court (MA) Decision Number: 601 K / Pdt / 2015 concerning lawsuit by PT. Bangun Karya Pratama Lestari against NINE AM LTD may induce a significant impact on the trust of foreign business actors to regulation and law enforcement. It is true that the use of the Indonesian language as required in Article 31 paragraph (1) of Law of the Republic of Indonesia Number: 24 of 2009 is mandatory in any agreement or memorandum of understanding involving State institutions, government agencies of the Republic of Indonesia, Indonesian private institutions, or Indonesian State individuals. However, the decision by the judiciary in Indonesia to cancel the agreement could hamper investment in Indonesia. Especially because the use of the Indonesian language is more formal than substance. This article is normative research, using primary, secondary, and tertiary legal material. The result shows that the urgency for judicial bodies in Indonesia to adopt decisions to the needs of the investment program initiated by the Government and consider the needs between two entities from different countries. The judges need to fairly measure good faith from both parties in an agreement and understand the differences between the substantial and formal requirements for a valid agreement.



ABS-10

Corporate Social and Environmental Responsibility Regulation and Implementation in Indonesia: Contribution for Sustainable Development or Legalized Robbery?

Tresnawati¹

¹*Faculty of Law, Business and Investment Law, Maranatha Christian University, Jl. Suria Sumantri No. 65, Bandung, Indonesia*

**Corresponding author: tresnawati@maranatha.edu*

Keywords: Corporate Social Responsibility, Corporate Environmental Responsibility, Sustainable Development Goals, CSR.

Abstract: Corporate Social and Environmental Responsibility has been widely accepted as inherent part of a corporation. Though, one should always be aware of business nature of the corporation, that is profit making. This is the essential differences between a company and a foundation in Indonesia. Foundation is intended for social purposes, while company is for money-oriented purposes. In practice, this essence has been altered a lot. Many of foundations has been profit directed institutions, while company has been squeezed to be social oriented institution by applying many regulations on Corporate Social and Environmental Responsibility. Corporate Social and Environmental Responsibility contribution to Sustainability Development is something irrefutable in Indonesia, as proven by Semanggi Interchange in Jakarta. Initiated from Burtland Reports in 1987, sustainable development is the idea that human societies must live and meet their needs without compromising the ability of future generations to meet their own needs. CSER, or commonly known as CSR is the implementation of sustainability development. This is far from the concept of CSR in Indonesia, which perceive merely from financial aspects. Condition is even worsening due to the fact that there is no limitation regulation on how much a company shall contribute, or who will authorize how much has the company contribute while the total amount will reduce their taxable income? Every Province, City and Regent also has different regulations relating to Corporate Social and Environmental Responsibility, which leads to overlapping regulations with Central Government Regulation. Not to mention another burdensome compulsory cost, national or territorial tax. Those overlapping regulations are applicable to the same object, Company or Corporation. No wonder, planning for enactment of Corporate Social and Environmental Responsibility has faced many rejections, particularly from business actors. Undeniably, there must be balance on regulations and implementations of Corporate Social and Environmental Responsibility, or this might also affect the assessment of ease of doing business in Indonesia. Having said that, some recommendation on this matter will be offered in this article. This article would use the statute and comparative approach, in a normative scheme.



ABS-15

Financial Exploitation by Spouse, a Crime in Private Space (an Overview Based on Indonesian Legal System)

Rahel Octora¹ and Fauzan Hanif M²

^{1,2} Maranatha Christian University, Jl.Suria Sumantri 65, Bandung, Indonesia

*Corresponding author : octora@ gmail.com

Keywords: financial exploitation, crime, private space

Abstract: Family is the smallest organization in the social structure. Family resilience affects community resilience and sustainability. An event that may disrupt family resilience is domestic violence. Domestic violence, from the perspective of Indonesian law, is regulated in Law Number 23 of 2004 concerning the Elimination of Domestic Violence. In this law, violence is categorized into physical, psychological, sexual violence and domestic neglect. Domestic neglect is considered to be equivalent to financial violence, even though in the Domestic Violence Law, the concept of domestic neglect as a form of act against the law is formulated without adequate explanation. It may potentially bring up multiple interpretations in law enforcement. Financial violence oftentimes not realized by most of people. There are various forms of action that fall into the category of financial violence, but this paper focuses on financial exploitation by spouse in a marriage. This paper uses normative juridical research method, using secondary data in the form of primary and secondary legal materials, such as relevant laws and regulations, as well as various literature in the field of law. This paper will review how the current laws and regulations in Indonesia do not clearly regulate the act of financial exploitation by a spouse in a marriage, and its legal consequences. From a criminal law perspective, the act of exploiting one's property is categorized as *mala in se*.



ABS-53

Study of Stock Ownership Nominee Agreement in Mining Business to People's Welfare that is Aligned for Sustainable Development Goals

Ida Sumarsih¹

¹*Doctor of Law Student, Pelita Harapan University*

**Corresponding author: idasumarsih81@gmail.com*

Keywords: Nominee Agreement, Mining, People's Welfare

Abstract: The goal for Limitation of Foreign Stock's ownership to protect natural resources in Indonesia is not yet optimal because of the existence of nominee agreement. Which is a form of law smuggling. So natural resources that should be benefiting for Indonesia people's welfare, in reality it is enjoyed by Foreign Investor. This research is a normative juridical research using secondary data and doing inductive analysis. From the result of the research is concluded that law smuggling in stock ownership nominee agreement prohibition in mining field is still exist because there is no monitoring, control, field observation, evaluation and law enforcement for nominee agreement practices in mineral and coal mining up to beneficial ownership in establishment and operational of mineral and coal mining business. Therefore it is needed to make a regulation to monitor, supervise and doing law enforcement by The Energy and Mineral Resources Ministry (ESDM) through Monitoring, Controlling, Field Observation and Evaluation System (P3LE) towards stock ownership nominee agreement practices in mining business so that the management of natural resources can be benefitting for people's welfare and Sustainable Development Goals (SDGs) is achieved.



ABS-70

Part Time Working Arrangement in Omnibus Law as Part of Sustainable Development and How it is Implemented in Developed Countries

Reggiannie Christy Natalia¹

¹Lecturer at Pelita Harapan University, MH. Thamrin Street, Tangerang, Indonesia.

* Corresponding author: reggiannie.natalia@lecturer.uph.edu

Keywords: Part-time workers, OMNIBUS law, Sustainable Development.

Abstract: In this fast growing business environment, flexibility in working arrangement is required to fill the need of both employees and employers. Working for part-time jobs is not a new working arrangement in Indonesia and so around the world. However the law governing this type of working arrangement was only officially regulated in 2020 and at the same time has received a lot of pros and cons in the country as Indonesian labour felt that the new working arrangement might suppress their rights. The purpose of this research is to examine on how the part-time employment could contribute to the sustainable development goal no 8 from the United Nations on Development Programme (UNDP). The method that will be used is normative legal research, whereas the research will analyses the part-time working related laws in Indonesia and developed countries. In conclusion, this research finds that the legalization of part-time employment law is needed in Indonesia and would likely contribute to the SDGs no 8. In the mean time, a comparison study from the UK and Denmark implementation of part-time working arrangement would give a better insight of how Indonesia should have treated and give protection to the part-time workers.



ABS-108

Good Faith Principle and Legal Protection over Parties Related to Fiduciary Certificate in the Constitutional Court Decision in Indonesia after the Constitutional Court Decision Number 18/PUU-XVII/2019

Agus Setiawan¹, Haris Wiguna² and Pan Lindawaty Suherman Sewu³

¹Faculty of Law, Universitas Kristen Maranatha, Bandung, West Java, Indonesia

²Alumny of Faculty of Law, Universitas Kristen Maranatha, Bandung, West Java, Indonesia

³Faculty of Law, Universitas Kristen Maranatha, Bandung, West Java, Indonesia

*Corresponding author: lindawaty.ss@law.maranatha.edu

Keywords: Good faith principle, Legal protection, Fiduciary, Court constitutional decision

Abstract: The Fiduciary Institution is regulated in Law Number 42 of 1999 on Fiduciary ('FL'). One of the ways to give legal certainty and protection in FL is the registration of the fiduciary so as to give the preferred rights to the fiduciary recipient over the other creditors; besides publishing the fiduciary certificate. Nevertheless, the Constitutional Court Decision No. 18/PUU-XVII/2019, brought some consequences to the creditors when they want to execute and sell the object that becomes the fiduciary object. The method used in this research is normative juridical. Besides, it is library research applying a descriptive analytical method with secondary data. This research objective aims to find out that the principle of good faith will provide the basis for legal protection for the parties in the fiduciary. The research result shows that after the publication of the Constitutional Court Decision, there are some changes in the mechanism of the execution of the fiduciary object. The execution of the court verdict based on the assessment of a default must be in line with the agreement between both parties, namely the creditor and debtor. The Constitutional Court in its decisions implies the importance of the good faith principle of the creditors and the need of legal protection for the debtors, especially related to the execution of the fiduciary object.



ROOM R – Friday, 2 July 2021, 10:30-12:00 WIB

**Topic 5: Mental Health, Human Resources,
Leadership and Well-being**

ABS-22

**Calling and Work Engagement in Priest: the Moderating Role of
Social Support**

Missiliana Riasnugrahani¹, Meta Dwijayanthi² and Cindy Maria³

^{1,2,3}Maranatha Christian University, Jl. Surya Sumantri No.65, Bandung, Indonesia, Department of Psychology

*Corresponding author: cindy.maria@psy.maranatha.edu

Keywords: Calling, Work Engagement, Social Support, Priest

Abstract: The priest has many jobs and responsibilities to fulfill the vision and missions of the church. This study examines the moderating role of social support from spouses and presbyters in the relationship between calling and work engagement in the priest. Using purposive sampling, we collected 121 priests that married and worked at least one year as a priest. The age range of respondents was 28-61 years old, and more than half were male. This research data gathered with Utrecht Work Engagement Scale, presbyters support scale, spouse support scale, and Calling and Vocation Questionnaire-presence scale. All scale are reliable. With regression technique –Model 2 from Hayes PROCESS– we found that the relationship between calling and work engagement in the priest is moderated only by presbyters support. The result shows that emotional and instrumental support from presbyters can increase work engagement in the priest who has a weak calling. However, when analyzing social support by its basic functions, informational support from spouses acts as a moderator in the relationship between calling and work engagement. We also found that emotional and instrumental support from spouses and presbyters can directly increase the priest's work engagement. Implications for theory and practice are discussed.



ABS-23

The Role of Calling and Job Crafting on the Promotion of Employee Engagement for Organizational Sustainability

Susanti Saragih^{1*}, Meily Margaretha² and Sherlywati³

^{1,2,3} Maranatha Christian University, Indonesia

*Corresponding author: susanti.saragih@eco.maranatha.edu

Keywords: Job Crafting, Work as a Calling, Employee Engagement, Job Design, Organizational Sustainability

Abstract: A sense of job as a calling (JAC) relates to employees' intrinsic motivation to perform their daily tasks wholeheartedly and it has been acknowledged as a willingness to contribute to the greater good. Thus, arises their willingness to modify daily tasks, mobilize the resources needed to carry out their tasks successfully. This proactive behavior will improve employees' wellbeing and engagement. Moreover, this contribution will enable organizations to achieve sustainable organizational success. The purpose of this study was to examine the relationship of JAC, job crafting, and employee engagement as an important aspect to achieving sustainable organizational success. There were 275 respondents participated in this study. Validity and reliability testing were used to test the accuracy of the survey instruments. To investigate the correlation between variables, we used correlation testing. Moreover, path analysis using WarpPLS was conducted to test the direct and indirect effect of JAC and job crafting on employee engagement. The results showed that JAC significantly affects the two main dimensions of job crafting, increasing structural job resources and increasing challenging job demands. When teachers see their job as a calling, they are more likely to engage in job crafting. They crafted their job by using their capacities to the fullest, gaining more task and responsible, and eager to learn new things. Although conceptually, all dimensions of job crafting are predicted to have significant effect, this result indicated that decreasing hindering job demands and increasing social job resources were not significant mediated job as calling and employee engagement. Thus, having a calling in the work context drive teachers to perform job crafting as their adaptive response to pursue their purpose through their careers at all costs. Finally, this will lead to organizational sustainability because it enhances employee's social health and the well-being of employee as reflected in employee engagement. This study demonstrated the value of JAC and job crafting on the promotion of employee engagement for organizational sustainability. Therefore, it is important for the managers striving to make work meaningful, such as by ascertaining and endeavouring to resolve any difficulties that employees face. In this context, teachers who perceive the job as a calling are able to adjust work activities and feel that their contributions are valued and relevant to the success of their organization and this will lead to organizational sustainability.



ABS-28

What does Sejahtera mean to you? The interpretation of Sejahtera based on money-saving habit, happiness, and life satisfaction

Hasna Fauziati Zakkiyah*, Stella Stella, Farah Mutiasari Djalal, and Yosef Dedy Pradipto
Department of Psychology, Bina Nusantara University, Jakarta, Indonesia
 *Corresponding author: hasna.zakkiyah@binus.ac.id

Keywords: Prosperity, happiness, life satisfaction, money-saving habit, features.

Abstract: This research aims to explore the meaning of an abstract concept Sejahtera (akin to ‘being prosper’ in English). Specifically, whether Sejahtera was perceived differently based on people’s saving habit, level of happiness, and satisfaction with life. Feature generation task was used to generate features that describe the meaning of Sejahtera. A total of 331 Indonesians were asked to generate features, and their level of happiness and life satisfaction were measured, as well as their money-saving habit (e.g., whether they have saving habit, the percentage of saving from salary, and whether this is a routine habit). The generated features were coded, counted, and classified based on participants’ level of well-being (happiness and life satisfaction) as well as their saving habit. The relationships among these variables were explored. The results showed that despite having some idiosyncratic features, Sejahtera was perceived uniformly among Indonesians as ‘feeling happy’, ‘having enough’, and ‘having every need fulfilled’. These features were generated most often by participants regardless their level of happiness, life satisfaction, and their saving habit. These top generated features also shown a great resemblance with the definition by Indonesian governmental regulation regarding *Kesejahteraan Sosial* (akin to social welfare or literally translated as ‘prospering socially’). The results are discussed in light of theories of concept and indigenous psychology.



ABS-58

Teacher Self Efficacy and Work Engagement: the Mediating Role of Psychological Well Being

Ida Ayu Nyoman Kartikawati¹, Lie Fun Fun² Lisa Imelia³ Stephanie Andamari⁴
Faculty of Psychology, Maranatha Christian University, Suria Sumantri 65, Bandung, West Java
*Corresponding author: ida.ank@psy.maranatha.edu

Keywords: Teacher Self Efficacy, Work Engagement, Psychological Well Being

Abstract: Public high school teachers have an important role in forming the basic thinking of students to enter college. During the Covid 19 pandemic teachers faced the challenge of turning the learning process in the classroom into online learning. It is important to take confidence in one's own abilities and also an interest in working so that teachers can face the demands of change and continue to carry out the teaching process according to learning targets. The purpose of this research is to describe the role of the mediator from the psychological well-being of teachers to teacher self-efficacy and work engagement of public-school teachers in Bandung City. This study used purposive sampling data collection techniques and obtained 209 data from Bandung city public high school teachers. Respondents in this study consisted of 33.5% male and 66.5% female. Data were collected using a teacher self-efficacy scale questionnaire consisting of 24 items, work engagement consisting of 17 items and a psychological well-being questionnaire consisting of 42 items. The reliability of each measuring instrument was 0.66, 0.85 and 0.91. The analysis technique used regression analysis and it was found that the results above indicated that there was no direct effect between teacher self-efficacy as a predictor of work engagement as outcomes ($p > 0.05$), and there was a significant mediation or indirect effect ($p < 0.05$). This means that there is complete mediation, which indicates that psychological well-being can act as a mediator between teacher self and work engagement



ABS-63

Effect Neuroticism to Subjective Well-Being in Faculty of Psychology Student

Heliany Kiswantomo¹ and Theofanny²

¹Maranatha Christian University, Jl. Prof. Drg. Suryasumantri 65, Bandung, Indonesia

²Department of Psychology, Maranatha Christian University, Bandung, Indonesia

* Corresponding author: (heliany@gmail.com)

Keywords: Neuroticism, Subjective Well-being, Students

Abstract: Students of the Faculty of Psychologists are important to have subjective well-being because after they graduate, they have to serve people. One of the factors that influence the subjective well-being of individuals is personality traits. One of the personality traits according to the Big Five Personality Trait is neuroticism. Neuroticism is the tendency of individuals to experience unpleasant emotions and disturbing emotions, and have disturbances in thoughts and actions (Vestre, in Costa & Mc Crae, 2003). Respondents in this study was 467 students of the Faculty of Psychology, selected by Simple Random Sampling technique. This research used Big Five Inventory – 10 (BFI-10), to measure neuroticism traits (Rammstedt, B. & John, O. P.,2007). Subjective Well-being was measured by Satisfaction with Life Scale and Scale of Positive and Negative Experience (SPANE) from Diener (2009). Data were analyzed by Linear Regression. The result indicated that neuroticism had a positive correlation and significant effect with positive affect and life satisfaction, but had no effect or no correlation on negative affect. The summary was neuroticism only affected two subjective well-being components. Neuroticism possibly had an indirect effect on negative affect. Impact of this study is that very important of Faculty of Psychology to design intervention for student with high and moderate neuroticism.



ABS-66

Internal Change Agents' Strategies to Deal with Boundary in Organizations in Indonesia

Leonardus Dewa Hardana¹ and Rayini Dahesihsari²

^{1,2}*Magister Psikologi Profesi, Atma Jaya Catholic University, Jalan Jendral Sudirman 51, South Jakarta, Indonesia*

**Corresponding author: leonard.201800040032@student.atmajaya.ac.id*

Keywords: Internal Change Agent, Boundary Spanning, Change Management

Abstract: It is indicated that the role of internal change agent is increasingly important due to an unforeseen future of post Covid era. However, studies about internal change agents are limited in contrast to the work of external consultants, particularly in the Indonesia context. This study aims to explore how internal change agents perceived the permeability of boundaries in an organization and how the strategies they used to deal with such boundaries. Boundary is among the specific challenges facing by internal change agent that differentiate them from external consultants' work. This research applies qualitative approaches by conducting semi-structured interviews with six internal change agents, recruited as participants using the maximum variation technique. Data were analyzed using thematic descriptive analysis. The findings showed that structural, knowledge, political, and interpersonal boundaries existed when participants managed change in organizations. However, the nature and characteristics of the perceived boundaries differed from what has been indicated in the previous studies, particularly for the interpersonal boundaries. The findings also identified that internal change agents use organizational support, communication and invite participation to span the boundaries. Moreover, the findings suggested that resilience and interpersonal skills were needed for internal change agents to deal with the boundaries effectively. The findings contribute to literature related to boundaries to be spanned by internal change agents, particularly in the specific context of Indonesia as a collectivistic and high-power- distance society, which have distinct differences in nature and characteristics with previous studies in western countries. Furthermore, the findings also had significant practical implications on developing internal change agents' essential competencies to manage change in organizations effectively.



ROOM S – Friday, 2 July 2021, 10:30-12:00 WIB

Topic 5: Mental Health, Human Resources, Leadership and Well-being

ABS-91

Perceived Individual, Partner, and Community Stressors Related to Covid-19 Quarantine in Indonesia: a Qualitative Study

Pingkan C.B Rumondor¹, Eilien Rosalie¹, Syifa Fauziah¹, Adriana S. Ginanjar², Claudia Chiarolanza³, Ashley K. Randall⁴

¹Department of Psychology, Bina Nusantara University, Jakarta, Indonesia

²Faculty of Psychology, Universitas Indonesia

³Department of Dynamic and Clinical Psychology, and Health Studies, Sapienza - University of Rome, Italy

⁴Counseling and Counseling Psychology Arizona State University, Arizona, US

Keywords: COVID-19, stress, social restrictions, romantic relationships, Indonesia

Abstract: COVID-19 was declared as a public health emergency of international concern on January 30, 2020. Currently, this virus has spread to more than 193 countries in the world, including Indonesia. The spread of the COVID-19 virus continues to negatively impact individuals' health, economy, psychological well-being, and social and family relationships. Although COVID-19 is considered an international concern, individual perception and reaction toward a stressor can vary across countries. As such, this study aimed to highlight how individuals living in Indonesia perceived stress related to the early phases of COVID-19. We examine this across three contexts: perceived individual, interpersonal (i.e., their romantic partner's stress), and community stressors. Using inductive thematic analysis, qualitative data collected via an online survey from 422 individuals in a romantic relationship from March to June 2020 showed that participants' answers could be clustered to ten overarching themes. Interestingly, one theme describing an absence of stress or positive stress emerged in the analysis. Results suggested that participants were experiencing vulnerability related to social restriction due to the COVID-19 situation, offering an insight into future culture-appropriate practices related to stress and coping responses for individuals in romantic relationships.



ABS-94

Brain Respiration to Overcome Stress People Who Live with HIV (ODHIV)

Efnie, Indrianie¹

¹Faculty of Psychology, Maranatha Christian University, Surya Sumantri Street, Bandung, Indonesia

*Corresponding author: efnie.indrianie@gmail.com

Keywords: Brain Respiration, Stress, HIV, EDA

Abstract: People living with HIV facing a chronic life-threatening illness and stigma from the society that can caused stress. By using Brain Respiration they can manage their negative emotion and reduce the stress level. Quasi experimental method used in this research. The sampling technique was purposive sampling. 18 ODHIV that newly diagnosed HIV and had high stress level have contributed to this research. 9 of them become experimental group, and the rest become as control group. ODHIV in experimental group got Brain Respiration and ODHIV in control group was not. The measurement of stress level was done by doing pre-test and post-test. Stress level in this research has been measured by electrodermal activity (EDA) by using biofeedback device. EDA is autonomic nervous system that reflect mental state such as stress. Non parametric statistic Wilcoxon and Mann Whitney used in this research. The result showed that there was difference stress level before and after test on experimental group ($T_{count} = 1 < T_{table} = 5$, $\square = 0,05$). There was difference stress level between experiment and control group ($U_{count} = 2 > U_{table} = 1$, $\square = 0,05$). In conclusion, Brain Respiration can be used to reduce stress level people living with HIV.



ABS-101

The Interior of Medium-Scale Business Tiara Handicraft in Surabaya with Accessible Design Principle for Mentally and Physically Disabled Employees

Rhea Griselda¹, Olivia Gunawan² and Laksmi Kusuma Wardani³

¹*Department of Interior Design, Petra Christian University, Siwalankerto 121-131, Surabaya, Indonesia*

^{2,3}*Department of Interior Design, Petra Christian University, Surabaya, Indonesia*

**Corresponding author: rheagriselda@gmail.com*

Keywords: Disability, Accessible Design, Human Resources, New Normal, Medium-Scale Business Abstract:

Abstract: Work is an essential activity for all living human, especially those with disabilities. The lack of adequate facilities to support disabled employees in the medium-scale business Tiara Handicraft in Surabaya causes the inefficiency and increased dependency of said employees. A breakthrough, followed by a set blueprint, of the interior design of Tiara Handicraft aims to create an accessible design that takes into account the anthropometry of Indonesian citizens, as well as the safety for all its employees. All of these are done in order to provide ease of access for disabled employees of Tiara Handicraft when utilizing prevalent facilities so they can increase their productivity and improve the quality of the end product. The usage of Design Thinking: Empathize, Define, Ideate, Prototype, and Test method assists in comprehending the problem systematically, thoroughly, and subsequently discovers conceptualized, fathomable, and accurate solutions. The result of this design is a conceptual idea. The principle of accessible design will also be implemented on the styling process of a certain area within Tiara Handicraft. Hopefully, the idea, design principle, and design outcome could stand as a model for other facilities to improve the productivity of disabled persons, and consequently improve the quality of their lives.



ABS-102

Happily Married in the Absence of a Child: Marital Satisfaction of Voluntary and Involuntary Childless Individuals

Mutiara Ramadhita Roesad, Pingkan Cynthia Belinda Rumondor

Department of Psychology, Bina Nusantara University, Jakarta, Indonesia

**Corresponding author: pingkan_rumondor@binus.ac.id*

Keywords: Marital satisfaction, voluntary childless, involuntary childless, young adult, Indonesia

Abstract: In Indonesia, marriage is considered culturally imperative and favored by young adults. After being married, young adult couples are socially expected to complete their family with a child. However, the total fertility rate in Indonesia is declining, indicating an unsuccessful attempt to procreate (involuntary childless) or voluntarily postponing having a child (voluntary childless). The absence of a child due to involuntary reasons can create tension between wife and husband. In contrast, the decision to be voluntary childless might not cause tension within the couple but could burden couples with social expectations. In line with the vulnerability-stress-adaptation model, both processes can cause stress that hinders marital satisfaction. The purpose of this research is to obtain an overview of marital satisfaction for childless couples. Moreover, this research aims to test the differences in marital satisfaction between involuntary and voluntary childless groups. Using quantitative data collected via an online survey from 108 involuntary childless participants and 112 voluntary childless participants, mean differences for both groups were tested with the Mann-Whitney method. The result obtained from the marital distress cut-off score based on the *Couple Satisfaction Index (CSI)* showed that the marital satisfaction for both involuntary and voluntary childless was relatively high, and there were no differences between the two groups. Additional analysis on stress perceived by couples showed that voluntary childless reported stress from family (40.2%) and social (34.8%) pressure, whereas involuntary childless participants reported stress due to loss of self-confidence (23.1%) and general distress (26.9%). This research suggested that participants in both groups (voluntary and involuntary childless) experienced relatively high marital satisfaction despite the stress that they experienced. Further study regarding the adaptive process or dyadic coping in childless couples is needed to understand how couples buffer the negative impact of stress on marital satisfaction.



ABS-136

Gratitude Journal, Expressive Writing, and Mindfulness

Ka Yan¹, Priska Analya²

^{1,2}*Faculty of Psychology, Maranatha Christian University, Bandung, Indonesia*

**Corresponding author: kresentia_kayan@yahoo.com*

Keywords: Gratitude Journal, Expressive Writing, Mindfulness

Abstract: This study aims to determine the influence of writing on mindfulness and consists of 2 studies. The first study investigated the influence of gratitude journals on mindfulness, while the second study investigated the influence of expressive writing on mindfulness. Participants are 72 students (first study) and 23 students (second study). Both studies involved students grouped in the experimental group (who received treatment writing) and the control group who did not get treatment. The results of statistical tests in the first study showed no effect of writing gratitude journal on mindfulness, while the results of statistical tests in the second study showed the score of the group that got treatment in the form of expressive writing was higher than the group that did not get treatment. There is no significant influence of gratitude journal on mindfulness. Similarly, there is no significant influence of expressive writing on mindfulness. However, there was a moderate effect size in participants who received expressive writing treatment, which needed further study involving larger samples. Researchers can also then consider the characteristics of the sample to be studied (not just students) so as to get a broader picture.



ABS-138

The Role of Affective Commitment in Mediating the Relationship between Authentic Leadership and Organizational Learning at Chicken-Based Food Processing Company in Indonesia

Henilia Yulita¹, Vincencius Farrel Jonathan², Yustinus Yuniarto³, Michael Christian⁴, Eko Retno Indriyarti⁵ and Suryo Wibowo⁶

^{1,2,3,4}Faculty of Social and Humanities, Universitas Bunda Mulia, Jl. Lodan Raya No. 2 Ancol, Jakarta, Indonesia

⁵Faculty of Economics and Business, Universitas Trisakti, Jl. Kyai Tapa No. 1 Grogol, Jakarta, Indonesia

⁶Psychological Science Doctoral Program, Universitas Persada Indonesia YAI, Jl. Pangeran Diponegoro No. 74 Senen, Jakarta, Indonesia

*Corresponding author: michaelchristianid@gmail.com

Keywords: Organizational learning, Affective commitment, Leadership

Abstract: The phenomenon of closing many retail outlets in Indonesia recently has one of the impacts of decreasing the processed food distribution network. Anticipating this, an organization must adjust its capabilities through the support of the leaders and continuous organizational learning (OL). Studies explain the importance of authentic leadership (AL) styles in OL. However, the role of affective commitment (AC) is still slightly involved. Therefore, this study aims to measure the role of AC in mediating the relationship between AL and OL. This study is an empirical-quantitative study on company X based in Jakarta, one of the largest chicken-based food processing companies in Indonesia. Using the probability sampling technique, 78 employees at the head office were sampled in this study. The questionnaire and the SMART PLS complement the analysis. This study states that the role of AC successfully mediates the relationship between AL and OL. Furthermore, this study also explains that AL affects AC and OL. In addition, AC also affects the OL. Surviving, competing, and even winning are inseparable from the role of the leader, team, and organizational learning. Trust from stakeholders (strengthen or even weaken) is considered necessary to be involved in the next research.



ROOM T – Friday, 2 July 2021, 10:30-12:00 WIB

**Topic 5: Mental Health, Human Resources,
Leadership and Well-being**

ABS-155

**Perma - a Multidimensional Framework of Well-Being in
Indonesian Adults**

Ni Luh Ayu Vivekananda, M.Psi, Psikolog¹, Evi Ema Victoria Polii, S.Psi, MA²
Departement of Psychology, Maranatha Christian University, Jl. Surya Sumantri No. 65, Bandung, Indonesia
**Corresponding author: ayu.vivekananda@gmail.com*

Keywords: well-being theory, PERMA, positive psychology

Abstract: These days, research on well-being is developing rapidly. It is because well-being is considered an important factor to support humans to function positively in the environment. Seligman's PERMA theory is one of the theoretical approaches used to discuss well-being. The PERMA framework explains the 5 dimensions that create well-being which are positive emotions, engagement, relationships, meaning, and accomplishment. By developing their well-being, individuals will achieve a better quality of life. Therefore, it is important to know the PERMA profile of adults in Indonesia. This research involved 112 individuals aged 18-63 as respondents. The data collection method used was a survey technique using the PERMA questionnaire (15 items). The data analysis technique used was descriptive analysis to sound out or describe the data collected. The result of this research showed that from the five dimensions of PERMA, Engagement and Relationship are the most prominent dimensions, while Positive emotion and Meaning are the lowest dimensions. Thus, it can be concluded that it is important for respondents to focus on something that is done and to really feel fully involved with what is being done, as well as to have a positive relationship with the environment to achieve comprehensive well-being which includes hedonic and eudaimonic. Moreover, it is suggested to improve the well-being of respondents by developing Positive emotion and find Meaning in living life as an individual. This research is very important for the development of well-being research in Indonesia and expanding research on various cultures in Indonesia. Hence, it is recommended for further research to increase the number of respondents to represent adult individuals in Indonesia. In addition, it is hoped that further research will not only examine the profile of the 5 dimensions of PERMA but also link to other factors that affect well-being such as physical and spiritual health, flow, gratitude, and happiness to obtain a more comprehensive analysis related to PERMA well-being.



ABS-159

The Dimensions of Transformational Leadership and Their Impacts on the Performance of Construction Business during Covid-19 Pandemic

Erwin Permana¹, Widarto Rachbini², Wasi Widayadi³, Rukun Santoso⁴

¹²³Faculty of Business and Management, Pancasila University, Indonesia
Jln Srengseng Sawah, Jagakarsa, Jakarta Selatan 12640

⁴ Faculty of Economics, Jakarta Islamic University, Indonesia

Jl. TB Simatupang No.1, RT.8/RW.2, Gedong, Kec. Ps. Rebo, Kota Jakarta Timur, Daerah Khusus Ibukota Jakarta 13760

**Corresponding author: erwin.permana@univpancasila.ac.id*

Keywords: Transformational leadership, performance, construction business.

Abstract: As a leadership concept that is concerned with building employee creativity at the individual level to perform, it is very important to examine the concept of transformational leadership during a pandemic, especially for the construction industry, because this industry is heavily affected by the Covid-19 pandemic. The purpose of this research is to analyze the effects of the transformational leadership dimensions on the performance of the construction business in Jakarta during the Covid-19 pandemic. Structural Equation Model (SEM) with smart PLS was used to analyze the data. The respondents were businesspeople, members of the Association of the Construction Service Businessperson (Asosiasi Pengusaha Jasa Konstruksi, Aspekindo). The statistical analysis shows that individual-consideration and idealized-influence dimension significantly affect the business performance. On the other hand, intellectual stimulation dan inspirational motivation do not have significant impact on the performance. This research confirms that the attention to the individuals and the role model of a charismatic and amiable leader are fundamentals in the construction business during Covid-19 pandemic. In order to make sure the implementation of individual consideration dan idealized influence are in the ethical corridor. this research recommends further research to use ethics as a variable to study transformational leadership in construction service during this pandemic



ROOM T – Friday, 2 July 2021, 10:30-12:00 WIB

Topic 6: Psychological, Education and Social Resources in the New Normal

ABS-39

Systematic Literature Review on Mindset and the Benefits in Living New Normal Life

Ira Adelina, Vida Handayani and Maria Yuni Megarini

¹*Faculty of Psychology, Maranatha Christian University, Surya Sumantri 65, Bandung, Indonesia*

²*Faculty of Psychology, Maranatha Christian University, Surya Sumantri 65, Bandung, Indonesia*

³*Faculty of Psychology, Maranatha Christian University, Surya Sumantri 65, Bandung, Indonesia*

**Corresponding author: (iraadelina.psi@gmail.com)*

Keywords: stress, mindset, COVID-19, pandemic, new normal

Abstract: Pandemics are large-scale epidemics afflicting millions of people across multiple countries, sometimes spreading throughout the globe (WHO, 2010b). Pandemics are "frequently marked by uncertainty, confusion and a sense of urgency" (WHO, 2005, p. 1). Pandemics are associated with lots of psychosocial stressors, such of separation of family and friends, shortages of food and medicine, wage loss, social isolation, financial hardship, death, trauma, and so on. The psychological effects of the pandemic will likely be more pronounced, more widespread, and longer lasting than the purely somatic effects of infection (Taylor, 2019). This pandemic period causes intense stress for individuals. Mindset, as a belief whether ability and intelligence are fixed or changeable traits, plays a critical role in how we cope in life's challenges (Dweck, 2006). This research uses descriptive method, in a form of systematic literature review from more than 50 articles, taken from psychological and medical journals in the last 35 years. The journals related to the pandemic situation from medical and psychological perspectives, along with its interventions. Based on this review, we conclude that mindset plays an important role in individual's appraisals and responses to stressors. Responses given by individual's can be adaptive responses that lead to effective coping, or maladaptive and lead to coping that is ineffective and even malfunctioning and disrupted health during pandemic.



ABS-52

Human Development Index in Indonesia: Are We in Line with SDGs and How Much Have We Grown?

Tery Setiawan¹, Indah S.R. Kuntari² and Indah Puspitasari³

^{1,2,3}*Department of Psychology, Maranatha Christian University, Prof. Drg. Suria Sumantri 65, Bandung, Indonesia*

**Corresponding author: tery.setiawan@psy.maranatha.edu*

Keywords: Human development, Indonesia, well-being, sustainable development goals, latent growth

Abstract: Human development index encapsulates the attainment of health, education, and living standards of one nation. Here, we posit that the progress towards the 2030 sustainable development goals is vital in ensuring positive achievement in HDI, especially in developing country such as Indonesia. In this study, we aim to investigate the relation between the current fulfillment of the 2030 agenda and HDI in Indonesia and examine the growth Indonesia has made in 2016 thru 2020. By using the state-of-the-art national data gathered by Statistics Indonesia, we carefully selected relevant indicators of the 2030 agenda to run the regression model on HDI. Additionally, we employed latent growth modeling to predict the growth rate of HDI in Indonesia. Controlling for provincial minimum wage, our regression analyses show that partnership for the goals, represented by the percentage of individuals using internet, is the strongest predictor for positive attainment of HDI. Further, there is a small positive increment of HDI annually within each province as well as between provinces. On average, the growth model demonstrates a significant difference in measurement years between provinces, with year 2020 being the peak among other years. These novel findings shed light on Indonesia's human development, which echoes the progress of national development.



ABS-54

Role of Parental Stress in Parenting Practice in Parents of Middle Childhood Children

Ellen Theresia¹, Marissa Chitra Sulastra², and Serena Wijaya³

^{1,2,3}Faculty of Psychology, Maranatha Christian University, Surya Sumantri 65, Bandung, Indonesia

*Corresponding author: ellen.theresia@psy.maranatha.edu

Keywords: parental stress, parenting practice, middle childhood

Abstract: Parenting at every stage of a children's development can create happiness as well as challenges for parents. When parents feel stressful and lack of satisfaction in parenting, parents can experience parental stress. Parental stress plays a role in parenting practice. This study aims to determine the role of parental stress in parenting practices. Data were collected from 134 parents who have middle-childhood children in Bandung. This study used Alabama Parenting Questionnaire (APQ) Short-Form questionnaire to measure parenting practices and Parental Stress Scale (PSS) to measure parental stress. The researcher validated the questionnaire using CFA and tested the hypothesis using multiple regression analysis. The results showed significant relationship between two variables and inter-variable. Aspect the lack of satisfaction in parental stress predicts a positive parenting and aspect parental stress predicts poor supervision. This shows the parental stress aspect: parental stress and lack of parental satisfaction, gives contribution to parenting practices in middle-childhood children. This study provides a new perspective, in which the parental stress can predict poor supervision and lack of satisfaction in parenting. Further research can be carried out by examining individual child differences and parent's belief as a moderator.



ROOM U – Friday, 2 July 2021, 13:00-14:30 WIB

Topic 7: Religion, Language and Humanity Issues in Sustainable Communities

ABS-2

Indonesian Film Industry amidst the Covid-19 Pandemic: an Observation on Sustainability Efforts

Anton Sutandio, Ph.D. 

Universitas Kristen Maranatha, Bandung, Indonesia

**Corresponding author: anton.sutandio@lang.maranatha.edu*

Keywords Indonesian Film Industry, Sustainability, Pandemic.

Abstract: This research is an observation of the Indonesian industry amidst the COVID-19 pandemic. The pandemic has impacted the film industry to the point when the film workers from the director to the ticket booth attendant lose their work or experience a drastic income drop. This research will look at how the Indonesian film industry attempts to sustain the wheel of production amidst the pandemic through any possible means. The focus of the research will be the various efforts and platforms of production that the film workers or communities do and use to keep the industry afloat. The collected and observed efforts will be categorized and interpreted to show that although the pandemic hits the industry hard, film industry workers have managed to find creative ways to survive and to make sure that it can sustain, albeit barely enough, in the pandemic condition. In the future, these various means of survival may become a foundation for the sustainability of the Indonesian film industry.



ABS-27

Local Wisdom in Indomie and Demae Icchou Video Advertisements: a Multimodal Analysis

Trisnowati Tanto¹, Sri Iriantini²

¹English Department, Maaranatha Christian University, Suria Sumantri 65, Bandung, Indonesia

²Japanese Department, Maranatha Christian University, Bandung, Indonesia

*Corresponding author: trisnowatitanto@gmail.com

Keywords: Concepts, Video Advertisements, Multimodality, Local Wisdom

Abstract The research focuses on the main concepts revealed in two instant noodle video advertisements; one is Indomie from Indofood Indonesia and the other one is Demae Icchou from Nissin Foods, Japan. Both brands are not only the most prominent instant noodles in Indonesia and Japan respectively, but they are also well known out of the countries. At present instant noodles are a serious business in the two countries; hence, how the products are advertised throughout the countries becomes highly significant as well. The research aims to find out these inherent concepts in the advertisements by using the Multimodality approach, focusing more on the visual and verbal modes. The research uses a descriptive qualitative method as well as a library research method as the data collection technique. The findings show that these Indonesian and Japanese video advertisements share some similar main concepts as they both assert their countries' local wisdom. This is a smart strategy for it can build the feeling of closeness to the product advertised and people will get to know the countries much better, which will eventually improve the two countries' economic growth and the people's standards of living, which is one of the UN Sustainable Development Goals.



ABS-38

The Influences of Song Lyrics “*Jagad Anyar Kang Dumadi*” on the Productivity of Traditional Artists in Yogyakarta: a Critical Discourse Analysis

Mohamad Makincoiri¹, Mulyana²

¹*Faculty of Language and Arts, Universitas Negeri Yogyakarta, Jl. Colombo No. 1, Yogyakarta, Indonesia*

²*Faculty of Language and Arts, Universitas Negeri Yogyakarta, Yogyakarta, Indonesia*

*Corresponding author: mmakincoiri@gmail.com

Keywords: Critical Discourse Analysis, Song, Lyrics, Traditional Artists

Abstract: Soimah Pancawati’s song *Jagad Anyar Kang Dumadi* has inspired other traditional artists in Yogyakarta to stay productive in pandemic period. This article discusses the Critical Discourse Analysis (CDA) in the song lyrics of *Jagad Anyar Kang Dumadi*. The purpose of this research is to describe the language structure, production process, and political, economic, and socio-cultural influence in the song lyrics. This is a qualitative descriptive research. The method is CDA by Fairclough. The results show that the language structure is representing God in the positive view, while Covid-19 in the negative view. Furthermore, the political, economic, and socio-cultural condition in the Covid-19 pandemic has affected the discourse production of the song lyrics. After the online launching of the song on YouTube, many other traditional artists have been started to follow the deed and produce online arts performances. From the result, it shows that the environmental conditions affect the productivity and creativity of traditional arts in the long run and the creativity of national artist affect the productivity of the other traditional artist. Art productivity affects the Sustainable Development Goals, especially in goals 8: Decent Work and Economic Growth.



ABS-43

Representation of Political, Social, and Cultural Phenomena in Biopics of Chinese Indonesian Figures Using Historical Approach

Selvia, M.Hum.¹, Yohan Yusuf Arifin, M.His.² and Septerianie Sutandi, M.TCSOL.³
^{1,2,3} Faculty of Languages and Cultures, Maranatha Christian University, Prof. drg. Suria Sumantri no. 65,
 Bandung, Indonesia
 *Corresponding author: selvia21@gmail.com

Keywords: Representation, Chinese Indonesians, Film

Abstract: Films are often used to communicate phenomena that occur in society. The representation of Chinese Indonesians in films portrays the political, social and cultural values of Indonesians. Problems that ensue Chinese Indonesians were reconstructed through films, thus enabling public consumptions. Three films will be the objects of the research: "Love and Faith", "A Man Called Ahok" and "Susi Susanti: Love All". This research was conducted in order to find out what are political, social and cultural phenomena being conveyed through these films, as well as how the matter is visually delivered. The methods used in this research is interpretative qualitative descriptive; in which the films were analyzed with a historical approach. An in-depth observation was applied for these three researched films as a form of data gathering technique. Through in-depth observation towards the existing political, social and cultural phenomena, it is revealed that Chinese Indonesian as an ethnic minority still received discriminative treatment despite their huge devotion to the country. It is hoped that the product of this research could be used as a reference regarding the political, social and cultural phenomena towards the ethnic group, in order to achieve a multicultural society that coexist peacefully; thus build up Indonesia to be a strong country capable of taking on future obstacles in accordance with Sustainable Development Goals (SDGs) enforced by the Indonesian government.



ABS-67

Food Sustainability in Local Wisdom Perspective of the Indigenous People Dayak Tomun Lamandau

Brian L. Djumaty¹, Nina Putri Hayam Dey²

¹*Department Of Development Studies, Antakusuma University, 63 Iskandar Street, Pangkalan Bun, Indonesia*

²*Department Of Development Studies, Antakusuma University, 63 Iskandar Street, Pangkalan Bun, Indonesia*

*Corresponding author: Brian.djumaty@gmail.com

Keywords: Sustainable Development, Food Sustainability, Local Knowledge, Local Food Security and Indigenous People

Abstract: One of the focuses of sustainable development goal is Zero Hunger program. This program requires food availability and sustainable agricultural managements. The Indonesian government has issued a law and its derivatives in order to meet the national food availability. However, the government has only interpreted food security as the food availability and not about food sovereignty. So, the concept of food security has created dependence on food imports. Indonesia as an agricultural country should not have always been imported foods in order to meet the needs, especially in its fulfilment for domestic consumption. This is because the Indonesian farmers across generation who are in direct contact with food sources have local wisdom to manage and fulfil the needs in a sustainable manner, even though only for small scale or domestic scale. If the community is able to fulfil their food needs for domestic food sustainability, it can be ensured that the Indonesian will be able to meet their food needs in the national context. Based on the description above, the purpose of this study is to describe food sustainability in the perspective of local wisdom of the indigenous Dayak Tomun Lamandau community by using descriptive qualitative research methods. This research was conducted on the indigenous Dayak Tomun Lamandau community in Sungai Buluh Village, Lamandau Regency, Central Kalimantan. This study found that a local knowledge, that is a sustainable food processing, has been passed down across generation. This local knowledge has been proven to successfully maintain the availability of food in granaries that last for years. This adaptive behaviour prevents local people from food crisis. The conclusion is that the local knowledge of the Dayak Tomun Lamandau community is able to meet and sustain the food needs on a domestic scale and it also contributes to fulfil food sustainability in the village context. This knowledge can be a capital in the process of actualizing national food security and sustainability. A knowledge transfer regarding to food security from local wisdom must be completed. The policies issued must be more supportive to local farmers and local wisdom in the community so that food sovereignty can be achieved.



ABS-73

The Role of Religious Orientation and Ethical Ideologies in Environmental Concerns amongst Teachers and School Staff in East Java, Indonesia

Dexon Pasaribu¹, Pim Martens¹ and Bagus Takwin²

¹Maastricht Sustainable Institute, Maastricht University, Maastricht, The Netherlands

²Maastricht Sustainable Institute, Maastricht University, Maastricht, The Netherlands

³Department of Social Psychology, Universitas Indonesia, Depok, Indonesia

*Corresponding author: dexon.pasaribu@maastrichtuniversity.nl

Keywords: Religious orientation, ethical ideology, environmental apathy, environmental concerns

Abstract: Several studies show that more often than not, religion hinders the awareness of and efforts towards environmental sustainability, where it depresses concern about the environment. Others, however, have found that the belief in God or the identification with a particular religion is not associated with measures of environmental concern. This study proposes to address religion as a major driver of ethics and how it relates to attitudes toward environment sustainability. This study investigates how Allport's religious orientation and Forsyth's ethical ideologies relate to the measures of environmental concerns using ecocentric and anthropocentric motives and general environment apathy. We survey a total of 929 school teachers and staff from 37 schools in East Java. The set of questionnaires asks variety of important determinants and demographic details, ecocentric-anthropocentric scale of environmental attitude, religious orientation scale (ROS) and, the ethical position questionnaire (EPQ). Multiple regression is applied to analyse the data. This study suggests mixed results whereby a higher intrinsic personal religious orientation (IP) more often leads to a lower general apathy toward the environment (GEA), a higher ecocentric (EM) and anthropocentric motives (AM) in valuing the importance of the natural environment. On the other hand, ethical relativism and extrinsic social religious orientation (ES) consistently relate to a higher AM and a higher GEA. We also identify different components of religious orientation which correlate significantly with idealism and relativism, suggesting that individuals' religious orientation may closely relates to their ethical belief and decision. This study concludes that two components of religious orientation relate to ethical ideologies. Specifically to religious orientation however, in contrast to White's (1967) thesis, this study rejects the notion that religion inhibits environmental concerns in the context of IP. When religion is viewed as deeply personal to the individual as the commitment to a religious life and living out his/her religion, it will be more likely to correlate with a higher environmental concerns. On the other hand, by measuring religiousness using ES, this study find supporting evidence for White's (1967) thesis, whereby higher ES relates to a higher GEA. When religion is viewed in some ways as an instrumental in-group membership, providing protection, consolation or social status, and enabling religious participation, it will be more likely to correlate with a higher environmental apathy. Lastly, several approaches to interpret the results along with several significant demographic and other determinants with each of their limitations, are discussed.



ROOM V – Friday, 2 July 2021, 13:00-14:30 WIB

Topic 7: Religion, Language and Humanity Issues in Sustainable Communities

ABS-78

***Tangos* Therapy: Health Behavior as the Result of Normalizing Power in Medicating Symptoms of Malaria on the Community of Sebesi Island**

Vera Budi Lestari Sihotang

Department of Anthropology, Faculty of Cultural Sciences, Gadjah Mada University

*Corresponding author: verbudl@gmail.com

Keywords: Response to disease, Recovery, Traditional Medication, Local Knowledge, Tangos Therapy.

Abstract: *Tangos* is a part of health therapies by extracting sweat (sauna-like) by using potion made of some types of medicinal herbs. This research aims to examine *tangos* therapy as a health behavior carried out by the community of Sebesi Island to heal malaria symptoms. According to Gochman (1988), health behavior does not encompass clinical improvement or physiological recovery, but it is included as specific behavior which has an impact on improvement or recovery. In addition, this study also purposes to interpret the type of power which results health behavior of *tangos*. According to Foucault (1982), power only exists when it is performed, even when it is integrated to a potentially different field brought to a permanent structure. The research regarding traditional medication to treat malaria in several areas of Indonesia has largely been conducted. This study acts as another important contribution regarding malaria in Indonesia, in the form of ethnographical research. Also, cross-cultural study on malaria is important to carry out to document the response of the population to fever, malaria symptoms, as a measure of disease control. Data collection was done through participation observation, that was by living temporarily on Sebesi Island and interacting directly with local people; the interview was given to the traditional healer, community leaders, midwife, and the citizens who have knowledge about *tangos*. Another method was a literature study aiming to obtain information about types of power, Sebesi Island, and the forms of medication for malaria symptoms. To explain health behavior, data were analyzed by using types of health categories, while the analysis of types of power was employed to see whose power which results normalizing power. The results show that *tangos* is a form of health behavior categorized as response to disease and preventive, protective, and safety behavior. Through this research, it is discovered that normalizing power is carried out by the community of Sebesi Island. This normality is reproduced and legitimized through *tangos* therapy. In this case, normalizing power is performed without being ordered. The community seek for an alternative and enact *tangos* as a reference for healing malaria. The people's knowledge about this therapy can be viewed as a control instrument contributing to individual's choice in treating malaria. Modern medical which dominates enough on this island does not necessarily cause *tangos* to be left behind. In fact, their knowledge about *tangos* to heal malaria precisely limit the health workers' knowledge which causes the neglect in health knowledge owned by midwives.



ABS-84

The Perceptions of Indonesian University Students on the Use of Extensive Reading in English Grammar Class

Maryani¹

¹*Universitas Kristen Maranatha, Indonesia*

**Corresponding author: maryanimarnath@gmail.com*

Keywords: extensive reading, grammar, students' perceptions

Abstract: One of the ways of target language input can be accessed by reading texts in the target language itself. It is undeniable that by reading, learners can achieve not only the vocabularies, but also the grammar of the target language. Therefore, reading in the target language is necessary as students can observe various grammatical patterns of used in the texts. As one of Sustainable Development Goals (SDGs) is to offer the opportunities for lifelong learning, it is important for teachers to encourage students to read English texts extensively so they can do self-learning in their lives. The purpose of this study is to show the perceptions of Indonesian university students of the use of extensive reading activities in their English Grammar class. The data were gained from 34 Indonesian private-university students in Grammar class in Indonesia who submitted a learning log each week that reflected their reading progress. To collect the data, an online questionnaire through Google Form was distributed at the end of the semester. The questionnaires result was analyzed using descriptive statistics and thematic analysis. The results indicated the positive and negative opinion regarding the students' perceptions on the use of extensive reading in Grammar class. By implementing extensive reading activities in English Grammar class, the students' grammar competence is hoped to develop naturally as they have been exposed to extensive reading.



ABS-90

Raising Environmental Awareness Through Teaching Chinese as a Second Language at University

Xuc Lin¹, Mariana², Fu Ruomei³

¹Department of Chinese, Bina Nusantara University, Jl. Kemanggisan Illir III No.45, DKI Jakarta, Indonesia

*Corresponding author: xuelin@binus.ac.id

Keywords: Environmental Awareness, Teaching Chinese, Second Language

Abstract: Due to many environmental issues, the need for increased environmental awareness becomes essential. This paper aims to raise environmental awareness through teaching Chinese as a second language at university. The researchers use theme-based language learning and task-based language learning to implement the teaching process. The research was conducted in a Chinese listening class and History of China at Bina Nusantara University Chinese department with 66 students with waste management as the learning theme. Before the teaching process, we use a pre-task questionnaire to measure the students' environmental awareness, especially waste management. Later, the researchers introduce the students to some materials related. The researchers gather feedback after the students complete a writing task that is related to the topic. The study divided into three sections: the students' awareness and behavior about waste management, the students' reflection, and the students' suggestion to improve environmental issues. Students are more aware of environmental issues, particularly on waste management in daily life, aware about their old habits, learn new knowledge, and their suggestions are everyone must take the lead, become an example for others to protect the environment in daily life, raising awareness through education and improvement of government' policy.



ABS-95

Local Religions and Contested Civic Space in Indonesia: a Case Study of Sunda Wiwitan Community in Cigugur, West Java

Hurriyah¹

¹*Department of Political Science, Universitas Indonesia, Depok, Indonesia.*

Keywords: civic space, civil rights, local religions, governmental restrictions, discriminations.

Abstract: The study explores the problems of civic space in Indonesia, with a case study of Sunda Wiwitan community in Cigugur. While previous studies assert that local religions have experienced the lowest level of discriminations among other minorities, the Indonesian case shows otherwise. Despite stronger state's recognition, the adherents of local religions are still suffering from discrimination in their daily life. Using a combination of case study and digital analysis, the study shows that struggles for civil rights of the local religion are often challenged by both governmental and social restrictions, resulting a contested civic space. The study asserts that the three actors are in active position in shaping the civic space: local government with the support of majority groups seek to control the space, and the Sunda Wiwitan community struggles to maintain and create a new space. It concludes that while the study case demonstrates a complexity of civic space problem in local setting, it essentially reflects a deeper problem of a civic space for the adherents of local religions in Indonesia. This work contributes to the study of local religions by expanding civic space theory to reframe the dynamics of religious freedom and civil rights struggle in Indonesian case.



ABS-103

New Constellations of Power and Resistance in the Platform Economy: Study of Gojek

Irsanti Widuri Asih, Heru Nugroho, Budiawan
Media and Cultural Studies, Gadjah Mada University

Keywords: platform economy, hegemony, counter-hegemony, gojek, digital capitalism, cyber-proletariat

Abstract: Gojek is a platform-based on-demand ride-hailing business that has attracted some researchers to conduct studies in this field through various approaches. Most researchers see the phenomenon of Gojek as part of the global disruptive technology movement that has a positive impact on the economic and socio-cultural aspects of society. Some others expose the asymmetrical relationship between the platform and its driver-partners. To date, no one has analyzed this phenomenon from the perspective of dialectical hegemony that transpires between the platform and its driver-partners. This article will fill in the gaps in the study of the Gojek phenomenon from the perspective of Gramscian Theory of Hegemony to uncover the dialectical relationship between the digital platform and its drivers-partners. The hegemony done by the platform is manifested in the concepts of work and the implementation of platform work system, the internalization of corporate values, and campaign programs designed by PT. Aplikasi Karya Anak Bangsa as the owner of Gojek Platform for certain strategic purposes. Whilst, the counter-hegemony movements done by the driver-partners are by conducting strikes, using modification of application, and joining driver-partners community. Finally, this article provides recommendations for several initiatives that should be taken by both the corporation and the Indonesian Government as the regulator to minimize the exploitation and alienation practiced by the Gojek platform.



ABS-104

The Recalled of Disaster Memory on Sebesi Island: a Historical Perspective

By Devi Riskianingrum¹ and Herry Yogaswara²

¹Department of History, Faculty of Humanity, Indonesian University

²Research Centre for Demography, Indonesian Institute of Sciences

*Corresponding author: devichudori@gmail.com; yogaswaralipi@yahoo.com

Keywords: Memory, disaster, *micro* history, tsunami, Mt. Anak Krakatau, Sebesi Island

Abstract: Memories of disaster have its own uniqueness on humankind. These memories tend to be short of duration, particularly when the media no longer do the coverage on the incident, that is, when the victims have recovered and is living life as prior to the disaster. From the victim's perspective, the memory of the disaster may remain alive, but it will be gradually fading away. The same case occurred to the inhabitants of Sebesi Island. History records that this island underwent destruction due to the tsunami triggered by the eruption of Mt. Krakatau in 1883. A period of 138 years seems to efface the memory of this catastrophic disaster. Again In 2018, a tsunami struck the Island due to volcano flank collapse caused by a continuous eruption of Mt. Anak Krakatau. The article uses *microhistory* approach with archival study and oral history to analyse the way in which memory of disaster recalled among the Sebesians after the 2018 Tsunami. Focus on several individual experience, the memory used as a sort of microcosm with which to explore general questions. In this study, memory refers to individual processes, but it also forms 'collective memory' in a group of people. The results point out that the memory of disasters from the older generation did not pass to the younger generation. This was due to the long absence of catastrophic events; hence it appears as a new experience. Although Anak Krakatau continually erupted but did not deemed as a threat. Media played important roles to shape disaster knowledge, mainly after the 2004 Aceh tsunami which was widely reported on television, radio, and the internet. Therefore, the 2018 tsunami had a significant impact as it recalled the memory of disaster in the minds of its inhabitants. The recalled of disaster memory build the awareness of disaster to the Sebesians in facing future hazards. This is in line with the aim of our government in succeeding the Sustainable Development Goals, principally point 11, as initiating a strength community to establish a sustainable settlement.



ROOM W – Friday, 2 July 2021, 13:00-14:30 WIB

Topic 7: Religion, Language and Humanity Issues in Sustainable Communities

ABS-106

The Influences of Chinese Culture on Historical Buildings in Surabaya

Olivia Gunawan¹, Rhea Griselda² and Diana Thamrin³

^{1,2,3} *Department of Interior Design, Petra Christian University, Siwalankerto 121-131, Surabaya, Indonesia*

**Corresponding author: oliviagunawan@outlook.com*

Keywords: Cultural Heritage, Historical Building, Chinese Culture, Surabaya

Abstract: Surabaya is the second largest city in Indonesia that is vast and rich in history, proven by the large number of traditional and historical architecture. One of the most prominent influences came from the Chinese culture, which came with the Chinese people who migrated to Surabaya seeking to expand their trade. Despite the mix with Javanese and European Indische cultures, the building still shows distinctive Chinese architectural features. This research aims to identify the characteristics of the Chinese-influenced buildings. Qualitative and analytic approaches are used to summarize various historical data and reveal patterns in the building distribution. The results show that the influence of Chinese culture is concentrated on the northern part of Surabaya, proven by the number of Chinese building forms. These buildings serve as evidence of history that are preserved in Surabaya, along with their diverse people and cultures that have undergone cultural developments as time progresses. It is expected that this cultural influence can be well-documented and utilized as valuable resources for historical studies and cultural preservation and function as a basis for research, building design influence, and development of tourism.



ABS-113

Healing Through Acting: the Therapeutic Effect through Online Monologue Performance

Rizki Theodorus Johan, S.S, M.A¹, Sonny Angjaya, S.S, M.Hum²
^{1,2}English Department, ¹Universitas Kristen Maranatha, Bandung, Indonesia
Corresponding author: rizkitheodorusjohan@gmail.com

Keywords: Drama therapy, monologue performance, acting, therapeutic effect.

Abstract: Drama therapy is a form of therapy through creative expression by including theatrical elements in mental therapy which intentionally aimed to facilitate personal growth and mental health of a person. During this pandemic, mental health become even more essential and immediate issue to deal with for many individuals, especially for youths. As such drama therapy may be proven to be more relevant than ever to maintain mental health during such a tumultuous time. This study aims to explore the application of dramatic therapy in class setting, particularly in an online environment, and what kind of therapeutic effects acquired (if any) by the students who participated in it. By using the concept of dramatic reality theory posited by Susana Pendzik, this research will mainly focus on the process of how dramatic therapy can be implemented in online drama class, particularly through online monologue performance as well as attempting to identify the effects that are experienced by the students before, during, and after the said performance. The method that will be used in this research is qualitative and library research by conducting performance session, questionnaire, and extended interview. The data for this research is taken from 42 university students who participated in a theatre production class. The findings of this research may provide new insights on how dramatic therapy can be used in a drama class, and help the students to cope with their personal issues as well as improving their performance skills and developing their personal growth.



ABS-132

Digital Interactions in Church Communities Attributable to Covid-19 Pandemic

Julianti Kasih¹, Yenni Merlin Djajalaksana², and Doro Edi³

¹*Informatics Engineering Program, Maranatha Christian University, Jl. Surya Sumantri No. 65, Bandung, Indonesia*

^{2,3}*Information Systems Program, Maranatha Christian University, Jl. Surya Sumantri No. 65, Bandung, Indonesia*

**Corresponding author: julianti.kasih@maranatha.ac.id; yenni.md@maranatha.ac.id; doro.edi@maranatha.ac.id*

Keywords: catholic, church, Christian, congregation, COVID-19, digital interaction

Abstract: COVID-19 pandemic has begun at the end of 2019 and entered Indonesia in March 2020. This situation significantly impacted various areas, including the church communities. As a result of Large-Scale Social Restrictions, many churches can no longer conduct face-to-face services at church premises and turn to digital interactions. Interactions with the Congregation are carried out through live streamings, mainly on YouTube Channel, mobile applications specifically made for this need, and website or other social media channels. This research was conducted within the broader area without restrictions on Indonesia's territory. Survey method, distributed online questionnaires targetted towards church communities was using for this research For this reason, we distributed questionnaires to congregations from various Christian and Catholic Churches in Indonesia using purposive sampling. We collected 159 responses for this study. The results were calculated with descriptive statistical analysis using AMOS 24 software tools. The research and analysis found no influence from the use of digital interactions on the condition of the church mass. Although there was a sense of loss of kairos moment, the respondents stated that they had no problem with digital interactions regardless of whether it was not as good as face-to-face interaction. This situation needs to be a concern for preachers to make digital interactions enjoyable, intimate, and build people. This study found that respondents still prefer face-to-face interactions to digital interactions.



ABS-156

Phonics Instruction for Young Learners in EFL Context: a Comparative Review

Ullyna Dewi

Department of Applied Linguistics and Language Studies, Chung Yuan Christian University, Zhongli, Taiwan

**Corresponding author: ullynadewi@cycu.org.tw*

Keywords: phonics instruction, reading skill, vocabulary learning, English literacy, sustainable development goal

Abstract: The metanalysis of National Reading Panel (NRP) deduced that systematic phonics instruction is highly beneficial for children of English as Native Language (ENL) on reading skill and vocabulary spelling at early age. In the recent decades, phonics instruction has been incorporated for young English as a Foreign Language (EFL) learners resulting positive effect on reading ability and spelling. However, whether it impacts young learners' understanding on word meaning, is still questioned. The English reading skill and vocabulary knowledge development will give access for young learners to life-long learning opportunities to acquire sustainable development in society where English is used as a global means for communication. The paper aims to compare phonics teaching methods specifically in the context of Indonesia, Taiwan and Iran in which English is learned as a foreign language. This comparative literature review is intended to contribute to teaching practices in Indonesia to reach the development goal in education. The electronic search included three data bases: Google Scholar, ProQuest and Local Journals (Taiwan and Indonesia). The inclusion for searching of phonics instruction criteria were all types of published articles related to English learning, narrowing down to phonics instruction for young learners. The exclusion criteria were published articles related to disable or dyslexic children and were not in English. Research of phonics instruction has been spotlighted more on the reading skill than on vocabulary learning. Combined methods were found to be favourable in vocabulary growth, regarding to the word-meaning. The context and the teaching methods (first language, material, age, type of approach) resulted different effect. Regarding to the literacy in English, phonics instruction is viewed as the reading curriculum which should be practiced by the teachers in EFL context to achieve the sustainable development goal. By this literature comparison, combined methods are promising teaching methods which are applicable in the context of EFL, especially in Indonesia. The methods give opportunity to reach the sustainable development goal.



ABS-158

Social Entrepreneurship Pesantren-Based to Support Rural Development in the Era of Covid-19 Pandemic (Case Study in District of Lebak, Banten Province, Indonesia)

Muhammad Syafar¹, Helmy Faizi Bahrul Ulumi²

¹Department of Islamic Community Development, UIN Sultan Maulana Hasanuddin Banten, Serang City, Indonesia

²Department of Islamic Community Development, UIN Sultan Maulana Hasanuddin Banten, Serang City, Indonesia

*Corresponding author: m.syafar@uinbanten.ac.id

Keywords: social capital; social enterprise; *pesantren*; community development; Covid-19 pandemic.

Abstract: The world development targets that were designed in the framework of the Sustainable Development Goals (SDGs) in 2030 is a challenge for all global stakeholders. This article aims: 1) to identify social entrepreneurship *pesantren*-based through social capital and local wisdom of community in District of Lebak, 2) to identify the development of social entrepreneurship *pesantren*-based to support local economy in the era of pandemic Covid-19, 3) to analyze of benefits of social entrepreneurship *pesantren*-based for rural development in the era of pandemic Covid-19. The method used a qualitative method in order to obtain a comprehensive understanding of all phenomena occurring in the study. The results of this study showed that: 1) social entrepreneurship that has been developed by the pesantren and community focuses on social capital and local wisdom of the community. 2) The impact of Covid-19 outbreak affected the local economy, however pesantren as social enterprises can contribute to support economic resilience through strengthening farmer groups. 3) Benefit of social entrepreneurship *pesantren*-based has an impact for socio-economic community and accessibility dealing with economic enhancement and rural development. Furthermore, enhancing social enterprise as the local institution is needed for improving social entrepreneurship development that has contributed to the local economy.



Closing Remarks

Good afternoon ladies and gentlemen. We are all very grateful for God's blessings so that during these two days, all of us have obtained good insights and joined a number of fruitful discussions in the International Conference on Emerging Issues in Technology, Engineering and Science, and also in the International Conference on Emerging Issues in Humanity Studies and Social Science. We have learned a lot from the sessions delivered by the amazing keynote speakers as well as from the parallel sessions where the presenters have shared their interesting research. Thank you all for delivering such important materials and findings which have deepened our knowledge about the emerging issues that will influence many aspects of human life and the academicians' contributions to solve many problems.

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Secretariat: LPPM Universitas Kristen Maranatha

Jl. Prof. drg. Surya Sumantri, M.P.H. No. 65, Bandung - 40164, West Java, Indonesia

Phone: (+62 22) 2012186, 2003450 ext. 7102, Fax: (+62 22) 2005914

Email: ice-tes2021@maranatha.edu | ice-hums2021@maranatha.edu

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