



2016 IPN – IWNEST KOTA KINABALU CONFERENCES

KOTA KINABALU, MALAYSIA
08 – 09 January 2016



IPN Network

ipnmalaysia



Welcome to IPN-IWNEST 2016

Dear Professor, Dr and distinguished delegates,

Welcome to the IPN - IWNEST 2016 Conferences in Kota Kinabalu, Malaysia. On behalf of ***International Postgraduate Network (IPN.org) and IWNEST***, 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 Kota Kinabalu, Malaysia.

We believe that by this excellent conference, you can get more opportunity for further communication with researchers and practitioners. For the conferences of **ICICA, ICGT, ICEBCMLG, ICCNE, ICIMIE and ICECE** more than 50 submitted papers have been received and 35 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 IPN.org
Chairman, IPN – IWNEST 2016 Kota Kinabalu



Message from IWNEST President

On behalf the IWNEST publications team, it is my privilege to welcome you to the IPN - IWNEST 2016 Conferences Kota Kinabalu. IWNEST 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 our 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 IWNEST 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
Founder President
Honorary Advisor
IPN - IWNEST 2016 Kota Kinabalu





ABOUT INTERNATIONAL POSTGRADUATE NETWORK (IPN.ORG)

The International Postgraduate Network (IPN.org) 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.org 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.org 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.org supports that such international cooperation can help countries learn from each other and promotes the dissemination of scientific and engineering activities. IPN.org 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.



www.internationalpostgraduatenetwork.org
www.ipnconference.org



ANNOUNCEMENT

All accepted papers will be published in:

- Journal of Applied Sciences Research (online issue ISSN 1819-544X) (abstract and indexing by EBSCO HOST, CSA, AGRICOLA, Journal Seek, Index Copernicus, Open J-gate or
- Australian Journal of Basic and Applied Science (ISI/THOMSON REUTERS) (online issue ISSN 1991-8178) (abstract and indexing by ISI/Thomson Reuters, Ulrich periodicals, Ebscohost, Cabi International and DOAJ) or
- International Journal of Applied Engineering Research (IJAER) or
- Advances in Natural and Applied Sciences (online issue ISSN 1995-0772) (abstract and indexing by Google Scholar, Ulrich Periodicals, EBSCO HOST, CSA, CAB Abstract, U.K., DOAJ and ISC. or
- Advances in Environmental Biology (AEB) (online issue ISSN 1995-0756) (abstract and indexing by ISI/Thomson Reuters. SCOPUS, Ulrich periodicals, Ebscohost, Cabi International and DOAJ) or
- Research Journal of Social Sciences (online issue ISSN 1815-9125) (abstract and indexing by Google Scholar, Ulrich, EBSCO HOST, DOAJ) or
- Journal of Scientific Research and Development (ISSN: 1115-7569) (abstract and indexing by ISI/Thomson Reuters, Ulrich periodicals, Ebscohost, Cabi International and DOAJ)

One best presenter will be selected from each session and the author of best presenter will be awarded the certificate.





KEYNOTE SPEAKER



ASSOC. PROF. DR. JUSTIN SENTIAN

Ecocampus Management Centre
Universiti Malaysia Sabah

Assoc Prof. Dr. Justin Sentian is an atmospheric scientist and currently heading the Climate Change Research Group at the Faculty of Science and Natural Resources, Universiti Malaysia Sabah. He is also a research fellow with the university's Centre of Disaster Studies and Water Research Unit. Currently he is also the Director of the UMS EcoCampus Management Centre. In 2009, he received the Commonwealth Scholarship Awards to pursue his master degree by research in atmospheric science at the University of East Anglia (UK). He was the Government of Malaysia scholar at Lancaster University (UK) and obtained his doctoral degree specializing in tropical atmospheric chemistry and climate change in 2009. Prior to the current appointment, he worked as Environmental Control Officer with the Federal Department of Environment four seven years.

Most of his research and publication contributions are in the areas of atmospheric chemistry, climate change, air quality, meteorology, environmental pollution modelling as well as environmental impact assessment. He has presented more than 35 papers in international and national conferences, seminar and workshops. He has been invited to give lectures on his research works in number of plenary lectures. So far, he has published more than 50 research papers peer reviewed international, national journals and proceedings. He has published two books and expected to publish another book early next year entitled "Climate Change and Impacts in Southeast Asia".

He has been teaching at the university for the last 16 years, and supervised 12 masters students, and currently supervising 4 PhD and 10 master scholars. His current research focuses on four projects: a) High resolution regional climate change in Southeast Asia/Malaysia which is also part of the MICS (Phase III) Project and also a collaborative research with National University of Taiwan, b) Climate change impacts, vulnerability and adaptation, which is a research project funded by the Ministry of Higher Education through LRGS research grant, c) Greenhouse gas fluxes across tropical forest gradient, which is a collaborative research with the Centre of Ecology and Hydrology, University of Edinburgh and fully funded by NERC, UK, d) Short-lived reactive halocarbon emissions



from the tropical coastal environment and biogenic emission from the tropical forest and palm oil plantation, which is a research collaborative with research consortium from a number of European universities and fully funded by European Union and NERC, UK.

In addition, he is actively involved in various environmental consultancy works that related to environmental impact assessment (EIA), environmental auditing (EA), environmental management plan (EMP). He is a registered consultant with the Department of Environment and Sabah Environmental Protection Department. Currently, he has been appointed by WorldFish (funded by Asian Development Bank) as a climate change specialist for Malaysia in the investigation of climate change vulnerability and adaptation in Sabah.



Abstract:

Oil Palm: Scoping the Issues of Atmospheric Environment and Climate Change

Research on landcover change on global environmental change has been emerging in the last few decades with the realisation that land surface processes influence the dynamic of the atmosphere and thus climate. This paper is aimed to highlight the relationship issues of atmospheric environment and climate change with oil palm such as the effect to the greenhouse gas fluxes, atmospheric chemistry and air quality, and climate change. The effects of oil palm agricultural activities to the atmospheric environment and climate change have been explored. Conversion of forested areas into agriculture (mainly oil palm) have found to influence the emission fluxes of greenhouse gases, atmospheric chemistry (in reference to ground-level ozone and radical OH), climate change (in reference to surface temperature and total precipitation) under SRES A2 and SRES B2 climate scenarios. Better understanding on this issue would certainly improve the perspective of environmental issues, which can be linked with the environmental policy in oil palm industries



LIST OF THE CONFERENCE COMMITTEE

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Prof. Dr. Abdel Rahman Mohammad Said Al-Tawaha (Ph.D McGill University)
 Founder President of Islamic World Network for Environmental Science and
 Technology

Editor in Chief, Journal of Applied Science and Agriculture Editor
 in Chief, Australian Journal of Basic and Applied Sciences Al Talal
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Datin MZ Zainab

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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
Dinner Coupon
Participation Certificate (collected from Session Chair after the session)
Conference Bag

**IPN.org***IPN Education Group***IPN – IWNEST 2016 Conferences Kota Kinabalu
Conference Program**

January 08, 2016	Venue: Foyer (Level 2)	1400 – 1700	Registration	
January 09, 2016	Venue: Kinabalu Room 1	0845 – 1000	Opening Remarks & Plenary Speech	Assoc. Prof. Dr. Justin Sentian, Universiti Malaysia Sabah
		1000 – 1030	Group Photo and Coffee Break	
	Venue: Kinabalu Room 1	1030 – 1230	Session 1	
	Venue: Golden Dew Bistro Restaurant	1230 – 1400	Lunch	
	Venue: Kinabalu Room 1	1400 – 1600	Session 2	
	Venue: Foyer	1600 – 1630	Coffee Break	
	Venue: Kinabalu Room 1	1630 – 1800	Session 3	
	Venue: Golden Dew Bistro Restaurant	1900 – 2100	Dinner	



Session 1

Time: 1030-1230

Venue: **Kinabalu Room 1**Session Chair: **Assoc. Prof. Dr. Justin Sentian**IPN.org
IPN Education Group

No	Paper ID	Presenter
1	001-icimie	A Comparison between the Performances of Synthetic and EWMA Charts for Monitoring the Coefficient of Variation W.L. Teoh , Michael B.C. Khoo, W.C. Yeong, S.Y. Teh <i>Universiti Tunku Abdul Rahman, Malaysia</i>
2	003-iccne	Large Effective Area Square Photonic Crystal Fiber for Optical Communications Feroza Begum , AbulKalam Azad, Saifullah Abu Bakar, PgIskander Petra, Kazuya Miyagi and Yoshinori Namihira <i>University Brunei Darussalam, Brunei Darussalam</i>
3	005-icica	A Review of Artificial Intelligence Strategies in Covering Array Construction Sughan Nair , Adzhar Kamaludin and Kamal Z. Zamli <i>Universiti Malaysia Pahang, Malaysia</i>
4	002-icimie	An Investigation into Cultrual Dimensions of Construction Professionals Working for International Projects in Oman Byung Gyoo Kang , Cheng Zhang, Sameera Daminda Randunne, Boon Hoe Goh, Myung Kyu Song <i>Xian Jiaotong-Liverpool University, China</i>
5	002-iccne	Simple Speech Controlled Home Automation System Using Android Devices Theodore Ramli, Natashia Nabihha Dabimel, Mazlina Mamat, Norfarariyanti Parimon, Rosalyn R. Porle <i>Universiti Malaysia Sabah, Malaysia</i>
6	006-icica	An Analysis on the Hateful Contents Detection Techniques on Social Media Maw Maw , Vimala A/P Balakrishnan <i>University of Malaya, Malaysia</i>
7	004-icimie	Topical Information Diffusion Models based on Sentiment Analysis for Social Networks Kwanho Kim , Jae-Yoon Jung <i>Incheon National University, Korea</i>
8	004-iccne	Designing Dispersion Compensating Microstructure Optical Fiber Feroza Begum , AbulKalam Azad, Saifullah Abu Bakar, PgIskander Petra, Kazuya Miyagi and Yoshinori Namihira <i>University Brunei Darussalam, Brunei Darussalam</i>
9	001-icica	Comparative Study on Activation Function based Heart Abnormality Activity Fakroul Ridzuan Hashim , Ja'afar Adnan, Nik Ghazali Nik Daud & Amir Firdaus Rashidi <i>National Defence University of Malaysia</i>



Session 2

Time: 1400-1600

Venue: **Kinabalu Room 1**Session Chair: **TBA**

No	Paper ID	Presenter
1	002-icgt	Dynamic Modeling of a Synchronous Generator Using T-S Fuzzy Approach Hee-Jin Lee <i>Kumoh National Institute of Technology, Korea</i>
2	013-icgt	IMPLEMENTATION OF GREEN BUILDING INCENTIVES FOR CONSTRUCTION KEY PLAYERS IN MALAYSIA SITI ZUBAIDAH HASHIM, INTAN BAYANI ZAKARIA, NADIRA AHZHAR, MOHD FADZIL YASIN, ABDUL HAKIM AZIZ <i>University of Technology MARA, Perak</i>
3	007-icgt	Easy Solar Photovoltaic Panel as Renewable Energy System Device Kalaivani D/O Ramachandran, Nur Farahdiba Binti Zulkefle, Muhammad Syafiq Bin Mohd Kamal <i>Kota Kinabalu Polytechnic, Sabah</i>
4	009-icgt	Electrochemical Behaviors of Graphite in an Ethylene Carbonate-Based Electrolyte Containing Two Different Types of Film-Forming Additive Sa Rang Yoon and Soon-Ki Jeong <i>Soonchunhyang University, Republic of Korea</i>
5	006-icgt	Thermal output analysis of a designed parabolic trough solar field for moderate temperature industrial load Rizwan Masood, Syed Ihtsham Ul-Haq Gilani, Hussain H Al-Kayiem <i>Universiti Teknologi Petronas, Perak</i>
6	014-icgt	Biodiesel production from two non-edible vegetable oil, performance and emission investigation of that biodiesel and their combined blend in an unmodified diesel engine A.M. Ruhul, H.H. Masjuki, M.A. Kalam <i>University of Malaya, Malaysia</i>
7	005-icgt	Study of a silica gel-water based dual mode adsorption chiller Khairul Habib and Ahmed Askalany <i>Universiti Teknologi PETRONAS, Malaysia</i>
8	001-icgt	A Review of Low Voltage Current Mirrors Jimin Cheon <i>Kumoh National Institute of Technology, Korea</i>



Session 3

Time: 1630-1800

Venue: **Kinabalu Room 1**

Session Chair: **Assoc. Prof. Dr. Cheng Fan Fah**



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No	Paper ID	Presenter
1	002-icebcmlg	Evaluating the Standard and Performance of Online Learning in an English Language Teachers Programme Hasreena Abdul Rahman, Jamil Ahmad <i>UKM, Malaysia</i>
2	003-icebcmlg	Impact of employee training on guests' satisfaction: A survey on 5 star hotels in Kuala Lumpur Cheng Fan Fah and Cheng Seow Voon <i>University Putra Malaysia, Malaysia</i>
3	001-icece	Resilience Narrative of a Taiwanese Preschool Boy with Asperger's Syndrome: The Lens of Bioecological Model Kuan-Ling Oliva Lin <i>Griffith University, Australia</i>
4	004-icebcmlg	Collaborative Learning with Jigsaw Technique in Online Environment Asmara Alias, Norazah Yusof, Nor Bahiah Ahmad <i>University Technology Malaysia (UTM), Johor</i>
5	001-icebcmlg	Alternative Dispute Resolution (ADR): Important Mechanisms of Consumer Dispute Resolution Nor 'Adha Abd Hamid <i>Kolej Universiti Islam Antarabangsa Selangor</i>



Conference Venue



Ming Garden Hotel & Residences

Lorong Ming Garden, Jalan Coastal, 88000 Kota Kinabalu, , Sabah, Malaysia

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www.internationalpostgraduatenetwork.org

www.pgtsresources.com

Contact Person:

018-2189487 (IPN Network)

013-4234705 (NURUL)



Note

**List of Abstract**

No	Paper	Abstract
1	001-icica	<p>Comparative Study on Activation Function based Heart Abnormality Activity</p> <p>Fakroul Ridzuan Hashim, Ja'afar Adnan, Nik Ghazali Nik Daud & Amir Firdaus Rashidi</p> <p><i>National Defence University of Malaysia, Department of Electrical & Electronic Engineering, Faculty of Engineering, Sg Besi Camp, 57000 Kuala Lumpur, Malaysia</i></p> <p>Abstract : The detection of heart abnormality activity of a patient is important when an abnormal symptom occurred. This project is aimed to detect the disease by using hybrid multilayer perceptron (HMLP) network. Several data from the electrocardiogram (ECG) signal is extracted to be set as input parameters. In order to get the best result, several activation function are used, such as logistic, hyperbolic, exponential, step and square root. The result obtained is then compared among the activation function and other detection techniques.</p>
2	005-icica	<p>A Review of Artificial Intelligence Strategies in Covering Array Construction</p> <p>Sughan Nair¹, Adzhar Kamaludin² and Kamal Z. Zamli³</p> <p><i>Faculty of Computer Systems & Software Engineering, Universiti Malaysia Pahang, Lebuhraya Tun Razak, 26300 Gambang, Pahang, Malaysia. E-mail : mcs14001@stdmail.ump.edu.my ¹, adzhar@ump.edu.my ², kamalz@ump.edu.my ³</i></p> <p>Abstract : Background: Software systems are getting larger in size and functionality. Exhaustive software testing becoming nearly impossible with larger systems. Objective: Researchers are focusing on methods and strategies to optimize software testing process by applying computational based strategies as well as Artificial Intelligence (AI) based strategy. Results: This paper reviews the AI based strategies and its effectiveness in being solution for this optimization problem compared to computational based tools and strategies. Conclusion: write the main conclusion for your paper.</p>
3	006-icica	<p>An Analysis on the Hateful Contents Detection Techniques on Social Media</p> <p>Maw Maw¹, Vimala A/P Balakrishnan ²</p>



		<p>¹University of Malaya, Department of Information System, Faculty of Computer Science and Information Technology, Box.50603, Kuala Lumpur, Malaysia ²University of Malaya, Department of Information System, Faculty of Computer Science and Information Technology, Box.50603, Kuala Lumpur, Malaysia</p> <p>Abstract : Background: Detecting abusive contents on social media becomes a broad research area along with the popularity of social media. Objective: This paper mainly aims to understand the different techniques applied within the scope of detecting the use of hateful language on social media, their strengths and challenges to provide the future researchers and practitioners with a solid and concrete reference in this research area. Methodology: In this paper, we analyzed previous researches done in the domain of hateful language detection in the social media. We selected relevant published journal articles and conference papers from 2010 to 2015. Results: We observed that Support Vector Machine (SVM) algorithm is the most frequently applied for classification. Data ambiguity problem and classification of sarcastic sentences are identified as the challenges for the researchers in this area of research Conclusion: The future researchers should be paid attention on the identified challenges.</p>
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	Paper	Abstract
1	001-icece	<p>Resilience Narrative of a Taiwanese Preschool Boy with Asperger’s Syndrome: The Lens of Bioecological Model</p> <p>Kuan-Ling Oliva Lin</p> <p>¹School of Education and Professional Studies, Griffith University, Brisbane, Australia. E-mail: kuan-ling.lin@griffithuni.edu.au</p> <p>Abstract : The significance of this pioneer resilience narrative study illuminates the importance of resilience development in the Taiwanese preschool child with Asperger’s disorder. Cultivating resilience in young children with Asperger’s syndrome is crucial because they have more difficulties to adjust in school settings. This study aims to explore resilience development in a Taiwanese preschool boy, Victor, with Asperger’s syndrome through both teachers’ storytelling and the reflection of his narratives. An adaptation of Bronfenbrenner’s Bioecological model is used to comprehensively analyze the influence of Victor’s risk and protective factors on his resilience development. This qualitative study includes multiple data but heavily relies on video recording to capture Victor’s narratives and social interactions. Through the combined method of Riessman’s dialogic/performance and thematic analyses, the findings revealed not only the influential elements of Victor’s resilience within the Bioecological model but also the unique way that Victor with Asperger’s disorder showed his resilience development. It is important that through storytelling as an effective intervention of enhancing resilience, this study represents the first stage in improving poor interpersonal relationships of Victor with Asperger’s syndrome at preschool.</p>



No	Paper	Abstract
1	001-icgt	<p>A Review of Low Voltage Current Mirrors</p> <p>Jimin Cheon</p> <p><i>School of Electronic Engineering, Kumoh National Institute of Technology, 61 Daehak-ro, Gumi, Korea. E-mail: jimin.cheon@kumoh.ac.kr</i></p> <p>Abstract : Current mirrors are core structure of almost all analog and mixed mode circuits and the performance of analog structures largely depends on their characteristics. Hence, for low voltage analog circuit structures, low voltage current mirrors are mandatory. In this paper, low voltage (LV) current mirror design techniques are addressed. Important characteristics of a current mirror are described with simple conventional current mirror. In terms of those characteristics, current mirrors using advanced circuit strategies are introduced and analyzed.</p>
2	002-icgt	<p>Dynamic Modelling of a Synchronous Generator Using T-S Fuzzy Approach</p> <p>Hee-Jin Lee</p> <p><i>Department of Electronic Engineering, Kumoh National Institute of Technology, Gumi-si, Gyeongbuk, Korea. E-mail : jinlee@kumoh.ac.kr</i></p> <p>Abstract : The dynamic behavior of power systems is affected by the interactions between linear and nonlinear components. To analyze those complicated power systems, the linear approaches have been widely used so far. Especially, a synchronous generator has been designed by using linear models and traditional techniques. However, due to its wide operating range, complex dynamics, transient performances, and its nonlinearities, it cannot be accurately modelled as linear methods based on small-signal analysis. This paper describes an application of the Takagi-Sugeno (T-S) fuzzy method to model the synchronous generator in a single-machine infinite bus (SMIB) system. The T-S fuzzy model can provide a highly nonlinear functional relation with a comparatively small number of fuzzy rules. The simulation results show that the proposed the T-S fuzzy modelling captures all dynamic characteristics for the synchronous generator, which are exactly same as those by the conventional nonlinear modelling methods.</p>
3	005-icgt	<p>Study of a silica gel-water based dual mode adsorption chiller</p> <p>Khairul Habib and Ahmed Askalany</p> <p><i>Mechanical Engineering Department, Universiti Teknologi PETRONAS, 32610 Bandar Seri Iskandar, Perak Darul Ridzuan, Malaysia. E-mail : khairul.habib@petronas.com.my</i></p> <p><i>Mechanical Engineering Department, Faculty of Industrial Education, Sohag University, Sohag, 82524, Egypt. E-mail : ahmed_askalany3@yahoo.com</i></p>



		<p>Abstract : This article presents analytical investigation results on the performance of dual-mode multi-bed adsorption cooling systems using silica gel-water pair. This novel adsorption chiller utilizes effectively low-temperature solar or waste heat sources of temperature between 40 and 85°C. Two operation modes are possible for the advanced chiller. The first operation mode will be to work as a highly efficient conventional chiller where the driving source temperature is between 60 and 85°C. The second operation mode will be to work as an advanced two-stage adsorption chiller where the available driving source temperature is very low (below 60°C). In the present work, a simulation study of a dual-mode, four-bed silica gel-water adsorption chiller is undertaken. For a driving source temperature above 60°C, the chiller functions as a single stage four-bed adsorption chiller. However, the chiller works as a two stage four-bed adsorption chiller when the driving source temperature falls within the range from 40°C to 60°C. With a cooling water temperature of 30°C. It has been found that this dual mode adsorption chiller is capable to provide cooling throughout the year via measuring the coefficient of performance and the cooling capacity of the system.</p>
4	006-icgt	<p>Thermal output analysis of a designed parabolic trough solar field for moderate temperature industrial load</p> <p>Rizwan Masood, Syed Ihtsham Ul-Haq Gilani, Hussain H Al-Kayiem</p> <p><i>Mechanical Engineering Department, Universiti Teknologi Petronas, Perak, Malaysia. E-mail : rizwan.masood.1@gmail.com</i> <i>Mechanical Engineering Department, Universiti Teknologi Petronas, Perak, Malaysia</i> <i>Mechanical Engineering Department, Universiti Teknologi Petronas, Perak, Malaysia</i></p> <p>Abstract : This paper presents an overview of the Parabolic Trough Solar Collectors, which is a fastest growing technology amongst concentrated solar power technologies. It is largely being used in developed countries; mainly in steam power cycles for electricity generation but its use is not limited to electric power generation. This technology is also being used for many other applications like refrigeration and air-conditioning, desalination of sea water, pumping of irrigation water and many heating applications for process industry. Though this technology is already developed and used in many developed countries but there is barely any development in Malaysia. There is thus need for assessment of this technology to explore the potential industrial applications, under local environmental conditions. In this article basic design and development considerations for a parabolic trough collector system have been discussed. This paper also includes a thermal output analysis of a designed parabolic trough solar field to provide the baseline information for industrial applications feasibility study. System Advisor Model (SAM) has been used for this analysis using environmental conditions Ipoh, Malaysia. The results of simulation indicate that considerable amount of high temperature thermal energy can be obtained. The heat transfer fluid temperature reached up to 200 to 230oC, which can be used to operate an unfired</p>



		boiler to produce steam or in some other industrial thermal application.
5	007-icgt	<p>Easy Solar Photovoltaic Panel as Renewable Energy System Device</p> <p>Kalaivani D/O Ramachandran, Nur Farahdiba Binti Zulkefle, Muhammad Syafiq Bin Mohd Kamal</p> <p><i>Department of Electrical, Kota Kinabalu Polytechnic, Sabah, Malaysia. E-mail : kalaivani@polikk.edu.my</i> <i>Department of Electrical, Kota Kinabalu Polytechnic, Sabah, Malaysia. E-mail : ahmadkhai@polikk.edu.my</i></p> <p>Abstract : Solar power is energy from the sun that is converted into electrical energy. Solar energy is the abundant renewable energy source available, and the Malaysia has some of the richest solar resources in the world. Electric energy is becoming one of the source energy which is required daily. However, electric power outages always happened. Easy Solar Photovoltaic Panel as Renewable Energy System Device is implemented as an electric power source by using solar as a help and support. It is used by providing charge through solar panel from sunlight. Then, the charge is flowing through the solar controller to charges battery that will flow to the load. Since energy that obtained from the battery are shaped in direct current (DC), then the inverter used to change direct current (DC) to alternating current (AC) for purpose of using device or application that using alternating current (AC) to operate.</p>
6	009-icgt	<p>Electrochemical Behaviors of Graphite in an Ethylene Carbonate-Based Electrolyte Containing Two Different Types of Film-Forming Additive</p> <p>Sa Rang Yoon and Soon-Ki Jeong*</p> <p><i>Department of Chemical Engineering, Soonchunhyang University, Asan, 336-745, Republic of Korea. E-mail : ysl0722@naver.com, *hamin611@sch.ac.kr</i></p> <p>Abstract : Electrochemical reactions occurring at a graphite electrode were investigated to gain insight into the effects of film-forming additives such as vinylene carbonate, fluoroethylene carbonate (FEC) and lithium bis(oxalato) borate (LiBOB) on surface film formation on the electrode. The surface film generated in the presence of a mixture of FEC and LiBOB was found to have the certain characteristics that are important in the initial charging and discharging process. The mixture produced a highly resistive film on the graphite electrode, resulting in an improvement in Coulombic efficiency.</p>
7	013-icgt	<p>IMPLEMENTATION OF GREEN BUILDING INCENTIVES FOR CONSTRUCTION KEY PLAYERS IN MALAYSIA</p> <p>SITI ZUBAIDAH HASHIM^{1*}, INTAN BAYANI ZAKARIA¹, NADIRA AHZAHAR¹, MOHD FADZIL YASIN¹, ABDUL HAKIM AZIZ¹</p> <p><i>¹Department of Building Surveying, Faculty of Architecture, Planning and Surveying, University of Technology MARA Perak, 31600 Seri Iskandar, Perak,</i></p>



		<p>Malaysia. E-mail : sitiz056@perak.uitm.edu.my</p> <p>Abstract : A Green Building Index (GBI) as a building grading system to promote sustainability and increase awareness upon environmental issue. The GBI was developed and published by Malaysia Architect Association (PAM) and Association of Consulting Engineers Malaysia (ACEM). As a green building contribution on sustainable development and energy efficiency, government has introduced incentives to a person who obtain Green Building Index Certificate to encourage green technology. This paper presents part of this research which identified series of incentives introduced by government for construction key players in Malaysia and green building incentives implementation in various countries such as United States, United Kingdom, Australia and Singapore. The incentives are divided into three categories; financial, fiscal and structure. For the financial incentives provided such as grants, loans, fund, vouchers, rebates and etc. Financial support is more targeted and better budget control. Fiscal incentive is like a privilege given by government, in term of exclusion from paying any tax, but only given to qualified project. Structural incentives are much common incentives offered by government because it would not require expenditure of fund and not reduce the income of city and county. After comparison, we found that Malaysia should concentrate also on structural incentive that involves technical assistance, expedited building permit and Gross Floor Area (GFA) incentive scheme.</p>
8	014-icgt	<p>Biodiesel production from two non-edible vegetable oil, performance and emission investigation of that biodiesel and their combined blend in an unmodified diesel engine</p> <p>A.M. Ruhul^{1*}, H.H. Masjuki¹, M.A. Kalam^{1*}</p> <p>¹<i>Department of Mechanical Engineering, University of Malaya, 50603 Kuala Lumpur, Malaysia</i></p> <p>Abstract : In this study, two potential non-edible biodiesel feedstocks “<i>Croton megalocarpus</i>” and “<i>Ceiba pentandra</i>” have been used for esterification and transesterification process. Biodiesel characterization, engine performance and emission characteristics were investigated in an unmodified direct injection, naturally aspirated, single cylinder diesel engine. 20% (v/v) of each <i>C. megalocarpus</i> (CM), <i>C. pentandra</i> (CP) and their combined blends (CM20, CP20, CM15CP5, CM10CP10, and CM5CP15) were tested under varying engine speed ranging from 1400 rpm to 2400 rpm at full load condition. CM20 and CP20 reduced the brake power (BP) by 9.74% and 5.68%, brake thermal efficiency (BTE) by 3.71% and 1.31%, carbon monoxide (CO) emission by 2.55% and 3.80%, respectively compared to petroleum diesel. On the other hand, CM20 and CP20 increased the brake specific fuel consumption (BSFC) by 3.71% and 1.31%, NO_x emission by 10.75% and 12.37%, respectively. A mixture of 10% of both biodiesel with diesels (CM10CP10) provides better performance and emission characteristics. CM10CP10 reduced BP, BTE and CO by 0.53%, 0.47% and 6.48%, respectively and increased BSFC</p>



	and NO _x by 1.87% and 15.25% respectively, than ordinary diesel.
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No	Paper	Abstract
1	001-icebcmlg	<p>Alternative Dispute Resolution (ADR): Important Mechanisms of Consumer Dispute Resolution</p> <p>Nor 'Adha Abd Hamid</p> <p><i>Kolej Universiti Islam Antarabangsa Selangor (KUIS), Research Management Centre (RMC)/Business & Management Faculty, Bandar Seri Putra, 43000 Kajang Selangor</i></p> <p>Abstract : The issues in dispute among disputing users and consumers are fundamental and important in diagnosing the problems faced, which in turn can help determine the most efficient ADR procedures that can be implemented by the disputing parties. The business trade is among the most fortunate of fields as it has benefited greatly by the presence of ADR mechanisms in the Malaysian legal field, especially in dealing with consumer issues and trade relations. To consumers, the attraction towards choosing an ADR method grows in relation to the perceived good that can be potentially achieved by said method. This paper examines the extent to which the ADR process is able to assist consumers in terms of cost, through reasonable and minimal payments, and the efficacy of its processes in terms of time and energy. Comparisons will be made with the process of litigation which in most cases are unable to provide compensation and remedy that is expected by the community of the consumers involved. However, issues may arise when dealing with certain specific circumstances, such as cases involving a large number of claims that may not be determined or resolved through the ADR process. These issues will be described in detail in this paper with a focus towards the forms of ADR, such as mediation (mediation), consultation (negotiation) and arbitration (arbitration) while establishing the best method in handling of such issues.</p>
2	002-icebcmlg	<p>Evaluating the Standard and Performance of Online Learning in an English Language Teachers Programme</p> <p>Hasreena Abdul Rahman ^{*1}, Jamil Ahmad ²</p> <p><i>^{1,2} The National University of Malaysia, Department of Educational Leadership and Policy, Faculty of Education, 43600 UKM, Bangi Selangor, Malaysia. E-mail: hsreenarahman@yahoo.com</i></p> <p>Abstract : Before a professional development programme especially the online learning element is fully implemented, the objectives of the programme have to be defined in details to be used as the programme design. These objectives, known as the programme standard, will be compared to the programme installation that acts as the programme performance. The programme evaluated was The Professional</p>



		Upskilling Of English Language Teachers (Pro-ELT) Programme. The objective of this study is to identify any discrepancies that might occur in online learning by comparing the programme design set by the Ministry of Education (MOE) Malaysia with the programme installation. The three elements evaluated were staff selection, training venue suitability and testing equipment adequacy. Twelve respondents were interviewed. The interview transcripts and official documents were collected and analysed. This study found that most discrepancies in online learning were identified in terms of the system requirement, as well as the equipment requirement for the test centres. As a conclusion, discrepancies identified were able to give information on which areas need to be amended to ensure the implementation of online learning in the programme is a success.
3	003-icebcmlg	<p>Impact of employee training on guests' satisfaction: A survey on 5 star hotels in Kuala Lumpur</p> <p>Cheng Fan Fah¹ and Cheng Seow Voon²</p> <p><i>¹ Associate Professor Dr. , Department of Accounting and Finance. Faculty Economics and Management, University Putra Malaysia., 43400, Selangor, Malaysia. E-mail: chengfanfah@upm.,edu.my</i></p> <p><i>² Msc(LSE). Department of Accounting. University College TAR, Penang, Malaysia</i></p> <p>Abstract : Background: This study extended research on the importance of training and development for customer satisfaction and employee satisfaction by examining its influence on 5 Start Hotels. The survey was based on quantitative method, and 200 questionnaires were collected by using the random sampling method of convenience sampling at 5 Star hotel staffs in Kuala Lumpur. The findings showed that there is relation between employee training and customer satisfaction in five start hotel in Kuala Lumpur. Furthermore, successful training program has relationship to improve / influence employee satisfaction level.</p>
4	004-icebcmlg	<p>Collaborative Learning with Jigsaw Technique in Online Environment</p> <p>Asmara Alias^{*1}, Norazah Yusof², Nor Bahiah Ahmad³</p> <p><i>¹University Technology Malaysia (UTM), Faculty of Computing, P.O Box 81310, Skudai, Johor Bahru, Johor, Malaysia.</i></p> <p><i>²King Abdul Aziz University Rabigh, Faculty of Computing and information Technology, Kingdom of Saudi Arabia.</i></p> <p><i>³University Technology Malaysia (UTM), Faculty of Computing, P.O Box 81310, Skudai, Johor Bahru, Johor, Malaysia</i></p> <p>Abstract : This paper presents a discussion on Jigsaw as the collaborative learning technique in structuring collaboration between students in e-learning environment. The needs of collaboration and interaction between students has created a student centered learning, but in the typical e-learning environments, researchers have found that students learn independently in which without proper learning strategies and techniques, resulting student to do less interaction and</p>



		collaboration thus decreased student progress and motivation. Computer Supported Collaborative Learning (CSCL) is seen as a potential environment that uses technology to support learning collaboration activities in which the concept of team work is the fundamental. Unfortunately, it has been observed that these collaboration learning strategies in CSCL environment being use and adopt in a bad manner. Therefore, an improved Computer Supported Collaborative Learning framework with appropriate learning strategies needs to be proposed to overcome the raising issues. This research recommends the jigsaw techniques as the formal collaborative learning strategy embedded in the proposed CSCL framework. This improvement could transform existing CSCL framework into rich computerized capabilities.
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No	Paper	Abstract
1	001-icimie	<p>A Comparison between the Performances of Synthetic and EWMA Charts for Monitoring the Coefficient of Variation</p> <p>W.L. Teoh^{1,*}, Michael B.C. Khoo ², W.C. Yeong¹, S.Y. Teh³</p> <p>¹<i>Faculty of Science, Universiti Tunku Abdul Rahman, 31900 Kampar, Perak, Malaysia</i> ²<i>School of Mathematical Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia</i> ³<i>School of Management, Universiti Sains Malaysia, 11800 Penang, Malaysia</i></p> <p>Abstract : The coefficient of variation (CV) is a vital and widely used dimensionless measure of variability. The CV has many applications in scientific areas and is receiving growing attention in modern Statistical Process Control. It is well known that both the Synthetic and exponentially weighted moving average (EWMA) charts are very effective in detecting small to moderate changes in the CV. Therefore, a thorough comparison between the performances of these two optimal control charts is discussed in this paper. All the cases for detecting increasing and decreasing shifts in the nominal CV under both the zero- and steady-state modes are included in our study. The results reveal that the optimal EWMA CV-squared (EWMA-γ^2) chart outperforms the Synthetic CV (Syn-γ) chart for detecting small changes in the CV under the zero-state mode. However, for large increases in the CV, the Synthetic-γ chart is preferred. For the steady-state case, the EWMA-γ^2 chart is superior to the Synthetic-γ chart for detecting all levels of increases and decreases in the CV.</p>
2	002-icimie	<p>An Investigation into Cultrual Dimensions of Construction Professionals Working for International Projects in Oman</p> <p>Byung Gyoo Kang¹, Cheng Zhang³, Sameera Daminda Randunne², Boon Hoe Goh⁴, Myung Kyu Song⁵</p> <p>^{1,3}<i>Department of Civil Engineering, Xian Jiaotong-Liverpool University, Suzhou, China. E-mail : Byung-gyoo.Kang@xjtlu.edu.cn</i></p>



		<p>^{2,4,5}<i>Department of Civil Engineering, University of Nottingham Malaysia Campus, Semenyih, Malaysia</i></p> <p>Abstract : International construction projects involve multinational participants with different nationalities and cultural backgrounds. To execute international projects, construction companies easily face significant risks which hinder the capability to create profits and degrade company credibility. One of the major risk factors affecting project performance and success is cultural characteristics of project participants, especially expatriates, working in international construction projects. This research investigates the cultural dimensions of Indian, Sri Lankan and British construction professionals working for international projects in Oman. Cultural dimensions have been surveyed by a quantitative approach. The outcomes indicate that even though these professionals are working in the same construction industry and currently in a similar working environments, their cultural dimensions are mainly influenced by national culture. Further Asian participants of the survey showed lower Power Distance Index (PDI) and Uncertainty Avoidance Index (UAI) than their national cultural dimensions. This is a reflection of westernization of their companies in the international construction markets. Also lower Long Term Orientation (LTO) indicates the temporary tendency of employment in international construction projects. Further research will need to focus on the relationship between corporate culture and national culture to complete the entire picture of culture in construction.</p>
3	004-icimie	<p>Topical Information Diffusion Models based on Sentiment Analysis for Social Networks</p> <p>Kwanho Kim ^{*1}, Jae-Yoon Jung²</p> <p>¹<i>Department of Industrial and Management Engineering, Incheon National University, Incheon, Korea. Email: khokim@inu.ac.kr</i></p> <p>²<i>Department of Industrial and Management Systems Engineering, Kyung Hee University, Yongin, Korea.</i></p> <p>Abstract : Recently, social networks become an essential part to articulate interactions among users. In a social network, as users not only establish social relations but also produce and consume information, an integrated approach that is capable to analyze users in diverse perspectives regarding to information diffusion is necessary to deeply understand the hidden interaction patterns among users. In this research, we suggest a layered analysis model, called NITS, that aims to represent users on multiple layers according to analysis perspectives ranging from information transmission to contextual sentiment. Specifically, we introduce four layers each of which provides a particular perspective. The proposed four layers respectively focus on (i) static social link-based user relations, (ii) dynamic information diffusions, (iii) topical information diffusions, and (iv) sentiments on information diffusions. We demonstrate how the proposed model is able to identify user characteristics, and user types are discovered according to the similarity between users based on the representations</p>



	on the proposed layers.
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No	Paper	Abstract
1	002-iccne	<p>Simple Speech Controlled Home Automation System Using Android Devices</p> <p>Theodore Ramli, Natasha Nabiha Dabimel, Mazlina Mamat, Norfarariyanti Parimon, Rosalyn R. Porle</p> <p><i>Artificial Intelligence Research Unit, Faculty of Engineering, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia</i></p> <p>Abstract : Speech control is an emerging innovative method to accomplish control tasks. In this work, a system is created to control two of the most human interactive activities; switching on and off of lights and fans using ATMEGA-328P microcontroller and Android OS' speech recognition. This system improves the living standard by making life easier and increasing productivity. The development of the prototype will be made within a low budget in hopes to attract people.</p>
2	003-iccne	<p>Large Effective Area Square Photonic Crystal Fiber for Optical Communications</p> <p>Feroza Begum^{1,*}, AbulKalam Azad¹, Saifullah Abu Bakar¹, PgIskander Petra¹, Kazuya Miyagi² and Yoshinori Namihira²</p> <p><i>¹Faculty of Integrated Technology, University Brunei Darussalam, Gadong BE 1410, Brunei Darussalam</i> <i>²Graduate School of Engineering and Science, University of the Ryukyus, Okinawa 903-0213, Japan</i></p> <p>Abstract : This paper presents a large effective area square photonic crystal fiber for optical communication systems. In order to achieve large effective area, a five rings square photonic crystal fiber with missing first ring air holes is proposed. The designed PCF represents that it is possible to obtain large effective area, better chromatic dispersion, low confinement losses and near zero splice loss in the entire telecommunication band by using modest number of design parameters based on full vector finite-difference method. Additionally the effect of bending on confinement losses of the proposed square photonic crystal fiber has been investigated.</p>
3	004-iccne	<p>Designing Dispersion Compensating Microstructure Optical Fiber</p> <p>Feroza Begum^{1,*}, AbulKalam Azad¹, Saifullah Abu Bakar¹, PgIskander Petra¹, Kazuya Miyagi² and Yoshinori Namihira²</p> <p><i>¹Faculty of Integrated Technology, University Brunei Darussalam, Gadong BE 1410, Brunei Darussalam</i> <i>²Graduate School of Engineering and Science, University of the Ryukyus, Okinawa 903-0213, Japan</i></p>



		<p>Abstract : We design a hexagonal model of dispersion compensating photonic crystal fiber using finite element method with perfectly matched layer as an analysis tool. In this case, we change different parameters-diameter of air holes and pitch to observe the effects of different properties of dispersion compensating photonic crystal fiber such as effective area, confinement loss and chromatic dispersion. We have achieved large negative chromatic dispersion, and low confinement loss. Moreover, numerical results show that small length of the proposed dispersion compensating photonic crystal fiber is achieved. The proposed microstructure fiber can be used for wide band high speed optical transmission systems.</p>
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