

IPN-ARC Conference 2023



*Conference Program
& Abstract*



IPN-ARC Conferences
Langkawi, Malaysia
08-10 February 2023





IPN - ARC Conference 2023

LANGKAWI, MALAYSIA

08-10 FEBRUARY 2023



Welcome to IPN-ARC Conferences 2023

Dear Professor, Dr and distinguished delegates,

Welcome to the IPN Conferences and ARC Conference 2023 in Langkawi, Malaysia. On behalf of **IPN Education Group Conference Management (IPN) and AAN Research Center (ARC)**, 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 programs. For the participants, we hope all of you have a wonderful time at the conference and also in Singapore.

We believe that by this excellent conference, you can get more opportunities for further communication with researchers and practitioners. For the **BIZTEM 2023, IREITIC and AMESTIC 2023** more than 35 submitted papers have been received and 10 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,



Dato' Syed Azuan Syed Ahmad, DIMP
Director of Conference Management
IPN Education Group Conference Management

Message from IPN Honorary Advisor

On behalf the IPN Education Group Conference Management (IPN), it is my privilege to welcome you to the IPN Conference. 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. Hany El-Mesiry
Advisor of IPN Education Group Conference Management

About IPN Education Group Conference Management

IPN Education Group Conference Management, we perceive the process of discovery as a creative and rigorous endeavor. We encourage such exploration by supporting the research and development of ideas, solutions, and applications to benefit our community. IPN Education Group Conference Management strives to inspire students and academic staff to share and serve in the educational field. The IPN Education Group Conference Management at ASEAN Academic Network aims to promote the enjoyment of learning and publishing research. ASEAN community values learning and research at all levels. A dynamic range of conferences, workshops, and programs related to research in all disciplines exists to supplement this research center's ongoing development.



www.ipneducationgroup.org
<http://ipnconference.weebly.com/>

ANNOUNCEMENT

All accepted papers will be published in International Referred Journal indexed in MyCITE, Crossref, Google Scholar etc.

Selected papers subject to reviewers' comments will be invited for submission to the Scopus / WOS-ESCI Indexed journals with extra publication fee.

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:



Dr. Chai Ching Tan

Rajamangala University of Technology Tawan-Ok, Thailand
Vice President ASEAN Academic Network

LIST OF THE CONFERENCE COMMITTEE

IPN-ARC Conferences 2023, Honorary Advisor

Prof. Dr. Hany El-Mesiry, Jiangsu University, China

IPN-ARC Conferences 2023, Academic Committee

Conference Chair

Prof. Dr. Hany El-Mesiry, Jiangsu University, China

Reviewers/Technical Committee

- Prof. Dr. Cesar Demayo, Mindano State University, PHILIPPINES
- Prof. Dr. Makhmud Kharun, RUDN University, RUSSIA
- Prof. Dr. Kei Eguchi, Fukuoka Institute of Technology, JAPAN
- Assoc. Prof. Dr. Napat Watjanatepin, Rajamangala University of Technology Suvarnabhumi, THAILAND
- Assoc. Prof. Dr. Nor 'Adha Abdul Hamid, Kolej Universiti Islam Antarabangsa Selangor, MALAYSIA
- Assoc. Prof. Dr. Cordulo P. Ascaño II, Mindanao University of Science and Technology, PHILIPPINES

IPN-ARC Conferences 2023, Malaysia, Organising Committee

Nurul Faezah binti Mohd Talib

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 minutes (including Q&A)

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

During registration:

Original Receipt

Representative / Pass Card with lanyard

Participation Certificate (collected from Session Chair after the session)



IPN - ARC Conferences 2023
08-10 February 2023
Langkawi, Malaysia

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|--------------------------|-------------------------------------|-------------|------------------------------|------------------------|
| February 09, 2023 | Venue: Foyer Magpie 3 | 0800 - 0815 | Registration | |
| | Venue: Magpie 3 | 0830 - 0845 | Opening Remarks | Opening Remarks |
| | | 0845 - 0900 | Group Photo and Coffee Break | |
| | Venue: Magpie 3 | 0900 - 1130 | Session 1 | |
| | Venue: | 1130 - 1400 | Lunch | |
| | Venue: | | Session 2 | |
| February 10, 2023 | Lobby hotel | | Networking | |

Session 1
Time: 0900 - 1130
Venue: **Magpie 3**
Session Chair: 0900 - 1130

| No | Paper ID | Presenter |
|----|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 002-biztem | <p>Female Directors, Sustainability Steering Committee and E-Waste Information Disclosure in Malaysian Technology and Telecommunication Industries</p> <p>Hafizah Abd Mutalib</p> <p><i>Universiti Utara Malaysia, Malaysia</i></p> |
| 2 | 001-biztem | <p>E-Waste Information Disclosure: A Study on Malaysian Public Listed Companies</p> <p>Nor Atikah Shafai</p> <p><i>Universiti Utara Malaysia, Malaysia</i></p> |
| 3 | 004-biztem | <p>The Effect of Sustainability Reporting on Financial Performance</p> <p>Syed Quaid Ali Shah*, Fong-Woon Lai, Muhammad Kashif Shad and Salaheldin Hamad</p> <p><i>Universiti Teknologi PETRONAS, Seri Iskandar, Perak, Malaysia</i></p> |
| 4 | 003-ireitic | <p>A Case Study on Assessment and Rehabilitation of IIUM Pusu River for Water Quality Improvement</p> <p>Md Zahangir Alam, Nassereldeem A Kabbashi, Nur Atiqah Nabila Mohd Sukri, Nazurah Abdullah</p> <p><i>International Islamic University Malaysia, Malaysia</i></p> |
| 5 | 004-amestic | <p>Approximate Analytic Solution for forced Korteweg-de Vries Equation with periodic forcing</p> <p>Vincent Daniel David, Sharifah Wan Nurazreen, Arifah Bahar and Zainal Abdul Aziz</p> <p><i>Universiti Teknologi MARA, Malaysia</i></p> |
| 6 | 005-amestic | <p>A Review: Restricted Splicing Systems</p> <p>Mathuri Selvarajoo*, Mohd Pawiro Santono, Fong Wan Heng, Nor Haniza Sarmin, Vincent Daniel David</p> <p><i>Universiti Teknologi MARA, Malaysia</i></p> |

Session 2
Time:
Venue:
Session Chair:



| No | Paper ID | Presenter |
|----|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 001-ireitic | <p>Adaptive traffic management for life saving services in smart cities</p> <p>Subhranshu Mohapatra, Siddhant Saxena and Srishthy Jindal</p> <p><i>Manav Rachna International Institute of Research and Studies, India</i></p> |
| 2 | 002-ireitic | <p>Pseudomonas aeruginosa encapsulated with calcium carbonate microshells for potential biocontrol of the Ganoderma boninense</p> <p>Isshadiba Faikah Mustafa, Mohd Zobir Hussein, Abu Seman Idris, Nur Rasyeda Ramli, Muskhazli Mustafa, and Sharida Fakurazi</p> <p><i>Universiti Putra Malaysia, Malaysia</i></p> |
| 3 | 003-biztem | <p>Motivation, Socioeconomic Status and Career Expectations Affect on Gender-Based Self-Efficacy of Students</p> <p>Zakee Saadat and A M Sultana</p> <p><i>Universiti Tunku Abdul Rahman, Malaysia</i></p> |
| 4 | 001-amestic | <p>2D Massless Dirac equation in Noncommutative Geometry</p> <p>Lakhdar Sek*, Mokhtar Falek, Mustafa Mourni</p> <p><i>University of Biskra, Biskra, Algeria</i></p> |
| 5 | 002-amestic | <p>Mixed Logit Model for Transportation Safety Analysis in Kuwait</p> <p>Fahad AIRukaibia, Sharaf AlKhedera*, Tarek Sayedb, Abdulaziz Alburaita</p> <p><i>Kuwait University, Kuwait</i></p> |
| 6 | 003-amestic | <p>Query Generators for Datasets of Interchangeable Recipe Steps</p> <p>Juni Kim</p> <p><i>Stanford Online High School, California</i></p> |

Conference Venue



Langkawi Seaview Hotel Langkawi, Kedah, Malaysia

Conference Secretariat Contact:
IPN Education Group Conference Management
No. 62, Suasana Damai
Bandar Darulaman
06000 Jitra, Kedah, Malaysia

Programme website:
www.ipneducationgroup.org

Note



List of Abstract

| No | Paper ID | Presenter |
|----|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 001-biztem | <p>E-Waste Information Disclosure: A Study On Malaysian Public Listed Companies</p> <p>Nor Atikah Shafai, Hafizah Abd Mutalib and Saidatul Nurul Hidayah Jannatul Naim Nor Ahmad</p> <p><i>Tunku Puteri Intan Safinaz School of Accountancy, College of Business, Universiti Utara Malaysia</i></p> <p>Abstract: In this era of globalisation, the demand for electrical and electronic devices has surged, and the media and research studies have highlighted the poor management of electrical and electronic waste (e-waste). The issue is more pronounced following the COVID-19 aftermath as companies are shifting to using these devices in operating their businesses which spurs the attention on managing e-waste. Likewise, this new norm shows continuous trends and seems to remain. As such, this research aims to investigate the Malaysian publicly listed companies' commitment to e-waste management by examining the extent and quality of e-waste information disclosure. Using the annual report of 274 listed companies spanning from 2019 to 2021, this study employed content analysis to determine the extent and quality of e-waste information disclosure by examining the number of words and sentences and the 4-point quality scale measures accordingly. Additionally, this study explores the difference in the extent and quality of e-waste information disclosure between industries. In correspondence to the 14 industries examined, this study found that the highest number of words, sentences and quality of e-waste information disclosure was from the telecommunication and media industries, followed by the technology industry. Likewise, an independent t-test reveals the telecommunication and media and technology industries showed significant differences from other industries in their effort to provide adequate and quality e-waste information disclosure. The results reflect the law-abiding efforts among these industries on mandatory requirements of reporting e-waste management activities in the annual report. The findings of this study provide some insight into companies' commitment to reporting and managing their e-waste, which increases transparency, accountability, legitimacy and enhances the environmental reporting model. It is expected that the results will be of immense benefit to various stakeholders in making green investment more transparent.</p> |
| 2 | 002-biztem | <p>Female Directors, Sustainability Steering Committee and E-Waste Information Disclosure in Malaysian Technology and Telecommunication Industries</p> <p>Nur Fazleen Ab-Aziz, Hafizah Abd-Mutalib*, Saidatul Nurul Hidayah Jannatun Naim Nor-Ahmad</p> |

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|---|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | <p><i>Tunku Puteri Intan Safinaz School of Accountancy, College of Business, Universiti Utara Malaysia</i></p> <p>Abstract: The digitalisation era has brought an environmental issue regarding the generation of electrical and electronic waste (e-waste). The global scenario has started questioning how these appliances are taken care of when they reach the end of their useful lives. The advent of these obsolete appliances has created a catastrophe for the health of humans and the environment. Furthermore, business firms in telecommunication and technology industries face the pressure to engage in more severe action towards e-waste management and to report the activities in the annual reports due to their activities which are highly related to the generation of e-waste. In addressing this issue, the study intends to examine the e-waste information disclosure by firms in the two industries. In addition, the study also investigates if the e-waste information disclosure would differ between firms with more female directors and with a sustainability steering committee compared to their counterparts. This study hypothesises that firms with high female directors and a sustainability steering committee will show significantly higher e-waste information disclosure by utilising the virtue ethics theory. Fifty-nine companies of Bursa Malaysia listed firms in the technology and telecommunication industries were taken as samples. The results were consistent with the hypotheses, where firms with a high proportion of female directors and firms with a sustainability steering committee exhibit significantly high e-waste information disclosure compared to their counterparts. The results from this study may give some insights into how business firms address their e-waste management issue and can be significant in achieving the Sustainable Development Goals (SDGs).</p> |
| 3 | 004-biztem | <p>The Effect of Sustainability Reporting on Financial Performance</p> <p>Syed Quaid Ali Shah*, Fong-Woon Lai, Muhammad Kashif Shad and Salaheldin Hamad</p> <p><i>Universiti Teknologi PETRONAS, Seri Iskandar, Perak, Malaysia</i></p> <p>Abstract: Due to mounting pressure from different stakeholders, companies have become more interested in sustainability reporting (SR). Currently, it is highly under discussion that SR affects the entity's financial performance. Previous literature gives controversial conclusions on the nexus between SR and firm financial performance. Thus, the purpose of this paper is to examine the effect of SR on return on assets (ROA). In addition, the study examines the effect of the sustainability committee (SC) on the association between SR and ROA. Stakeholder, signaling, and agency theory are combined to examine the estimated models. The study has applied the ordinary least square technique on 10 years of data from 30 listed oil and gas companies. The findings show that SR has a negative influence on ROA. However, SC has twisted the results and positively moderated the nexus between SR and ROA. This work provides crucial insights for academic researchers and industry experts.</p> |
| 4 | 003-ireitic | <p>A Case Study on Assessment and Rehabilitation of IIUM Pusu River for Water Quality Improvement</p> <p>Md Zahangir Alam, Nassereldeen A Kabbashi, Nur Atiqah Nabila Mohd Sukri, Nazurah Abdullah</p> <p><i>Department of Chemical Engineering and Sustainability, Faculty of Engineering, International Islamic University Malaysia, Jalan Gombak, 53100 Kuala Lumpur Malaysia</i></p> <p>Abstract: Pusu river (or Sungai Pusu/Sg. Pusu) is one of the most severely polluted rivers in Malaysia. Pusu river is a tributary of River Gombak in the Klang River Basin, and the IIUM Gombak campus is located at the downstream part of Pusu river. This study was conducted in response to the recent cloudy river flow on the IIUM Gombak campus. Due to the lack of current data for water quality parameters in Pusu river, it is hard to identify the sources that contributed to the river's pollution. Hence, this study was to determine the sources of river water pollution by analysing the parameters for water quality. The</p> |

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| | | analysis of river water quality showed that the average values of pH, conductivity, TDS, TSS, and turbidity were 7.09, 67.6 $\mu\text{s}/\text{cm}$, 46.5 mg/L, 131.8 mg/L, and 717.6 NTU, respectively. It can be seen that Pusu river has a severe sedimentation issue, as turbidity and TSS showed values beyond the allowable limit according to the National Water Quality Standards for Malaysia. As such, several river methods were suggested to rehabilitate Pusu river, which flows through the IIUM Gombak campus. |
| 5 | 004-amestic | <p>Approximate Analytic Solution for forced Korteweg-de Vries Equation with periodic forcing</p> <p>Vincent Daniel David¹, Sharifah Wan Nurazreen, Arifah Bahar^{2,3} and Zainal Abdul Aziz^{2,3}</p> <p>¹<i>School of Mathematical Sciences, College of Computing, Informatic and Media, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia</i> ²<i>Department of Mathematical Sciences, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Malaysia</i> ³<i>Centre for Industrial and Applied Mathematics, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor</i></p> <p>Abstract: In this article, forced Korteweg-de Vries (fKdV) equation with a general periodic forcing is solved using Homotopy Analysis Method (HAM). The fKdV model used is nondimensionalized and simplified using transformation to get a general form of fKdV equation. By using a specific initial guess function, HAM solution of general form of fKdV is found at seventh order series solution. The horizontal line segment of HAM convergence series confirming the validity of the found solutions. The convergence series is shown for various t and it is found the canonical equation of KdV with forcing function creates disturbances over the profile. The HAM solution elucidates that the method is effective and provides a novel way to obtain convergence series solution for nonlinear problems.</p> |
| 6 | 005-amestic | <p>A Review: Restricted Splicing Systems</p> <p>Mathuri Selvarajoo^{1,*}, Mohd Pawiro Santono², Fong Wan Heng³, Nor Haniza Sarmin⁴, Vincent Daniel David⁵</p> <p>^{1,2,5}<i>School of Mathematical Sciences, College of Computing, Informatic and Media, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia</i> ^{3,4}<i>Department of Mathematical Sciences, Universiti Teknologi Malaysia, 81310 UTM, Johor Bahru, Johor, Malaysia</i> *Corresponding Author: mathuri@tmsk.uitm.edu.my</p> <p>Abstract: Head [1] first proposed the idea of a splicing method in 1987 to mathematically model the biological mechanism of DNA recombination. In a splicing system, two DNA molecules are cut at certain recognition sites, and the prefix of the first string is joined to the suffix of the second, resulting in a new string. In splicing system, the splicing operations can be denoted as splicing rules. A splicing system then formalises the splicing operation as a string operation. A language can be generated by iterated splicing operation according to a set of splicing rules starting with a set of strings or axioms. The language generated by splicing systems is known as splicing languages. According to the Chomsky hierarchy, the languages generated by the splicing system are regular languages, the lowest level of language. To increase the generative power of the languages generated by splicing systems, a restriction is introduced. In this research, three different restrictions on splicing systems will be reviewed which are weighted [2], groups [3] and probability [4].</p> |