Conference Program & Abstract

Kuching, Malaysia
31 January - 02 February 2020

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2020 IPN CONFERENCES KUCHING, MALAYSIA

KUCHING, MALAYSIA
31 JANUARY – 02 FEBRUARY 2020

Welcome to IPN Conferences 2020

Dear Professor, Dr and distinguished delegates,

Welcome to the IPN Conferences 2020 in Kuching, Malaysia. On behalf of ***IPN Education 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 programs. For the participants, we hope all of you have a wonderful time at the conference and also in Kuching, Malaysia.

We believe that by this excellent conference, you can get more opportunities for further communication with researchers and practitioners. For the conferences of **ICLSS 2020, ICCIS 2020 and ICKET 2020** more than 40 submitted papers have been received and 25 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 Education Group
Chairman, IPN Conferences 2020 Kuching, Malaysia

Message from IPN Honorary Advisor

On behalf the IPN Education Group, it is my privilege to welcome you to the IPN Conferences Kuching, Malaysia 2020. 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 Education Group
IPN Conferences 2020 Kuching, Malaysia

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.

IPN.org
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ANNOUNCEMENT

All accepted papers will be published in:

- Active Scopus Indexed Journal
- ESCI Journal
- Active ERA Journal
- International Journal of Business and Globalisation (IJBG)M (EISSN: 1753-3635/ISSN: 1753-3627)
- Revista Publicando (ISSN: 1390-9304)
- Chemical Engineering Transactions (CET) (Issn: 2283-9216)
- Journal of Industrial Engineering Research (JIER) (ISSN:2077-4559) (International Indexed Journal)
- International Journal of Recent Technology and Engineering (IJRTE) (TM) ISSN: 2277 -3878 (IJRTE JOURNAL)
- Science International Journal (SI) ISSN: 1013-5316 (Google Scholar)
- Journal of Asian Scientific Research EISSN: 2223-1331, ISSN: 2226-5724
- International Journal of Asian Social Science EISSN: 2224-4441 ISSN: 2226-5139
- Journal of Mechanics of Continua and Mathematical Sciences EISSN: 0973-8975, ISSN: 2454-7190
- Research Journal of Social Sciences (RJSS) (ISSN:1815-9125) (CNKI SCHOLAR, SIS DATABASE, ULRICH'S PERIODICALS, THOMSON GALE,DOAJ,OPEN J-GATE,INDEX COPERNICUS,ELECTRONIC JOURNALS LIBRARY,EBSCO HOST)
- International Journal of Administration and Governance (IJAG)(ISSN 2077-4486) (Google scholar, Scientific World Index, Directory of Indexing and Impact Factor (DIIF), Academia.edu.
- International Journal of Business and Management (IJBM) (ISSN 2321 8916) (Google scholar, Scientific World Index, Directory of Indexing and Impact Factor (DIIF), Academia.edu.
- Journal of Engineering and Science Research (ISSN 2289-7127) (Google Scholar, MyJurnal)
- Advances in Environmental Biology (AEB) (ISSN 1995-0756)
- 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.


Advances in Environmental Biology
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eISSN (online) : 2550-2174
RMP PUBLICATIONS
SCIENCE INTERNATIONAL
PUBLICATIONS INTERNATIONAL
Journal of Industrial Engineering Research
ISSN: 2077-4559
Mathematics and Statistics Journal

KEYNOTE SPEAKER:

Ts. Sr Nadzirah Hj. Zainordin, *PQS, MRISM, MRICS, P.Tech*
SEGi University, Malaysia

Ts. Sr Nadzirah Hj. Zainordin is a Senior Lecturer and Programme Lead for Quantity Surveying programme at Faculty of Engineering and the Built Environment, SEGi University, Malaysia. As well as a leader for Centre of Building & Resilient Development, SEGi University. She received her Master Science in Quantity Surveying from Heriot Watt University and currently waiting for her Ph.D Viva at Universiti Teknologi Malaysia. Received her registered surveyor at very a young age with professional bodies locally and internationally. She holding Professional Surveyor from the Board of Quantity Surveyor Malaysia (BQSM), the Royal of Institution Malaysia(RISM) and Malaysia Board of Technologist(MBOT) as Professional Technologies. Been recognized internationally where she gotten Chartered Surveyor from the Royal Institution of Chartered Surveyor (RICS), UK. She also actively involves in research which up-to-date had about 80 published papers and she also won a few innovation and invention award not only national level but at the international level as well. A vast research experienced, play roles as principal researcher and co-research for more that 10 internal and external research grant. Where her research interest its more on sustainable development, resilient practices and relevant issues to construction.

LIST OF THE CONFERENCE COMMITTEE

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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 minutes (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 Conferences 2020, Kuching, Malaysia

Conference Program

January 31, 2020	Venue:	1000 - 1200	Registration	
February 1, 2020	Venue: **Kabu, Level 4**	0830 – 0845	Opening Remarks	**Opening Remarks**
		0845 – 1000	Plenary Speech 1	**Keynote Speaker**
		1000 – 1030	Group Photo and Coffee Break	
	Venue: **Kabu, Level 4**	1030 – 1230	Session 1	
	Venue:	1230 – 1400	Lunch	
	Venue: **Kabu, Level 4**	1400 – 1600	Session 2	
February 2, 2020	Lobby hotel	0800 - 1200	Networking	

Session 1
Time: 1030 – 1230
Venue: **Kabu, Level 4**
Session Chair: **Sr. Ir. Nadzirah Zainordin**

No	Paper ID	Presenter
1	019-kch	**Characterizing Protection Ability of Blue Blocking Lenses Using K-Means Clustering** **Mohd Zulfaezal Che Azemin,** Norsham Ahmad, Mohd Hafidz Ithnin, Mohd Hazimin Mohd Salleh, Mohd Izzuddin Mohd Tamrin and Saiful Azlan Rosli *International Islamic University Malaysia, Malaysia*
2	001-kch	**A Design of Learning Recommendation LMS using Learning Analytics** Kyung Sun Park and **Tae In Han** *Graduate School of Korea National Open University, Seoul, Korea*
3	006-kch	**The Touchstone of Affordable Housing** Nadzirah Zainordin and **Siti Atikah Ghazali** *SEGi University, Kota Damansara, Selangor, Malaysia*
4	007-kch	**Cost Effective Framework of Teaching BIM and Structural Design for Reinforced Concrete Buildings** **Byung Gyoo Kang,** Yung-Tsang Chen, Ahmed Elamin, Bo Li and James Walker *University of Nottingham Ningbo China, China*
5	010-kch	**Entrepreneurial Intention among Students to Venture into Entrepreneurship through Flea Market Retailing in Oman** **Noor Abdullah Mohamed Alshanfari** *Multimedia University, Malaysia*
6	009-kch	**Bioactivity and Qualitative Assessment of Areca Nut *(Areca catechu L.)*** Luthfia R. Amerol, **Annabella G. Villarino,** Cesar G. Demayo *Mindanao State University-Marawi, Philippines*
7	012-kch	**The Perk of Building Information Modelling (BIM) Towards Malaysia Quantity Surveyors** Nadzirah Zainordin, **Mohd Farhan Mohd Nasir,** Nur Syahirah Zafarull *SEGi University, Kota Damansara, Selangor, Malaysi*
8	015-kch	**Looking into the Freedom of Partner Choosing in Pair Programming** **Soo See Chai** and Kok Luong Goh *University Malaysia Sarawak, Malaysia*
9	018-kch	**Short Term Effect of Virtual Reality Headset on Blink Rate and Inter-Blink Interval** Nurul Hafizah Zaini, **Mohd Zulfaezal Che Azemin**, Mohd Hafidz Ithnin and Mohd Izzuddin Mohd Tamrin *International Islamic University Malaysia, Malaysia*

Session 2
Time: 1400 - 1600
Venue: **Kabu, Level 4**
Session Chair: **Dr. Mohd Zulfaezal Che Azemin**

No	Paper ID	Presenter
1	016-kch	**Short Term Effect of Virtual Reality on Tear Film Stability and Ocular Discomfort** Mohamad Syarifuddin Sidik Ahmad, **Mohd Zulfaezal Che Azemin,** Mohd Hafidz Ithnin and Mohd Izzuddin Mohd Tamrin *International Islamic University Malaysia, Malaysia*
2	002-kch	**The Use of Biodegradable Wastes in Seed Ball Production for Seed Germination and Seedling Growth of Ipil-Ipil *(Leucaenia leucocephala)*** **Beverly B. Amparado** *Mindanao State University, Marawi City*
3	005-kch	**Experimental and Simulation study on Extraction of Naphthenic Acid from Highly Acidic Oil using Piperidinium Based Ionic Liquids** **Sakinah Khaidzir,** Asiah Nusaibah Masri, M.S.H. Ruslan and M.I Abdul Mutalib *Universiti Teknologi PETRONAS Perak, Malaysia*
4	003-kch	**Microbiological Analyses and Water Quality Assessment in Five Municipalities Along Lake Lanao, Philippines** **Mariam C. Kabirun,** Nourshamsia C. Barosa, Beverly B. Amparado and Annabella G. Villarino *Mindanao State University, Marawi City, Lanao del Sur, Philippines*
5	017-kch	**Short Term Effect of Virtual Reality on Eye Accommodative Ability** Mohamad Syarifuddin Sidik Ahmad, **Mohd Zulfaezal Che Azemin,** Mohd Hafidz Ithnin and Mohd Izzuddin Mohd Tamrin *International Islamic University Malaysia, Malaysia*
6	014-kch	**Does Supplementation with Alpha Tocopherol (α-TOC) Affects Blood Follicle-Stimulating Hormone (FSH) and Luteinizing Hormone (LH) Levels in Normal Females? A Preliminary Study on Mouse Model** **Siti Syairah Mohd Mutalip**, Wan Nor Hidayah Wan Ibrahim and Nael Awatif Mohamad Na'im *Universiti Teknologi MARA (UiTM), Malaysia*
7	011-kch	**Teaching 4D BIM and 5D BIM for Reinforced Concrete Buildings** **Byung Gyoo Kang,** Yung-Tsang Chen, Ahmed Elamin, Bo Li and James Walker *University of Nottingham Ningbo China, China*

Conference Venue

The Waterfront Hotel
"An Artrageous Hotel"
68 Jalan Tun Abang Haji Openg, 93000 Kuching, Sarawak
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Note

List of Abstract

No	Paper	Abstract
1	001-kch	**A Design of Learning Recommendation LMS using Learning Analytics** Kyung Sun Park and **Tae In Han** *Graduate School of Korea National Open University, Seoul, Korea* **Abstract:** This research is about the design of a system that can provide advanced e-Learning services in the era of the future LMS generation. The aims to design LMS that can be used to implement a Learning Management System (LMS) that supports customized learning services based on convergence with the latest IT technologies. The progress of the research is to identify related theories through research and analysis of previous studies such as learning analytics, customized learning, and adaptive learning, and to derive implications. Based on this, this study designed a learning recommendation LMS for customized learning service. The LMS developer group evaluated the results of the LMS design. This research is limited to the system design stage. Therefore, it is necessary to follow-up research such as the actual learning recommendation LMS implementation according to the design and the effectiveness verification through service application.
2	002-kch	**The Use of Biodegradable Wastes in Seed Ball Production for Seed Germination and Seedling Growth of Ipil-Ipil *(Leucaenia leucocephala)*** **Beverly B. Amparado** *Mindanao State University, Marawi City* **Abstract:** Solid wastes are among the topmost pollution problems worldwide whereas reforestation and greening are topmost priority considering that only less than 24% of the original forest covers remains. Reforestation and tillage, however, are both costly and destructive to the soil structure, thus, this study was conducted to introduce the use of seed balls as cheaper alternative and to determine which among the four seed ball mixtures could best support seed

		germination and growth of seedlings of Ipil-ipil *(Leucaenia leucocephala)*. Seed balls were made and sun-dried before sowing. Results show that a combination of 5 parts clay, 5 parts shredded paper, 3 parts manure, 1 part seeds in making seed balls was best in supporting germination and growth of L. leucocephala. A second mixture of 5 parts clay, 5 parts rice hull, 3 parts manure, 1 part seeds also supported germination and growth of L. leucocephala in the same manner. A third mixture of 5 parts clay, 5 parts charcoal, 3 parts manure, 1 part seeds also supported growth of L. leucocephala but showed delay in seed germination. A fourth mixture of 5 parts clay, 3 parts manure, 1 part seeds was able to support germination of L. leucocephala but was not able to sustain good growth of the seedlings. Thus, it is recommended that the above biodegradable wastes such as paper, rice hull, and wood charcoal be incorporated in the seed ball preparation to help abate solid waste pollution and to promote reforestation and urban greening.
3	**003-kch**	**Microbiological Analyses and Water Quality Assessment in Five Municipalities Along Lake Lanao, Philippines** **Mariam C. Kabirun[1],** Nourshamsia C. Barosa[2], Beverly B. Amparado[1] and Annabella G. Villarino[1] *[1]Mindanao State University, Marawi City, Lanao del Sur, Philippines* *[2]Department of Science and Technology VI, Magsaysay Village La Paz, Iloilo City* **Abstract:** Lake Lanao is one of the ancient lakes in the world and the second largest lake in the Philippines. At present, the lake is considered pristine, however, the biodiversity potential of the lake is now being threatened by various human activities such as the discharge of wastes from municipal sewers. Municipal sewage contains human faeces and water contaminated with these effluents may contain pathogenic (disease-causing) organisms and consequently, may be hazardous to human health if used as drinking-water or in food preparation. Meranao, the local dwellers of the lake depend largely on this body of water as their source of food and drinking water. Hence, the present study evaluates the water quality of Lake Lanao using microbiological analyses specifically along five municipalities: Tamparan, Taraka, Wato-Balindong, Tugaya and Bacolod-Kalawi Lanao del Sur. The study was conducted for three months sampling periods. Findings showed the presence and the estimated number of coliform bacteria that maybe associated with the occurrence of waterborne diseases in the surrounding municipalities.
4	**005-kch**	**Experimental and Simulation study on Extraction of Naphthenic Acid from Highly Acidic Oil using Piperidinium Based Ionic Liquids** **Sakinah Khaidzir,** Asiah Nusaibah Masri, M.S.H. Ruslan and M.I Abdul Mutalib

		Chemical Engineering Department, Centre of Research in Ionic Liquids, Universiti Teknologi PETRONAS Perak, Malaysia **Abstract:** In this study, piperidinium based ionic liquids (ILs) with anions of trifluoromethanesulfonate, phenolate and dicyanamide are synthesized. Extraction of naphthenic acid from model oil using the synthesized ILs are investigated. Extraction study at different ionic IL/model oil weight ratio is conducted and the initial and final content of naphthenic acid in model oil are calculated. The piperidinium based IL with phenolate anion showed the best potential to extract the naphthenic acid from model oil where it is able to completely extract all the acid at a minimum IL/model oil ratio of 0.01. FTIR analysis was done to confirm the extraction of naphthenic acid. COSMO-RS is used to evaluate the properties of ILs and naphthenic acid as well as to predict the extraction mechanism. The experimental performance of the ILs is compared to the COSMO-RS prediction trend qualitatively and the results show good agreement with each other.
5	**006-kch**	**The Touchstone of Affordable Housing** Nadzirah Zainordin and **Siti Atikah Ghazali** *Center of Building & Resilient Development, Faculty of Engineering and the Built Environment, SEGi University, Kota Damansara, Selangor, Malaysia.* **Abstract:** Affordable housing is a program that introduced by the government to improve housing affordability which ensure every income earner group could afford houses, especially for low-income households. Affordable sustainable housing project has no clear definition so far but the concept of needs, which seeks to ensure that the essential needs of the poor are adequately met; and the need for addressing every limitation arising from the use of technology and activities of social elements affecting the environment's ability to meet the present and future needs, may to consider to define as general idea. This paper its to identify the criteria of affordable housing concept. By using the latest 10 years of publication for extensive literature review methodology perhaps may contribute in enhancing the existing knowledge.
6	**007-kch**	**Cost Effective Framework of Teaching BIM and Structural Design for Reinforced Concrete Buildings** **Byung Gyoo Kang,** Yung-Tsang Chen, Ahmed Elamin, Bo Li and James Walker *Department of Civil Engineering, University of Nottingham Ningbo China, 199 Taikang East Road, Ningbo, Zhejiang, China* **Abstract:** Building Information Modelling (BIM) is revolutionizing the construction industry for digitalization. BIM provides enormous benefits to the industry, which include improved constructability and

		quality of work, improved health and safety management, lower costs, faster design and construction amongst others. However, there are obstacles to implementing BIM at project level and company level. These include the cost of software and hardware, cost of training, transition from drafting to modelling and compatibility between software platforms. These typical obstacles slow down the implementation of BIM not only in the industry but also in education institutions. This paper provides a framework of teaching BIM and structural design for reinforced concrete buildings in tertiary level education. Both Closed BIM and Open BIM approaches have been developed. Closed BIM is based on Autodesk products including Revit and Robot Structural Analysis. Open BIM is integrated in Revit and ETABS with the plug-in software, CSiXRevit. The proposed framework provides not only a comprehensive and practical method, but also a cost effective method which universities can adopt without any financial burdens.
7	**009-kch**	**Bioactivity and Qualitative Assessment of Areca Nut *(Areca catechu L.)*** Luthfia R. Amerol[1], **Annabella G. Villarino[2],** Cesar G. Demayo[3] *[1]Graduate School, Mindanao State University-Marawi, 9700 Marawi City, Philippines* *[2]Biology Dept., College of Natural Sciences and Mathematics, Mindanao State University-Marawi, 9700 Marawi City, Philippines* *[3]Biology Dept, College of Science and Mathematics, Mindanao State University-Iligan Institute of Technology, 9200 Iligan City, Philippines* **Abstract:** Cancer is a global threat whose treatment is coupled with side effects ultimately affecting the patients' quality of life. One potential herbal remedy for cancer is Areca nut *(Areca catechu L).* Areca seed in the form of betel quid is a masticatory indulgence since the ancient period with ethnobotanical uses ranging from social to medicinal. This study was therefore conducted to evaluate the biological properties specifically antioxidant and cytotoxic properties, of the local variety of Areca nut and to find out if the corresponding phytochemicals responsible for the abovementioned biological effect are present in Areca nut extract. The antioxidant activity was evaluated using 2,2-diphenyl-1-picryl-hydrazyl-hydrate (DPPH) photometric assay and compared with Vitamin C, results revealed that the half maximal inhibitory concentration of the Areca nut extract was lower than 5 ppm indicating a scavenging activity equally strong as Vitamin C. Cytotoxicity test of the Areca nut extract against normal human blood lymphocytes showed no inhibition on cell proliferation and no significant effect on cellular metabolism, hence non-toxic. Qualitative assessment of the presence of compounds in the extract using Gas Chromatography-Mass Spectrometry identified twenty-seven (27) possible bioactive compounds. Of these, eleven (11) compounds were found to be known antioxidants. This study has shown support to the ethnomedicinal use of the seed of A. catechu as

		antioxidant.
8	**010-kch**	**Entrepreneurial Intention among Students to Venture into Entrepreneurship through Flea Market Retailing in Oman** **Noor Abdullah Mohamed Alshanfari** *Faculty of Management, Multimedia University, Persiaran Multimedia, 63100 Cyberjaya, Selangor, Malaysia* **Abstract:** Entrepreneurship is a vital economic activity to support local communities. It is perceived as a significant avenue for influencing the youngsters to a start-up business. The growing number of graduates annually has become one of the main challenges for Omani government. Therefore, entrepreneurship has become one of the essential measures for reducing the escalating unemployment rate due to the low national recruitment rate in public and private sectors in Oman. This research aims to examine the extent of the entrepreneurial intention of youngsters, especially among 322 tertiary students from colleges of applied sciences in Oman, to venture into entrepreneurship through the flea market retailing by adopting the theory of planned behavior (TPB).The findings highlight the impact of education on entrepreneurial intentions, which will provide resources in the area of entrepreneurial education to online libraries for research students and also provides useful policy directions to the Oman government in its effort to actively promote entrepreneurship and business ventures through the Al Raffd Funds.
9	**011-kch**	**Teaching 4D BIM and 5D BIM for Reinforced Concrete Buildings** **Byung Gyoo Kang,** Yung-Tsang Chen, Ahmed Elamin, Bo Li and James Walker *Department of Civil Engineering, University of Nottingham Ningbo China, 199 Taikang East Road, Ningbo, Zhejiang, China* **Abstract:** Teaching Building Information Modelling (BIM) becomes a compulsory requirement in construction related disciplines. Currently BIM education in construction management is more advanced compared to other areas of construction. However, there are still gaps between application of BIM and practical construction management. This gap is more apparent when cost and schedule need to be integrated for more efficient and effective management of construction projects. This paper provides practical frameworks to teach 4D BIM and 5D BIM for reinforced concrete buildings. For 5D quantity take-off and cost estimating, without any professional cost estimating software, Autodesk Revit and MS Excel have been successfully utilised to achieve the goal. In 4D scheduling simulation framework, bill items in Bill of Quantities become the basis of cost and schedule integration. Structural design outcomes from Autodesk Robot Structural Analysis software are used to compensate for the shortfall of Revit with respect

		to reinforcement bars and formworks. The proposed frameworks not only provides practical approaches, but also achieves cost effective teachings which can be adopted without any financial burden.
10	**012-kch**	**The Perk of Building Information Modelling (BIM) Towards Malaysia Quantity Surveyors** Nadzirah Zainordin[1], **Mohd Farhan Mohd Nasir[2],** Nur Syahirah Zafarull[3] *[1,2,3] Center of Building & Resilient Development, Faculty of Engineering and the Built Environment, SEGi University, Kota Damansara, Selangor, Malaysia.* **Absract:** Building Information Modelling (BIM) concept is considered as a new concept that should be introduced to the construction practitioners as it is not widely used in Malaysian construction industry. It is a contemporary evolving methodology which simplify the design and construction process by using digital illustration. BIM is a preparation and process of simulated model and structure all the way through its lifespan. The application of BIM can be utilized on every phase of construction activity starting from planning right until operation. Unluckily, the application of BIM in Malaysian construction industry is very slow. This slow application is initiated by the individual itself and methodological difficulty, known as internal and external difficulty. Internal difficulties are initiated by individual itself and expenditure, typically to discover contemporary tools and practice of the software. Whereas external difficulties are interrelated to the deficiency of confidence between the contemporary software applications. Therefore, this study intends to evaluate proper image of BIM applications in Malaysian construction industry and the benefits experienced by the usage of BIM implementation are identified particularly for Quantity Surveyor in Malaysia. 278 responded to the structure questionnaire which involve Quantity Surveyor all over the Malaysia based on data retrieved from Board of Quantity Surveyor Malaysia website. The finding shown the benefits of BIM whoch will be count among Quantity Surveyor which will further enhance the awareness of benefits of BIM to the Quantity Surveyor profession itself.
11	**014-kch**	**Does Supplementation with Alpha Tocopherol (α-TOC) Affects Blood Follicle-Stimulating Hormone (FSH) and Luteinizing Hormone (LH) Levels in Normal Females? A Preliminary Study on Mouse Model** **Siti Syairah Mohd Mutalip[1,2]**, Wan Nor Hidayah Wan Ibrahim[1] and Nael Awatif Mohamad Na'im[1] *[1]Faculty of Pharmacy, Universiti Teknologi MARA (UiTM), 42300 Bandar Puncak Alam, Selangor, Malaysia* *[2]Maternofetal and Embryo Research Group (MatE), Universiti Teknologi MARA (UiTM), 40450 Selangor, Malaysia*

		Abstract: Alpha tocopherol (α-TOC) is a subtype of tocopherol, which is one of the components of vitamin E. It was commonly referred to as 'vitamin E' during the initial years of its discovery, due to its ability to act as an antioxidant and anticancer in human. Following its discovery as the vitamin for reproduction in 1922, α-TOC has been continuously reported to exert good effects on the reproductive health. These were mainly based on the studies conducted on the use of vitamin E on diseased animal or cell models, however our focus here was on what will be the results if vitamin E is given to the normal or healthy animals. Thus, this study aimed to determine the effects of supplementation with α-TOC (this subtype was chosen as it is known as the most effective among the subtypes) on the blood follicle-stimulating hormone (FSH) and luteinizing hormone (LH) levels in normal female mice. Twenty-four female mice divided into four treatment groups (G1-G4) with 6 mice each. Treatment with 10 mg/kg/day, 20 mg/kg/day and 30 mg/kg/day of α-TOC were given for 7 days. On Day 8, blood samples were collected and analyzed using ELISA method. Present preliminary results showed that the differences in the blood FSH and LH levels following the given doses were significant ($p<0.05$) compared to control, suggesting that short-term supplementation with αTOC affected the blood hormonal levels in normal females. Further studies need to be done with different dosages and treatment durations to determine the changes under different experimental settings.
12	**015-kch**	**Looking into the Freedom of Partner Choosing in Pair Programming** **Soo See Chai**[1] and Kok Luong Goh[2] *[1]Department of Computing and Software Engineering, University Malaysia Sarawak, 93400 Kota Samarahan, Sarawak, Malaysia* *[2]International College of Advanced Technology Sarawak (i-CATS), Kuching, Sarawak, Malaysia* **Abstract:** The published research studies to date indicate that pair programming has a positive impact on some aspects of students' performance. In the normal practice of pairing programming in the academic field, the students were paired by assigning partners according to their level of programming skill. In another words, students were paired according to their programming compatibility that were perceived by their lecturers. However, research studies did not attempt to identify the main element that the students are looking into when they are given the freedom to select their partner in pair programming practice. An experiment with 76 students during a one-week programming workshop shows that 59.2% will choose their partner according to gender while 30.3% will choose their partner based on the ethnics group. The study shows that, only 5.2% of the students focus on the skills of their choice of partner. At the end of the workshop, 96% of the students agree that pairing with a partner helps

		them in solving programming problem. However, only 89.2% of the students preferred to work in pairs when solving programming while 5.4% preferred to work as individual. This initial finding tallies with the other research whereby it shows that pair programming benefits the students in solving programming problem. Despite the normal belief that the pairs are compatible if they have the almost same level of technical competency in programming, students tend to choose according to gender when they are given a choice.
13	**016-kch**	**Short Term Effect of Virtual Reality on Tear Film Stability and Ocular Discomfort** Mohamad Syarifuddin Sidik Ahmad[1], **Mohd Zulfaezal Che Azemin[1],** Mohd Hafidz Ithnin[1] and Mohd Izzuddin Mohd Tamrin[2] *[1]Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Bandar Indera Mahkota, 25200 Kuantan, Malaysia.* *[2]Kulliyyah of ICT, International Islamic University Malaysia, Gombak, 53100 Kuala Lumpur, Malaysia.* **Abstract:** Virtual reality (VR) has been integrated and used with smartphones as one of the digital entertainments such as in gaming and movie streaming. With emergent of various VR brands in the market, it concerns the public on the possible side effects of VR on the ocular performance specifically on tear film stability and ocular discomfort. The purpose of this study was to compare the change on non-invasive keratograph tear break-up time (NIKBUT), tear meniscus height (TMH) before and after the use of VR for 30 minutes, and to measure the ocular discomfort after the use of VR quantitatively. Thirty-two subjects were recruited in this study and all the subjects were divided randomly into two groups; VR and laptop (used as a control) groups. Each subject needed to watch a movie for 30 minutes using the respective devices. The changes of tear film stability and ocular discomfort before and after the use of the devices were then compared and the results showed that there was no significant difference ($p>0.05$) after 30 minutes of the use. Comparison of the ocular parameters between the devices on post-watching activities was also not significant ($p>0.05$). Use of VR did not give any signs of dryness to the eyes and it can be used without any discomfort even after 30 minutes usage of the devices.
14	**017-kch**	**Short Term Effect of Virtual Reality on Eye Accommodative Ability** Mohamad Syarifuddin Sidik Ahmad[1], **Mohd Zulfaezal Che Azemin[1],** Mohd Hafidz Ithnin[1] and Mohd Izzuddin Mohd Tamrin[2] *[1]Kulliyyah of Allied Health Sciences, International Islamic University Malaysia,Bandar Indera Mahkota, 25200 Kuantan, Malaysia.* *[2]Kulliyyah of ICT, International Islamic University Malaysia, Gombak, 53100 Kuala Lumpur, Malaysia.*

		Abstract: Virtual reality (VR) is a fast-growing technology in the world today. Many countries use virtual reality for many purposes such as education, military and entertainment. Despite the benefits of VR, harmful effects of VR on the users are still inconclusive. With only a few reliable studies that investigate the effect of virtual reality on the users especially on the eyes, yet still there are a lot more things we do not know about the effects of VR. The purpose of this study was to compare the amplitude of accommodation before and after watching 3-dimesional (3D) movie utilizing VR and notebook (control group). Thirty-two participants volunteered in this study and all participants underwent amplitude of accommodation (AA) test using Royal Army Force (RAF) rule before and after watching three-dimensional (3D) movie for 30 minutes using VR and two-dimensional (2D) movie by laptop. The amplitude of accommodation between pre- and post-watching 3D movie on VR was insignificantly changed (p= >0.05). The similar trend was also found after 30 minutes watching movie using laptop (p= >0.05). The utilization of VR and laptop for 30 minutes did insignificantly alter the eye accommodation.
15	**018-kch**	**Short Term Effect of Virtual Reality Headset on Blink Rate and Inter-Blink Interval** Nurul Hafizah Zaini[1], **Mohd Zulfaezal Che Azemin[1]**, Mohd Hafidz Ithnin[1] and Mohd Izzuddin Mohd Tamrin[2] *[1]Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Bandar Indera Mahkota, 25200 Kuantan, Malaysia.* *[2]Kulliyyah of ICT, International Islamic University Malaysia, Gombak, 53100 Kuala Lumpur, Malaysia.* **Abstract:** Virtual reality (VR) headsets are becoming remarkably well-known nowadays, especially in gaming industry. Their ability to immerse users into virtual world makes them captivating. However, there is limited research about the impacts of this technology on our eyes and vision. This study investigated if there is any effect on blink rate (BR) and inter-blink interval (IBI) after 30 minutes of watching 3-dimensional (3D) movie on VR. Besides, this study compares between watching 3D movie on VR headset and 2D movie on laptop. Blinks were recorded over 1 minutes for 32 participants volunteered in this study before and after 30 minutes of watching 3D movie on VR headset and 2D movie on laptop. The result of BR and IBI between pre- and post-watching 3D movie on VR was not significant (p= >0.05). The result between watching movie on laptop and VR also not significant (p= >0.05). Watching 3D movie on VR for 30 minutes resulted in no effects on blink rate and inter-blink interval of the users.
16	**019-kch**	**Characterizing Protection Ability of Blue Blocking Lenses Using K-Means Clustering** Mohd Zulfaezal Che Azemin[1], Norsham Ahmad[1], Mohd Hafidz Ithnin[1],

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Abstract: Blue light protection ophthalmic lenses have been regularly marketed as the ultimate protection against short-wavelength visible radiation mainly in the range of 400 nm and 450 nm. However, the actual protective effects of such lenses are currently unknown; most claims are provided by the manufacturers with limited scientific validation. This will not only make selling such lenses challenging but may provide the lens wearers little or no protection against the blue light hazard. It is recently discovered that the protection needs to take into accounts the light source that the wearers wish to protect from – heavy electronic gadget users for instance, are exposed to different spectrum of radiation compared to non-users. This problem is aggravated when the hazard needs to further be classified into the visual and non-visual effects. Non-visual impact includes the disruption in the circadian cycle which is governed by the physiological cycles of our body within 24 hours such as the melatonin hormone secretion. Such knowledge will help to educate optometrist to explain to their prospective customers and will also assist the spectacle wearers to make an informed decision based on validated scientific data.