2017 MDSG CONFERENCES
HO CHI MINH, VIETNAM

HO CHI MINH, VIETNAM
17-18 NOVEMBER 2017

CO-ORGANIZER

Welcome to IPN-MDSG Conferences 2017

Dear Professor, Dr and distinguished delegates,

Welcome to the IPN-MDSG Conferences 2017 in Ho Chi Minh, Vietnam. On behalf of ***IPN EDUCATION GROUP & Malaysia Doctorate Support Group***, I would like to thank all the Conference Chair, Program Chairs and the Technical Committees. Their high competence and professional advice enable us to prepare the high-quality program. For the participants, we hope all of you have a wonderful time at the conference and also in Ho Chi Minh, Vietnam.

We believe that by this excellent conference, you can get more opportunity for further communication with researchers and practitioners. For the conferences **IPCBFM 2017, ICEEECS 2017, ACCEPIC 2017, ARBMIC 2017, ICASM 2017, AICEBM 2017 AND HICITK 2017** more than 68 submitted papers have been received and 50 papers have been accepted and published finally.

In order to hold more professional and significant international conferences, your suggestions are warmly welcomed. And we are looking forward to meet you again next time.

Best Regards,
Thank you.

Yours Sincerely,

Datin MZ Zainab
Director – Conference Management
Chairman, IPN-MDSG Conferences 2017 Ho Chi Minh, Vietnam

Message from IPN-MDSG Honorary Advisor

On behalf the IPN EDUCATION GROUP & Malaysia Doctorate Support Group, it is my privilege to welcome you to the IPN-MDSG Conferences Ho Chi Minh, Vietnam 2017. IPN is an independent, non-political, non-governmental organization of distinguished scientists dedicated to advancing science around the world. We aim to help scientists and researchers to publish their findings in scientific journals and to promote and help to organize worldwide conferences. We believe that has no boundaries, regardless of the great distances between countries and continents. Thus IPN welcomes contributions from researchers from all concern irrespective to the race, colour, religion and nationality.

Best Regards

Prof. Dr. Abdel Rahman Mohammad Said Al Tawaha
Honorary Advisor
IPN Conferences 2017 Ho Chi Minh, Vietnam

About IPN Education Group

The IPN Education Group is a non-profit international association dedicated to the promotion of international education and university cooperation in the field of Business, Art, Social Science, Management, Education, Science, Technology, Engineering and any other related field.

Through the organization of different international events, it brings together institutions, bodies and organizations from different countries of the world for discussion and cooperation IPN Mission is to promote and enhance the dialogue in education among the institutions devoted to field mentioned above through:

- Promotion of best practice standards in the service of international education.
- The facilitation of relevant forums, training and information exchange.
- Creation and dissemination of knowledge; exert an influence in public policy.
- Production of publications used as a database document for research works, projects and innovation activities held on the international education field.

IPN believes that this is best achieved through international cooperation and promotes the development of closer links among relevant institutions and individuals around the world. IPN supports that such international cooperation can help countries learn from each other and promotes the dissemination of scientific and engineering activities. IPN intends to achieve the mentioned objectives and get an international visibility by the organization of international conferences and by interacting with public and private organisms from all parts of the world.

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ANNOUNCEMENT

All accepted papers will be published in:

- World Applied Sciences Journal (WASJ) (online issue ISSN: 1818-4952) (ERA JOURNAL)
- Research Journal of Social Sciences (RJSS) (ISSN:1815-9125) (Peer Review Journal)
- Journal of Industrial Engineering Research (JIER) (ISSN:2077-4559) (Peer Review Journal)
- Science International Journal (SI) ISSN: 1013-5316 (ISI Journal Web of Science)
- International Journal of Advanced and Applied Sciences (IJAAS) (ISI/Thomson Reuters Web of Science Core Collection) (online issue) (ISSN:2313-626X)
- Journal of Engineering and Applied Sciences (JEAS) ISSN: 1816949X (Scopus Journal)
- ADVANCED SCIENCE LETTERS ISSN: 1936-6612: EISSN: 1936-7317(Scopus Journal)
- Journal of Applied Science Research (JASR) (ISSN: 1819-544X)(Scimago Journal)
- Middle-East Journal of Scientific Research (MEJSR) (H Index 26)issn: 19998147(Scimago Journal)
- International Journal of Business and Management (IJBM) (eISSN: inprogress) (Google Scholar, MyJurnal)
- Journal of Engineering and Science Research (JESR) (eISSN : 2289-7127) (Google Scholar, MyJurnal)
- Advanced Journal of Technical and Vocational Education (AJTVE)) (eISSN : 2550-2174) (Google Scholar, MyJurnal)

One Best Presenter Award will be selected from each oral session. The Certificate for Best Presenter award will be awarded after presentation session.

KEYNOTE SPEAKER:

Prof. Dr. Bonghwan Kim

Daegu Catholic University, Gyeongbuk, Korea

Bonghwan Kim received the B.S. degree in electronics engineering from the Kyungpook National University, Daegu, Korea, and M.S. and Ph. D. degrees in Electrical Engineering and Computer Science from the Seoul National University, Seoul, Korea, in 1996, 1999, and 2005 respectively. From 2001 to 2005, he was a founder and the president of the ICMEMS Inc., Seoul, Korea. From 2005 to 2007, he was a principal engineer with UniTest Inc., where he developed a MEMS probe card. In 2008, he moved to the University of Illinois at Urbana-Champaign and joined the Shannon Group as a post-doctoral research associate. Since 2009, he has worked for Daegu Catholic University as an associate professor, Gyeongsan, Gyeongbuk, Korea. His current research activities include solar cell, hydrophilic and hydrophobic surfaces, LED plant culture, and design and fabrication of MEMS device such as micro cantilever, actuators, and MEMS probe card.

Abstract

3D Printing Based Water Strider Robot

A water strider is a small aquatic insect that is common in lakes, ponds and wetlands, which size is about 8 to 20 mm long. The water strider has a bristle of less than 3 μm on each leg and grooves that form helical nanostructures on the surface. The air forming the air cushion in the grooves prevents the fluid from entering, therefore, this allows the water strider to walk freely on the water and don't wet legs. These organisms have attracted attention in recent years because they have many advantages such as reducing resistance when walking on the water, not falling into water, and moving quickly. Especially, the analysis of the superhydrophobic structure of the water strider legs and the research for realizing it are proceeding most actively. The purpose of this study is to analyze the superhydrophobic structure of the water strider legs and then to fabricate a water strider legs with super hydrophobic structure and to realize a biomimetic water strider robot. To do this, we first design a body of water strider robot. Secondly, we select the necessary parts to drive the robot, construct the circuits, and weigh them. Thirdly, in order to make a water strider robot capable of buoyancy above the calculated weight, the bristle legs are formed into various shapes that can have a superhydrophobic structure by using 3D printing machine. A superhydrophobic coating is applied to the structure to compare the bearing capacity against water surface. Finally, we attach a driving device and observe the movement of the water strider robot on the water surface.

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INSTRUCTION FOR ORAL PRESENTATION

Devices Provided by the Conference Organizer:

- Laptop (with MS-Office & Adobe Reader)
- Projector & Screen
- Laser Sticks

Materials Provided by the Presenters:

- PowerPoint or PDF files

Duration of each Presentation (Tentatively):

- Regular oral presentation: about 15 minutes (including Q&A)
- Keynote speech: about 40 minute (including Q&A)

Notice: Please keep your belongings (laptop and camera etc) with you!

During registration:

Original Receipt
Representative / Pass Card with lanyard
Printed Program
Lunch Coupon
Participation Certificate (collected from Session Chair after the session)
Conference Bag

IPN-MDSG Conferences 2017 Ho Chi Minh, Vietnam
Conference Program

November 17, 2017	Venue: **Lobby**	1000 - 1200	Registration	
November 18, 2017	Venue: **SAPA ROOM**	0830 – 0845	Opening Remarks	**Opening Remarks**
		0845 - 1000	Plenary Speech 1	**Keynote Speaker**
		1000 – 1030	Group Photo and Coffee Break	
	Venue: **SAPA ROOM**	1030 – 1230	Session 1	
	Venue: **Restaurant**	1230 – 1400	Lunch	
	Venue: **SAPA ROOM**	1400 – 1600	Session 2	
	Venue: **Private Room of Orientica**	1400 – 1600	Session 3	
		1600 – 1630	Coffee Break	
	Venue: **SAPA ROOM**	1630 – 1800	Session 4	
	Venue: **Private Room of Orientica**	1630 – 1800	Session 5	

Session 1
Time: 1030-1230
Venue: **SAPA ROOM**
Session Chair: **Dr. Rafidah Hamdan**

No	Paper ID	Presenter
1	015-hcm	**Smartphone Interlocked ADAS System Development for Safety** Dongin. Lee, **Bonghwan Kim**, Byeungleul Lee, Tae-Young Byun, and Kyunghan Chun *Catholic University of Daegu, Korea*
2	003-hcm	**The Mechanical Properties of Foamed Concrete with Polypropylene Fibres** A. A. Jhatial, **W. I. Goh,** N. Mohamad, L. W. Hong, A. A. A. Samad, R. Abdullah *Universiti Tun Hussein Onn Malaysia, Johor, Malaysia*
3	016-hcm	**Desk games digitalization using Radon transformation and Color segmentation** Michal Horacek, **Ladislav Beran**, Lubos Rejfek *University of Pardubice, Czech Republic*
4	018-hcm	**Strength of Blended Cement Mortar Containing Palm Oil Fuel and Eggshell Ashes** **Zalipah Jamellodin,** Nur Hafizah Abd Khalid, Norazreen Nor Azhar, Mohamad Arif Jamaly, Masni A. Majid, Norhafizah Salleh, Noor Azlina Abdul Hamid, Noorli Ismail, and Suraya Hani Adnan *Universiti Tun Hussein Onn Malaysia, Malaysia*
5	017-hcm	**Navigation of robotics platform in unknown spaces using LIDAR, Raspberry PI and Hector SLAM** Petr Vanicek, **Ladislav Beran** *University of Pardubice, Czech Republic*
6	038-hcm	**Effects of finger dimension on low-frequency noise and optoelectronic properties of Ge metal-semiconductor-metal photodetectors with interdigitated Pt finger electrodes** Munkhsaikhan Zumuukhorol, Sosorburam Boldbaatar, and **Chel-Jong Choi*** *Chonbuk National University, Korea*
7	006-hcm	**Automatic Speed Detection and PWM Signal Generation For Application In Dual Fuel System** **KingLee Chua**, Siti Zarina Mohd Muji, Mas Fawzi, Suhaila Sari *Universiti Tun Hussein Onn Malaysia, Malaysia*
8	025-hcm	Position estimation of robotic platform using optical flow **Beran Ladislav**, Rejfek Lubos, Chmelar Pavel, Matousek David *University of Pardubice, Czech Republic*

Session 2
Time: 1400-1600
Venue: **SAPA ROOM**
Session Chair: **Dr. Nazatul Faizah Haron**

No	Paper ID	Presenter
1	013-hcm	**The Influence of Service Quality, Marketing-Mix Strategy and Country-of Origin on Brand Trust: A Study of Malaysian Automotive Industry** **Hairunnisa Mohamad Ibrahim ,** Filzah Md Isa, Ho Tuck Sum *Taylor's University, Selangor, Malaysia*
2	020-hcm	**Analysis of Investor Sentiments and Macroeconomic Variables Effects to Islamic Stock Index in Indonesia** **Herjuno Bagus Wicaksonoputro,** Tika Arundina Aswin *Univesitas Indonesia, Indonesia*
3	004-ricbss	**Assessing External Leader Involvement in Mitigating Deviance in Autonomous Teams through Narrative Analysis of Team-Member Recollections** **James P. Hess, PhD** *Indiana-Purdue University at Fort Wayne, USA*
4	032-hcm	**Wetlands Communities: Opportunity and Challenge towards Sustainable livelihood** **Zalina Abu Naim*,** Foziah Johar and Norazlina Abdullah *University of Technology Malaysia, Malaysia*
5	024-hcm	**Capital structure, Investment, Members return, and Performance: some Malaysian Cooperative Evidence** **Zelhuda Shamsuddin**, Abdul Ghafar Ismail, Wan Sallha Yusoff *Universiti Sultan Zainal Abidin, Malaysia*
6	028-hcm	**A Study on Personal Financial Planning Attitudes of Individuals in Nilai** **Dr. Sharan Shetty** *Manipal International University, Malaysia*
7	005-ricbss	**CEOs Characteristics, Orientation of Turnaround Strategy and Cultural Difference: A Conceptual Review** **Arief Prima Johan,** Rebi Fara Handika, Yulihasri, Herri *Andalas University, Indonesia.*

Session 3
Time: 1400-1600
Venue: **Private Room of Orientica**
Session Chair: **Prof. Dr. Bonghwan Kim**

No	Paper ID	Presenter
1	002-hcm	**Dynamic Geo-Centrifuge Test on Twin Tunnel** **Changwon Kwak,** Dongin Jang, Innjoon Park *Civil & Architectural Engineering Group, Korea*
2	026-hcm	**Filtration of the FMICW radar output signals by the advanced windows** **Luboš Rejfek**, Natalija Chmelařová, Ladislav Beran, Pavel Chmelař *University of Pardubice, Czech Republic*
3	019-hcm	**Comparative Study of High Calcium and High Iron Filter Media of Unaerated and Aerated Steel Slag Filter Systems in Removing Phosphorus** **Hamdan, R.,** Siti Zu Nurain Ahmad, Nur'ain Nazirah Mohd Arshad. *Universiti Tun Hussein Onn Malaysia, Malaysia*
4	027-hcm	**Test of Methods Eliminating Regular Signal Level Variations due to Spatial Alphasat Satellite Motion** V. Pek, O. Fiser, **L. Rejfek** *University of Pardubice, Czech Republic*
5	004-icasm	**Study of Inverse Problem for Microbial Population in Biodegradation Process of Xenobiotic Polymer** **Masaji Watanabe** and Fusako Kawai *Okayama University, Japan*
6	001-ricste	**Effect of Double Heat Temperature Profile on $Ba(Ce,Zr)O_3$ Sintered Pellet** **Azliana Ramli**, Nafisah Osman, Nurul Wahida Othman *Universiti Teknologi MARA, Malaysia.*
7	029-hcm	**Point Cloud Plane Visualization by Using Level Image** Pavel Chmelar, **Lubos Rejfek**, Ladislav Beran, Natalija Chmelarova, Martin Dobrovolny *University of Pardubice, Czech Republic*

Session 4
Time: 1630 - 1800
Venue: **SAPA ROOM**
Session Chair: **Dr. James P. Hess**

No	Paper ID	Presenter
1	021-hcm	**Sukuk Market Liquidity Determinants: Case Study on Sovereign Sukuk in Indonesia** Tika Arundina***, Farah Rizky Ariyana*** *Univesitas Indonesia, Indonesia*
2	031-hcm	**Factors Influencing Household Electronic Waste (E-Waste) Recycling Participation** **Nazatul Faizah Haron**, Alias Radam, and Shaufique F. Sidique *Universiti Sultan Zainal Abidin, Malaysia*
3	034-hcm	**Bond VS (and) Sukuk: The Dynamic Relationship between Sovereign Bond and Sukuk Market Developments with the Indonesian Economy** **Reifa Qisthi Mitsaliyandito*,** Tika Arundina*, Rahmatina Awaliah Kasri *University of Indonesia, Indonesia*
4	006-ricbss	**Corporate Governance in Indonesia: Business Ethics Perspectives and Challenges in Globalization Era** **Arief Prima Johan,** Niki Lukviarman, Maruf *Andalas University, Indonesia*
5	008-ricbss	**Undergraduate Career-readiness Challenges in Malaysia** **Noorziah Mohd Salleh,** Prikshat Verma, Alan Nankervis, John Burgess *Universiti Teknologi MARA, Malaysia*
6	005-aicebm	**Evidence-Based Implementation Analysis of Mutual Recognition Agreement on Tourism Professionals at Tourism Education in Thailand** **Nila Krisnawati,** Rachman Sjarief *Swiss German University, Indonesia*

Session 5
Time: 1630 - 1800
Venue: **Private Room of Orientica**
Session Chair: **Dr. Sharan Shetty**

No	Paper ID	Presenter
1	022-hcm	**Bond Auction Underpricing Determinants in Indonesia: Study Case of Government Project Based Sukuk Issuance (2012-2016)** **Ristiyanti Hayu Pertiwi**∗, Tika Arundina, Rahmatina A. Kasri *Univesitas Indonesia, Indonesia*
2	035-hcm	**Efficiency and Maqasid Shariah Index: An Analysis of Islamic Bank in Malaysia** **Wan Hakimah Wan Ibrahim**, Abdul Ghafar Ismail *Universiti Sultan Zainal Abidin, Malaysia*
3	023-hcm	**Understanding Indonesian Student's Attitudes Towards Sukuk Investment** **Chasbi Ashidiqi,** Tika Arundina *Univesitas Indonesia, Indonesia*
4	007-ricbss	**Supplier Evaluation and Order Allocation with FANP – Multiple Objective (Goal) Programming: A case study in Garment industry, Vietnam** Chia-Nan Wang, **Nguyen Van Thanh** *National Kaohsiung University of Applied Sciences, Taiwan*
5	002-hicitk	**A Model Proposal for the Improvement of the Design Phase in Information System Development** **Ibrahim Akman** *Atilim University, Turkey*
6	039-hcm	**An Empirical Study on Consumers' Perceptions of Web Service Quality (WSQ) on E-Auction sites** Zhang Yixin**,** Abdul Rahman*, **Rasheedul Haque**, Zahir Osman, Lee Har San, Parameswaran Subramniam *Linton University College, Malaysia*

Conference Venue

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Note

List of Abstract

No	Paper	Abstract
1	002-hcm	**Dynamic Geo-Centrifuge Test on Twin Tunnel** **Changwon Kwak** #1, Dongin Jang *2, Innjoon Park #3 *# 1Civil & Architectural Engineering Group, KDHEC 55 Bundang-ro, Seongnam-si, Gyeonggi-do, 13591, S. Korea 1 wdinsight@gmail.com* *# 2Ph.D Candidate, Department of Civil Engineering, Hanseo University, 360 Daegok-Ri, Seosan-Si, Choongnam, 32158, S.Korea Address Including Country Name 2 fox6082@nate.com* *# 3Professor, Department of Civil Engineering, Hanseo University, 360 Daegok-Ri, Seosan-Si, Choongnam, 32158, S.Korea 3 geotech@hanseo.ac.kr* **Abstract:** Tunnel is one of the most efficient ways to connect each spot with considerable reduction of the length of road or railway by underground excavation. Therefore, the whole construction cost can be also reduced, however, the seismic safety issues emerges and becomes more important since the hefty earthquakes occurred all over the world, recently. The dynamic behaviour of the underground structures such as tunnel is different to that of superstructures mainly because of the in-situ stress conditions. In this study, dynamic geo-centrifuge test is performed to consider the in-situ stress condition of the surrounding soil against a twin tunnel. Long-term period wave is applied as an input motion and flexible segment is simulated to investigate the effect of acceleration mitigation. As a result, the deviation of peak acceleration increases according to the growth of base acceleration and 17.8 % of acceleration reduction is verified due to the flexible segment.
2	003-hcm	**The Mechanical Properties of Foamed Concrete with Polypropylene Fibres** A. A. Jhatial[1], **W. I. Goh[1*],** N. Mohamad[1], L. W. Hong[1], A. A. A. Samad[1], R. Abdullah[2] *[1] Jamilus Research Center, Faculty of Civil and Environmental Engineering, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia* *[2]Universiti Teknologi Malaysia, Skudai, Johor Malaysia* **Abstract:** Foamed concrete is a lightweight concrete which is composed by mixing cement, sand, water and a foaming agent. The difference between foamed concrete and conventional concrete are materials

		usage and density. The density of lightweight foamed concrete is generally ranges from 300 kg/m^3 to 1800 kg/m^3 as compared to conventional concrete whose density is 2400 kg/m^3. Foamed concrete with low density contributes to low compressive strength. Therefore, to enhance the mechanical and physical properties of foamed concrete, several percentage of Polypropylene fibres (PF). In this study, foamed concrete was cast in two densities, 1600 kg/m^3 and 1800 kg/m^3. PF were added in 4 different percentages in both the densities of foamed concrete, which are 0 % (without any content PF), 0.05 %, 0.10 %, and 0.15 % PF. Compression test and modulus of eleasticity was carried on the specimens to determine the effect of adding PF in the foamed concrete. Based on the results, the optimum percentage of PF was determined to be 0.15% at which higher compressive strength as well as modulus elasticity for both densities was obtained. However, it is appropriate apply in non-load support structure such as lightweight brick wall block, precast wall panel, non-suspended slab which fully support by soil and other lightweight application.
3	**006-hcm**	**Automatic Speed Detection and PWM Signal Generation For Application In Dual Fuel System** **KingLee Chua**[1], Siti Zarina Mohd Muji[2], Mas Fawzi[3], Suhaila Sari[4] *[1,2,4]Embedded Computing System (EmbCoS), Department of Computer Engineering,* *Faculty of Electrical and Electronic Engineering, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia.* *[3]Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia.* *1chua@uthm.edu.my, 2szarina@uthm.edu.my, 3fawzi@uthm.edu.my, 4suhailas@uthm.edu.my* **Abstract:** Dual fuel injection can be implemented in vehicle by changing engine injector or manipulating signal from vehicle's Electronic Control Unit (ECU). Changing engine injector is costly, thus this paper focuses study to discover solution to manipulate ECU signal using microcontroller. The study desired to automatically detect motor speed, and then produce a new PWM signal to navigate fuel injector. The capture/compare/PWM (CCP) module of PIC18F4520 device is utilized to record timing of input signal, determine its corresponding speed, and generate PWM signal with the designated duty cycle. The predefined duty cycles for the PWM signal are 25%, 50%, and 75% in the system. The program is debugged using MPLAB software and verified with a test circuit operating at 10MHz frequency using specific engineering software. The experimental results demonstrate the program manifests a promising achievement to the expected theoretical results.
4	**013-hcm**	**THE INFLUENCE OF SERVICE QUALITY, MARKETING-MIX STRATEGY AND COUNTRY-OF ORIGIN ON BRAND TRUST: A STUDY OF MALAYSIAN AUTOMOTIVE INDUSTRY** **Hairunnisa Mohamad Ibrahim**[1], , Filzah Md Isa[2], Ho Tuck Sum[3] *[1&2]Faculty of Business and Law, Taylor's University, 47500 Subang Jaya, Selangor.*

		Abstract: The main purpose of this study was to investigate the relationship between service quality and brand loyalty, the relationship between marketing-mix strategy and brand trust. This study consisted of three independent variables: service quality, marketing-mix strategy, and country-of-origin and a dependent variable: brand trust. SEM was used to analyze the relationship between variables. The population consisted of Malaysian consumers, and a postal mail survey of 381 respondents in the Klang Valley, Selangor. The structural equation modeling findings generally support the conceptual models and indicates that service quality and country-of-origin have a significant relationships with brand trust. Contrarily, marketing-mix strategy does not have a significant relationship with brand trust. The findings of this study while contributing to the body of knowledge, may also assist policy-makers and marketers in their sustainability effort.
5	**015-hcm**	**Smartphone Interlocked ADAS System Development for Safety** Dongin Lee [1], **Bonghwan Kim** [2], Byeungheul Lee[3], and Kyunghan Chun [2] *[1]Department of Information and Communication Engineering, Yeungnam University, Gyeongsan-si 38541, Korea* *[2]Department of Electronic and Electrical Engineering, Catholic University of Daegu, Gyeongsan-si 38430, Korea* *[3]School of Mechatronics Engineering, Korea University of Technology and Education Chungnam 31253, Korea* **Abstract:** As vehicle manufactures continue to increase their emphasis on safety with advanced driver assistance systems (ADASs), we propose a device that is not only already in abundance but portable enough as well to be one of the most effective multipurpose devices that are able to analyze and advise on safety conditions. With the increasing amount of safety features that are being introduced in our vehicles, research on HUD and DIRD design has suggested that advisory information may benefit driving performance. The proposed system is composed of head-up display (HUD) and driving information rear display (DIRD) modules combined with the navigation information provided by a smartphone and a smartphone app is developed for vehicle maintenance in which the required information is provided from a vehicle ECU (Electronic Control Unit). Test results suggest that providing drivers with advisory ADAS information can be a good complement and maintenance becomes easy by the direct information from vehicle ECU.
6	**016-hcm**	**Desk games digitalization using Radon transformation and Color segmentation** Michal Horacek, **Ladislav Beran**, Lubos Rejfek *Faculty of Electrical Engineering and Informatics, University of Pardubice, Studentská 95, Pardubice, Czech Republic* *Email: michal.horacek@student.upce.cz* **Abstract**: The research is focused on real-time digitalization of board games. The information about the game progress in real time is

		frequently demanded by media in broadcasted tournaments. Recent solutions usually consist of an electronically modified playing board and modified playing objects. This system tends to be expensive and fits to top level tournaments more than casual regional tournaments with limited resources. The goal was to create a system, which is easy to assemble and use while keeping the transmission and processing in real-time. The chosen solution utilizes a digital camera to obtain input data as a video stream. The data are then processed by Image processing methods. The proposed algorithm includes Radon transformation for board and playing field localization, then methods of Color segmentation for detecting the objects on the playing board. The system was modified and tested in a Chess game.
7	**017-hcm**	**Navigation of robotics platform in unknown spaces using LIDAR, Raspberry PI and Hector SLAM** Petr Vanicek, **Ladislav Beran** *University of Pardubice, Faculty of electrical engineering and informatics, Pardubice, Czech Republic* **Abstract:** This research is a base research of an alternative type navigation for our project ARES – Autonomous Research Exploration System. This system is focused on exploration of dangerous indoor spaces like caves, abandoned mines, ruins etc. In many cases, there is poor or no signal from satellite navigation systems and it is necessary to develop accurate navigation for our platform. Our platform is based on several systems like navigation using an inertial navigation unit, visual odometry and 3D space mapping. The result of our system will be a 3D map of space. The developed 3D space mapping needs accurate position for creation of a space map. This paper deals with development of an alternative position estimation method and implementation of LIDAR sensor and Raspberry PI for 2D space mapping.
8	**018-hcm**	**Strength of Blended Cement Mortar Containing Palm Oil Fuel and Eggshell Ashes** **Zalipah Jamellodin[1],** Nur Hafizah Abd Khalid[2], Norazreen Nor Azhar[1], Mohamad Arif Jamaly[1], Masni A. Majid[1], Norhafizah Salleh[1], Noor Azlina Abdul Hamid[1], Noorli Ismail[1], and Suraya Hani Adnan[3] *[1] Faculty of Civil and Environmental Engineering, Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, Malaysia.* *[2]Faculty of Civil Engineering, Universiti Teknologi Malaysia, 81310 Johor Bahru, Malaysia.* *[3]Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, Malaysia.* **Abstract:** This study investigated characteristics strength of blended cement mortar containing palm oil fuel ash (POFA) and eggshell powder (ESP). POFA and ESP were easily sourced from palm mills and bakeries. POFA was dried in the oven at 105-110 °C for 24 hours while ESP was sun-dried. Cement in mortar partially substitute 20% by weight of cement by both ashes to form their cement blends. POFA is divided into

		two groups which is unground POFA (UPOFA) and ground POFA (GPOFA). A total of 36 mortar cube of 100mm x 100mm x 100 mm was tested at curing ages of 28 days for determination of compressive strength. The recommended mix design of 1: 3 and the 0.5 water / cement ratio was adopted referred to the BS EN 196-1: 2015 standard specification. Then, the XRD testing was conducted for the highest compressive strength value of blended mortar and control mortar. The results show that the blended mortar C80GP16E4 gives the highest compressive strength of 21.3 MPa which increases by 6.5% compared to the control mortar, 20 MPa. For mortars containing only 20% replacement of UPOFA or GPOFA, they give 17.4 MPa and 14.3 MPa compressive strength respectively. An increase of 21% for GPOFA. This is due to the high fineness of POFA providing more surface area that filled the voids between cement and aggregate. The paper concludes that POFA and ESP separately or as a binary blends can be adopted as a partial substitute for cement in mortar production but must not exceed 20% cement weight.
9	**019-hcm**	**Comparative Study of High Calcium and High Iron Filter Media of Unaerated and Aerated Steel Slag Filter Systems in Removing Phosphorus** **Hamdan, R.[1],** Siti Zu Nurain Ahmad[1], Nur'ain Nazirah Mohd Arshad[1]. *[1]Department of Civil Engineering Technology, Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia.* **Abstract:** This study investigated the comparisons between steel slag of high composition of iron (Filter HFe) and steel slag of high composition of calcium (Filter HCa) when used as the filter media of unaerated (UEF) and aerated (AEF) lab-scale column filters in removing phosphorus. Both Filter HFe and Filter HCa were continuously running for three months using 25 mg/L synthetic phosphorus wastewater of different pH systems (pH 3, pH 5, pH 7, pH 9, pH 11 and control using distilled water) as the influents. Sampling was done weekly for analysis of pH values, phosphorus (in the form of orthophosphate) removal efficiency, and concentration of Ca, Mg and Fe in the effluents. The results showed that Filter HFe has excellent (>59%) orthophosphate removal efficiency at acidic systems (pH 3 and pH 5 systems) and average removal efficiency (21-87%) at pH 7, pH 9, pH 11 systems. Also, unaerated systems performed better compared to aerated systems. Meanwhile, for Filter HCa, orthophosphate removal efficiencies for all pH systems were better (80-100%) compared to Filter HFe.
10	**020-hcm**	**ANALYSIS OF INVESTOR SENTIMENTS AND MACROECONOMIC VARIABLES EFFECTS TO ISLAMIC STOCK INDEX IN INDONESIA** **Herjuno Bagus Wicaksonoputro[1],** Tika Arundina Aswin[2] *[1]Univesitas Indonesia, herjuno.bagus@ui.ac.id, West Java, 16424, Depok, Indonesia* *[1]Univesitas Indonesia, tikarundina@gmail.com, West Java, 16424, Depok, Indonesia*

		Abstract: This study examines the exposure level of Islamic stock price indices in Indonesia to the relative change in investor sentiment index and macroeconomic factors. For investor sentiment, the proxy is the Consumer Confidence Index (CCI). For macroeconomic variables, the proxies are Indonesia Composite Index, industrial production index, consumer price index, the exchange rate of rupiah against the US dollar, money supply, and interest rates (the data used for this variable is the BI Rate). The author conducts the ordinary least square (OLS) test with the monthly data from January 2006 to June 2016. The study reports that CCI, Indonesia Composite Index, and money supply have the significant influence in Islamic Price Index in Indonesia. Our studies unlocking the room for new studies on influence of sentiment in Islamic financial industry.
11	**021-hcm**	**Sukuk Market Liquidity Determinants: Case Study on Sovereign Sukuk in Indonesia** Tika Arundina [1]***, Farah Rizky Ariyana**[2] *[1]Islamic Economics, tikarundina@gmail.com, Kampus FEB UI Depok, 16424, Depok, Indonesia* *[2] Islamic Economics, farah.ariyana@hotmail.com, Kampus FEB UI Depok, 16424, Depok, Indonesia* **Abstract:** This study attempts to examine the factors that significantly affect sovereign sukuk market liquidity in Indonesia. The author uses the sukuk's characteristics (issuance amount, YTM, and remaining maturity), macroeconomic factors (inflation, PUAS, and JII), and Indonesia's Consumer Confidence Index as independent variables and then conducts a panel regression against the dependent variable which is Indonesia's sovereign sukuk monthly trade volumes. The result shows that sukuk's issuance amount, remaining maturity, and PUAS have a positive impact while the inflation level, JII and YTM have a negative impact on sukuk market liquidity. However, Consumer Confidence Index is not proven to be significant determinants for sukuk market liquidity. This study contributes in filling the gap of empirical study regarding sukuk market liquidity determinants in Indonesia.
12	**022-hcm**	**Bond Auction Underpricing Determinants in Indonesia: Study Case of Government Project Based Sukuk Issuance (2012-2016)** **Ristiyanti Hayu Pertiwi**∗, Tika Arundina, Rahmatina A. Kasri *Department of Islamic Economics, Faculty of Economics and Business, Universitas Indonesia* **Abstract:** Common Value Theory points out the situation in financial instrument auction where investors tend to bid a lower price than the actual value and it results in an underpricing of financial instrument. The underpricing, further, may hamper the market as it leads to revenue loss for the company. As the Islamic financial market developed, government of Indonesia expand their instrument variation and started to issue Islamic Bond (sukuk) in 2008. There is still lack of empirical literature regarding sukuk performance, particularly in the pricing model. This

		paper attempts to examine underpricing indication in sukuk issuance during 2010-2016 and study the factors that might explain its persistence. To examine the existence of sukuk underpricing issuance, this study uses derived formulas from Jegadesh (1993) and Indonesian Ministry of Finance Regulation number 50/PMK.08/2012 which consider adjustment of two days holding period from auction day to settlement. To this end, Ordinary Least Square model is applied to analyze the determinant of underpricing. In contrast to the theory, result of this study shows that average sukuk issuance in Indonesia indicates a higher auction bid (T+0) than in settlement (T+2) period; and it is significantly affected by bid-ask spread, yield to maturity, and exchange rate.
13	**023-hcm**	**Understanding Indonesian Student's Attitudes Towards Sukuk Investment** **Chasbi Ashidiqi,** Tika Arundina[1] *Islamic Economic Studies, Department of Economics, Faculty of Economic and Business, University of Indonesia, Depok, 16424, Indonesia* **Abstract:** The purpose of this study is to discover the determinants of Indonesia college students' attitudes towards sukuk investment. Data from 1140 college students from 113 universities across 21 provinces in Indonesia were collected via an online survey. The results of a Structural Equation Modeling (SEM) analysis show that knowledge, religious factors, risk and return, and reputation have positively significant influences on Indonesian college students' attitudes towards sukuk investment. The study also shows that risk and return has the highest loading factor of the four variables, which means that Indonesian students' attitudes towards sukuk investment is highly influenced by their opinion on the profitability and risk of the investment.
14	**024-hcm**	**Capital structure, Investment, Members return, and Performance: some Malaysian Cooperative Evidence** **Zelhuda Shamsuddin** [1], Abdul Ghafar Ismail [2], Wan Sallha Yusoff [3]. *[1]Faculty of Economics and Management Sciences, Universiti Sultan Zainal Abidin, Address: 21030 Kuala Terengganu, Terengganu, Malaysia,* *[2]Sultan Sharif Ali Islamic University, Brunei Darussalam* *[3]School of Business Innovation and Technopreneurship, Universiti Malaysia Perlis , Perlis, Malaysia.* *E-mails: [1]zelhudaham@unisza.edu.my, Phone: +6019-9309622 (corresponding author); [2]agibab62@gmail.com; [3]wansallha@unimap.edu.my* **Abstract:** The purpose of this paper is to analyze the effect the leverage, investment, dividend, members benefit and performance of Malaysian cooperative in the credit sectors. Issue in relation to the effect of leverage, investment, dividend, members benefit and credit cooperative performance are still in discussion until today. This study employs a panel data model to investigate the relationship of leverage, investment, dividend, members benefit and cooperative size to performance for the years 2010-2014. The cooperative financial performance is measured

		using return on asset (ROA), and return on capital employed (ROCE). The result suggest that leverage, dividend, members benefit and cooperative size were significant to performance. The outcome of this study may assist cooperative managers in making decision on leverage, and members cooperative return issues.
15	**025-hcm**	**Position estimation of robotic platform using optical flow** **Beran Ladislav**, Rejfek Lubos, Chmelar Pavel, Matousek David *University of Pardubice, Faculty of electrical engineering and informatics, Pardubice, Czech Republic* **Abstract:** This paper deals with a base research of an alternative type of navigation for our project ARES (Autonomous Research Exploration System). This system is focused on exploration of unknown areas. The navigation of this platform is based on fusion of several navigation methods. The first method is based on the visual odometry using SURF (Speeded Up Robust Feature). The second navigation method is based on Hector Slam and Lidar sensor. The third method is based on optical flow. The implementation of third method based on the Lucas-Kanade method is descripted in this paper.
16	**026-hcm**	**Filtration of the FMICW radar output signals by the advanced windows** **Luboš Rejfek**[1], Natalija Chmelařová[1], Ladislav Beran[1], Pavel Chmelař[1] [1]*Department of Electrical Engineering, Faculty of Electrical Engineering and Informatics, Pardubice, Lubos.Rejfek@student.upce.cz* **Abstract:** This paper deals with the special types of windows application on the two dimensional spectrum obtained using the FMICW radar. This processing will improve the signal interpretation for the user. We want to implement this signal processing in our SW for the automatic detection of targets. The obtained results are described in detail with the recommendation for achieving the best processing result. We developed several windows, which can be used, for our algorithm.
17	**027-hcm**	**Test of Methods Eliminating Regular Signal Level Variations due to Spatial Alphasat Satellite Motion** V. Pek, O. Fiser, **L. Rejfek** *Department of Electrical Engineering, Faculty of electrical engineering and informatics, University of Pardubice, Pardubice, Czech Republic* *viktor.pek@student.upce.cz, ondrej@ufa.cas.cz, lubos.rejfek@upce.cz* **Abstract:** Many countries receive the Alphasat satellite signal in both Ka and Q bands in order to analyze the random atmospheric attenuation. The received signal from the Alphasat satellite is influenced not only by the atmosphere but also by the quasi regular satellite motion causing the "cosinusoidal" signal level fluctuations of about 24 hour period. In this contribution we describe mathematical methods eliminating this fluctuation and perform tests of the suitability of particular methods. To

		test these methods we developed and used the signal level software simulator as we must know the "true" attenuation values while the simulated values are the "true" ones from our testing viewpoint. The tests showed that we should recommend the MY method developed at the Institute of Atmospheric Physics Prague but the differences among tested methods are low and all described methods are acceptable.
18	**028-hcm**	**A Study on Personal Financial Planning Attitudes of individuals in Nilai** **Dr. Sharan Shetty** *Assistant Professor of Finance, School of Management & Business, Manipal International University* **Abstract:** Personal finance is seen as the practice of financial principles that affects the monetary decisions of a person or family (McGregor, 2007). It shows the pattern by which a person or family receive, plan, save and spend money in cognizance of future events and different financial risks (Barwell, May, & Pezzini, 2006) .It is a number of steps taken that concerns an individual's financial matters. It could be a budget that helps to adequately organize a person's finances, steps, goals for spending and also future savings. It also involves future income allocation to all the shades of expenses like food, utilities, rent, clothes, investments, and short-term and long-term savings. The financial security after retirement is the sole responsibility of individuals. In Malaysia's current economy that is full of uncertainty; personal financial planning has become important among individuals. There is an increase in options as regards investment and financial products by Companies and Financial institutions.
19	**029-hcm**	**Point Cloud Plane Visualization by Using Level Image** Pavel Chmelar[1], **Lubos Rejfek[1]**, Ladislav Beran[1], Natalija Chmelarova[1], Martin Dobrovolny[1] [1]*Department of Electrical Engineering, Faculty of Electrical Engineering and Info rmatics, University of Pardubice, Pardubice, Czech Republic* Pavel.Chmelar@stud ent.upce.cz **Abstract:** This paper presents the point cloud plane visualization by using the level image. A created level image describes the point presence in space at specific level. By knowledge its origin in space, the pixel size and detected rotation angle we can easily visualize planes in analyzed point cloud. The connection of image processing methods with the physical distance offers besides the visualization also get important properties about the scanned space. The visualization algorithm includes also color point cloud visualization. Presented results show advantages of the level image using.
20	**031-hcm**	**FACTORS INFLUENCING HOUSEHOLD ELECTRONIC WASTE (E-WASTE) RECYCLING PARTICIPATION** **Nazatul Faizah Haron[1]**, Alias Radam[2], and Shaufique F. Sidique[3]

		[1]*Department of Economics, Faculty of Economics and Management Sciences, Universiti Sultan Zainal Abidin, Gong Badak Campus, 21300 Kuala Terengganu, Terengganu Darul Iman, Malaysia* [2]*Department of Management and Marketing, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia* [3]*Department of Economcis, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia* **Abstract:** The amount of electronic waste (e-waste) has relatively increased along with the rapid increases in technological and economic development in Malaysia. In order to avoid dumping massive amounts of electronic waste in landfills, recycling programs were implemented by policymakers and governments to attract people to participate in these programs. The success of recycling programs largely depends on household participation and their commitment. Therefore, a better understanding on recycling behaviour will help to design and improve the effectiveness of these programs. This paper studies the profile of people who are involved in recycling activities and examines the factors influencing household recycling participation. The findings of this study suggests that socioeconomic variables, for example, education and income, are the predictors of recycling behaviour. Attitudinal factors were also found to affect recycling participation, such as *ATTITUDE, BELIEF, CONVENIENCE, KNOWLEDGE,* and *SOCIAL PRESSURE*.
21	**032-hcm**	**Wetlands Communities: Opportunity and Challenge towards Sustainable livelihood** **Zalina Abu Naim*,** Foziah Johar and Norazlina Abdullah *Department of Urban and Regional Planning, Faculty of Built Environment University of Technology Malaysia, Johor, Malaysia* **Abstract:** The principles of a sustainable society includes respect and care for the community, improvement in the quality of life, conservation of the earth's vitality and diversity, minimizing the depletion of resources, changing attitudes and practice and effectively managing the environment. Thus, a prerequisite to sustainable livelihood is the absence of poverty. Poverty however, is prevalent among the wetland communities, the major factor being weak in social, physical, natural and financial capitals. Setiu Wetlands, located in the state of Terengganu, Malaysia is less developed than other districts in the state, and are regarded as relatively poor. The Malaysian government pours a lot of efforts in order to improve the standard of living of the community. Amongst the initiatives is the development of a large scale shrimp aquaculture project aimed to boost the Setiu District economy. The objective of this study is to identify the impact of the economic development and how it contributes to the community in attaining sustainable livelihood. Primary data gathered from field study through observation and questionnaires as well as secondary sources are used in this study. The findings reveal that most households in the communities are still earning low monthly income with an average of RM1000 and less. Other critical issues include high number of out-migration among young generation, lack of asset, traditional usage of economic activities

		tools, lack of economic participation, lack of social participation, poor education background and lack of skills in required areas. Our research recognizes the need to strive for much improve quality of live and suggests that the communities should be exposed to the virtues of employment, public participation, social cohesion and cultural identity in order to achieve a sustainable livelihood for long-term survival.
22	**034-hcm**	**Bond VS (and) Sukuk: The Dynamic Relationship between Sovereign Bond and Sukuk Market Developments with the Indonesian Economy** **Reifa Qisthi Mitsaliyandito[1]*,** Tika Arundina[2]*, Rahmatina Awaliah Kasri *[1]University of Indonesia, reifaqim@gmail.com, Depok, Indonesia* *[2]University of Indonesia, tikarundina@gmail.com, Depok, Indonesia* **Abstract:** This study discusses the impact of sovereign bond and sukuk market developments on the Indonesian economy, and vice versa. It will use the 2009–2016 quarterly longitudinal data of *outstanding* bonds and sukuk as a proxy of the size of the bond and sukuk markets, as well as Indonesia's GDP as a *proxy* of the size of the economy. The basic model used in this study is a VAR model, and a Granger causality test is utilised to determine the direction of causality. The study also uses *impulse response function* and *variance decomposition* to determine the impact of shock on each variable on the others. The result shows that, overall, only sovereign sukuk has a positive impact on the economy. Therefore, in terms of improving the Indonesian economy, sukuk can be considered to be a more effective financial instrument compared to conventional bonds.
23	**035-hcm**	**Efficiency and Maqasid Shariah Index: An Analysis of Islamic Bank in Malaysia** **Wan Hakimah Wan Ibrahim[1]**, Abdul Ghafar Ismail[2] *Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia* **Abstract:** The aim of this paper is to measure bank efficiency the Islamic banking sector in Malaysia during the period 2008-2013. This study uses the non-parametric approach which is data envelopment analysis (DEA) to calculate the efficiency scores. Then, a two-stage analysis is regressed to determine the efficiency of Islamic banking sectors in Malaysia. Then based on the objective of Islamic Bank (IB) from the theory of Maqasid Shariah, Maqasid Shariah Index (MSI) is proposed to calculate the efficiency of IB which is influenced by this MSI index. Then, we analyze the Maqasid Shariah Index (MSI) of Islamic Bank as a complement to the application of Islamic law in the business cycle. Results indicate that the efficiency scores of Islamic banks have been increasing for the last 2 years of period. Then, the results of second stage analysis shows that MSI have a positive and significant relationship with efficiency.

24	**038-hcm**	**Effects of finger dimension on low-frequency noise and optoelectronic properties of Ge metal-semiconductor-metal photodetectors with interdigitated Pt finger electrodes** Munkhsaikhan Zumuukhorol, Sosorburam Boldbaatar, and **Chel-Jong Choi*** *School of Semiconductor and Chemical Engineering, Semiconductor Physics Research Center, Chonbuk National University, Jeonju 561-756, Republic of Korea* **Corresponding author email: cjchoi@jbnu.ac.kr* **Abstract:** We investigated the effect of interdigitated Pt finger electrode dimension on the low-frequency noise and optoelectrical properties of Ge metal-semiconductor-metal (MSM) infrared photodetectors (PDs). The dark current was reduced by increasing the finger width/spacing and decreasing the finger length of the Ge MSM PD. This dark current reduction led to an increase in the normalized photo current to dark current ratio (NPDR). The decrease in finger width/spacing facilitated the occurrence of the electric field crowding near contact electrode. This resulted in the image-force Schottky barrier lowering, which could be responsible for the increase in dark current. From the low frequency noise measurements performed at the frequencies in the range of 10 Hz - 1 kHz, the Ge MSM PDs had $1/f^{\gamma}$ frequency dependence with γ ranging from 1.07 to 1.20, regardless of finger dimension. The current crowding, in particular at the vicinity of the finger electrodes, was more pronounced in the Ge MSM PDs having smaller finger width/spacing, which could be a main cause of the increase in the low frequency noise.
25	**039-hcm**	**An Empirical Study on Consumers' Perceptions of Web Service Quality (WSQ) on E-Auction sites** Zhang Yixin, Abdul Rahman*, **Rasheedul Haque**, Zahir Osman, Lee Har San, Parameswaran Subramniam *Faculty of Business and Accounting, Linton University College, Mantin, Negeri Sembilan Malaysia* *School of Business and Management, Open University Malaysia, Bangi, Selangor* **Abstract:** The purpose of this research is to identify consumer's perceptions of web service quality (WSQ) on e-auction web sites. Within, e-Commerce, the e- auctions industry is growing at a rapid pace. This explosive growth appeal to time-strapped and cost-conscious consumers who are demanding speed and convenience in search and locating their services and goods. Over the next three years, this industry is expected to grow exponentially as the number of Internet traffic and growth of auction web sites continue to grow. This research used a quantitative approach to study the key factors influencing consumer perception of e-auction web service quality. A questionnaire consisting of seventeen items based on these five dimensions and another two dependent variables were developed. Analysis was carried out to assess the reliability and validity of these dimensions. Partial Least Square (PLS) was used to evaluate the model to identify the extent of relationship between these five major dimensions and the dependent

		variables. Results of the study revealed five dimensions, including performance, (how the online retailer meets the expectation of the online shoppers), access (the ability of online retailer to provide a wide variety of products), security (how the online retailer assure the online shoppers with their financial and personal information), sensation (the feeling of online shoppers when using the website), and information (the ability of online retailers to provide accurate and diverse information of the products). The theoretical and managerial implications of the results are discussed
26	**002-hcm-ajtve-hicitk**	**A Model Proposal for the Improvement of the Design Phase in Information System Development** **Ibrahim Akman** *Department of Computer Engineering, Atilim University, Kızılcaşar Köyü, 06836, Incek Gölbasi, Ankara, Turkey* *e-mail: Akman@atilim.edu.tr* **Abstract:** Quality of software systems is defined as reasonably bug or defect free, delivered on time and within budget, meets requirements and/or expectations, and is maintainable. Actually, software quality of is influenced by the stages of Software Development Process (SDP) and keeping its level high is a difficult task than other industrial products. This is mainly because SDP is invisible, complex and stochastic. The design phase is one of the arlier stages of SDP and has a dominant effect on quality. This article proposes a novel queueing network simulation approach for the assessment of design alternatives based on stochastic nature of SDP for achieving better software quality.
27	**004-icasm**	**Study of Inverse Problem for Microbial Population in Biodegradation Process of Xenobiotic Polymer** **Masaji Watanabe**[1] and Fusako Kawai[2] [1]*Graduate School of Environmental and Life Science, Okayama University, Japan.* [2]*Center for Fiber and Textile Science, Kyoto Institute of Technology, Japan* **Abstract:** This study shows validity of the bisection method in conjunction with the Newton-Raphson method in application to an inverse analysis of a three parameter model. Our techniques are demonstrated by application to microbial depolymerization process. Numerical results show applicability to a wide range of inverse problems.
28	**005-aicebm**	**Evidence-Based Implementation Analysis of Mutual Recognition Agreement on Tourism Professionals at Tourism Education in Thailand** [1]**Nila Krisnawati,** [2]Rachman Sjarief [1]*Department of Business Administration, Swiss German University, Indonesia* [2]*Department of Business Administration, Swiss German University, Indonesia*

		Abstract: ASEAN Member States (AMSs) which consist of ten countries have shared a common commitment to achieving an integrated ASEAN Economic Community (AEC) by 2015. The commitment has been realizing through implementing the Mutual Recognition Agreement (MRA) on Tourism Professional. This study aims to analyze the implementation of MRATP and to identify the barriers or challenges in the perspective of tourism and hospitality study program and other related institutions such as tourism and hotel associations, national tourism board in the early stage of adoption period from the year 2016-2017. The sample taken from this study were six universities based on advised from the ASEAN Secretariat Offices in Jakarta and Indonesia National Tourism Professional Board (NTPB). There are many universities in Thailand delivering tourism and hospitality, however only limited numbers recognize the MRA on Tourism curriculum including the eight study programs above. The study used qualitative approach with the in - depth interviews method. The result shown the MRA on Tourism professional have been disseminating to tourism and hotel study programs in Thailand, however not all study program are implementing yet due to some reasons. The challenges facing are the availability of resources and language barrier. This study considered limited in the MRA on tourism implementation analysis in one of AMSs in ASEAN.
29	**001-ricste**	**Effect of Double Heat Temperature Profile on $Ba(Ce,Zr)O_3$ Sintered Pellet** **Azliana Ramli**[1], Nafisah Osman[1], Nurul Wahida Othman[2] *[1]Faculty of Applied Sciences, Universiti Teknologi MARA, 02600 Arau, Perlis, Malaysia.* *[2]Faculty of Applied Sciences, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.* **Abstract:** The preparation technique during synthesizing process and heat treatment plays an important role in the properties of the ceramic materials. In this paper, ceramic perovskite-type oxide based on $Ba(Ce,Zr)O_3$ was prepared by sol-gel method and sintered via two-step sintering (TSS) technique. In the TSS, the sintered pellet was undergoing twice heat treatment. The first temperature profile was set at T_1= 1400°C and the second temperature were varied at T_2 = 1150°C, 1200°C, 1300°C and 1350°C, respectively. XRD results showed that all samples TSS1 to TSS5 exhibit single-phase of cerate-zirconate ceramics except for the pellet sintered at 1300°C (TSS4). The crystalline peaks for single-phase sintered pellets were matched to the standard compound $Ba(Ce,Zr)O_3$. On the other hand, the presence of secondary phases of CeO_2, Ba_2ZrO_4 and $BaCO_3$ along with the main phase of $Ba(Ce,Zr)O_3$ were detected in TSS4. SEM analysis revealed that the samples formed clear and compact grains with submicron sizes whereby the size of grain decreased from 336.4 to 192 nm as the second sintering temperature increased. This paper attempts to show that the implementation of different sintering profile in TSS method was found to give significant effect on the phase and morphology of solid solution of $Ba(Ce,Zr)O_3$.

30	**004-ricbss**	**Assessing External Leader Involvement in Mitigating Deviance in Autonomous Teams through Narrative Analysis of Team-Member Recollections** **James P. Hess, PhD** *Department of Management & Marketing, Indiana-Purdue University at Fort Wayne, 2101 Coliseum Blvd. East, Fort Wayne, IN, USA* **Abstract:** This exploratory study examines the extent to which autonomous team members recollect the most salient memories of deviance in their team experiences, revealing those components of organizational context that can be redefined by organizational leaders to mitigate deviance. Feedback from 18 participants, all revealing lived experiences on their respective autonomous teams, suggested that deviance is most likely to prevail within the following contextual areas: (a) organizational culture, (b) member recruitment and selection, (c) level of collaboration, (d) resource allocation, and (e) relationships with team-external entities. With attention to these findings, organizational leaders can minimize deviance in an effort to nurture an organizational context most conducive to meeting team-member expectations.
31	**005-ricbss**	**CEOs CHARACTERISTICS, ORIENTATION OF TURNAROUND STRATEGY AND CULTURAL DIFFERENCE: A CONCEPTUAL REVIEW** **Arief Prima Johan,** Rebi Fara Handika, Yulihasri, Herri *Department of Management – Andalas University, Indonesia.* **Abstract:** This paper aims to discuss the logical relationship of CEOs characteristics and the orientation of turnaround strategy. As argued by Hambrick and Mason (1984) that top leaders characteristics determined their decision on choosing specific and particular strategy, this article proposed that different traits of leader will lead to distinct approach on how they were pursuing turnaround strategy. Furthermore, this study also proposed that CEOs should consider cultural contingency of their employees. Using five dimension of cultural dimension which established by Hofstede, several approaches were proposed on how CEOs should consider their style.
32	**006-ricbss**	**Corporate Governance in Indonesia: Business Ethics Prespectives and Challenges in Globalization Era** Arief Prima Johan, **Niki Lukviarman, Maruf** *Faculty of Economics of Andalas University, Indonesia* **Abstract:** This paper discussed specific features of corporate behavior in Indonesia related to corporate governance issues. Since corporate governance structure in Indonesia is also characterized by the fact that most companies are managed and owned principally by founding family members, there exists potential conflict of interests between the governance participants. This paper argues that business ethics play as a key role in mitigating the conflicts in order to facilitate healthy

		business practices that accommodate various interests of stakeholders. Moreover, any effort to promote sound governance practices should consider the country's specific factors such as cultural issues that relates to business practices. Appropriate regulatory environment, therefore, is necessary to determine the rights and obligations of governance participants and the incentive to promote sound governance practices and business sustainability.
33	**007-ricbss**	**Supplier Evaluation and Order Allocation with FANP – Multiple Objective (goal) Programming: A case study in Garment industry, Vietnam** [1,2]Chia-Nan Wang, [1,3]**Nguyen Van Thanh** *[1]Department of Industrial Engineering and Management, National Kaohsiung University of Applied Sciences, Kaohsiung 80778, Taiwan* *[2]Fortune Institute of Technology, Kaohsiung 83158, Taiwan* *[3]CanTho University of Technology, CanTho 900000, Vietnam* **Abstract:** A supplier selection decision inherently is a multi-criterion problem. It is a decision of strategic importance to companies, which plays an important role in the business of production, construction,... However, it is not easy to select suppliers that are reliable, cost-effective, and more competitive. In this study, we use a Fuzzy Analysis Network Process (FANP) that takes into account the Fuzzy factor to evaluate the performance of suppliers and rank the suppliers. After the supplier is ranked, use the Goal Programming Model Order Allocation.
34	**008-ricbss**	**Undergraduate Career-readiness Challenges in Malaysia** **Noorziah Mohd Salleh,** Prikshat Verma, Alan Nankervis, John Burgess *Faculty of Business and Management, Universiti Teknologi MARA, Sabah branch, Kota Kinabalu, Sabah, Malaysia* **Abstract:** Career readiness refers to the preparedness of an individual in looking for a job and moving towards establishing the career path that they have chosen. The aim of this study was to discuss the proportions of Malaysian undergraduates being career-ready, together with the influence of gender. Four hundred questionnaires distributed, but only 362 were considered usable. The data were collected from ten universities. The career readiness of undergraduates was measured by the Career Factors Inventory (CFI), which consists of two dimensions of information, namely the need for career information and the need for self-knowledge, and two personal-emotional dimensions: career choice anxiety and generalised indecisiveness. The majority of respondents reported having a high level of career readiness. This research also found that the majority of Malaysian undergraduates reported having a high need for career information and for self-knowledge. Male undergraduates were more career-ready than female students. Findings on the career -readiness levels could possibly facilitate the government and educators in developing relevant programs and beneficial co-curriculum in universities. Co-curricular contents should be enhanced by integrating career-readiness positive attributes that would benefit them directly after graduation.