



4TH INTERNATIONAL
CONFERENCE ON
ERGONOMICS
(**ICE 2019**) &

2ND INTERNATIONAL
CONFERENCE ON
INDUSTRIAL ENGINEERING
(**ICIE 2019**)

**The PROGRAM
BOOK**

27th – 28th AUGUST 2019
TERENGGANU, MALAYSIA

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WELCOMING REMARKS

BISMILLAHIRRAHMANIRRAHIM ASSALAMUALAIKUM W.B.T. & SALAM SEJAHTERA

Distinguish International and National Speakers, Value Guests, Ladies and Gentlemen. I am honoured to extend our warmest welcome to all participant of the **4th International Conference on Ergonomics & 2nd International Conference on Industrial Engineering (ICE & ICIE 2019)**. I would like to thank all of you for your strong support and active participation that have made this event possible. The total number of papers presented and the total number of people registered have exceeded our expectation. We have received a good number of excellent quality papers, with a very current and broad spectrum of topics.

The conference aims to provide a platform for the presentation of new advances and research work in the fields of ergonomics and industrial engineering. The conference will bring together researchers, engineers and scientists in the area of interest from around the world. Full papers relating to broad areas of Ergonomics and Industrial Engineering are invited to this conference.

I would like to take the opportunity to thank Social Security Organization (SOCSO) for sponsoring this event. I would like to thank other organizations that have supported this event include Universiti Putra Malaysia (UPM), Universiti Pertahanan Negara Malaysia (UPNM), Universiti Malaysia Pahang (UMP), Universiti Kuala Lumpur (UniKL) and Universiti Sultan Zainal Abidin (UnisZA).

Enjoy your participation in **ICE & ICIE 2019** and have a memorable time visiting Terengganu, Malaysia. I wish everyone a successful and fruitful event.

Yours sincerely,

**Associate Prof. Ir. Dr. Siti Zawiah Md Dawal
ICE & ICIE 2019 Conference Chair**



INTERNATIONAL ADVISORY PANELS

1. Prof. Dr. B. Vijaya Rammath, Sri Sairam Engineering College, India
2. Prof. Abdul Aziz AlAboodi, Qassim University, KSA
3. Prof. Markus Hartono, Universitas Surabaya, Indonesia
4. Prof. Dr. Ramachandran, Sri Sairam Engineering College, India
5. Prof. Dr. Mohd Amri b Lajis, Universiti Tun Hussein Onn (UTHM), Malaysia
6. Prof. Dr Yusri Yusof, Universiti Tun Hussein Onn (UTHM), Malaysia
7. Prof. Dr. Shamsuddin Ahmad, Islamic University of Technology Dhaka, Bangladesh
8. Assoc. Prof. Dr. Judha Purbolaksono, Universiti Teknologi Brunei, Brunei

REVIEWERS

No	Name	Expertise (Field)	Institution
1	Assoc. Prof. Dr. Yap Hwa Jen	Automation Robotics VR	Universiti Malaya, Malaysia
2	Assoc. Prof. Ir. Dr. Siti Zawiah Md Dawal	Ergonomics, Manufacturing	Universiti Malaya, Malaysia
3	Assoc. Prof. Dr. Wan Nor Liza Wan Mahadi	Electrical	Universiti Malaya, Malaysia
4	Dr. Marizan Mubin	Electrical	Universiti Malaya, Malaysia
5	Dr. Raja Ariffin Raja Ghazilla	Ergonomics	Universiti Malaya, Malaysia
6	Prof. Ir. Dr. Nukman Yusoff	Manufacturing	Universiti Malaya, Malaysia
7	Dr. Sabariah Julai @ Julaihi	Mechanical Engineering	Universiti Malaya, Malaysia
8	Assoc. Prof. Dr. Irniza Rasdi	Occupational Health	Universiti Putra Malaysia, Malaysia
9	Assoc. Prof. Dr. Emilia Zainal Abidin	Occupational Health	Universiti Putra Malaysia, Malaysia
10	Assoc. Prof. Dr. Haliza Abdul Rahman	Environmental Governance, Public, Management Involvement in Environmental Issues	Universiti Putra Malaysia, Malaysia
11	Dr. Ahmad Salahuddin Mohd Harituddin	Aerospace Engineering	Universiti Putra Malaysia, Malaysia
12	Dr. Karmegan Karuppiah	Occupational Safety and Health	Universiti Putra Malaysia, Malaysia
13	Dr. Ahmad Salahuddin Mohd Harituddin	Aerospace Engineering	Universiti Putra Malaysia, Malaysia

14	Dr. Ruhaizin Sulaiman	Ergonomics	Universiti Putra Malaysia, Malaysia
15	Dr. Ezrin Hani Sukadarin	Occupational Safety and Health	Universiti Malaysia Pahang, Malaysia
16	Dr. Nurul Shahida Ahmad Salahim	Ergonomics	Universiti Malaysia Pahang, Malaysia
17	Dr. Mirta Widia	Ergonomics	Universiti Malaysia Pahang, Malaysia
18	Assoc. Prof. Dr. Dian Darina Indah Darius	Ergonomics	Universiti Pertahanan Negara Malaysia, Malaysia
19	Dr. Nurhayati Mohd Nur	Ergonomics	Universiti Kuala Lumpur, Malaysia
20	Dr. Eida Nadirah Roslin	Manufacturing	Universiti Kuala Lumpur, Malaysia
21	Prof. Markus Hartono	Ergonomics	Universitas Surabaya, Indonesia
22	Prof. Rika Ampuh Hadiguna	Supply Chain Management and Industrial Engineering	Universitas Andalas, Indonesia
23	Assoc. Prof. Dr. Novita Sakundarini	Sustainability or Industrial Engineering	University of Nottingham, Malaysia
24	Ts. Dr. Mohd Azlis Sani Md Jalil	Industrial Engineering, Ergonomics	Universiti Tun Hussein Onn Malaysia, Malaysia
25	Dr. Mahmood Ali	Mechanical Engineering	Politeknik Port Dickson, Malaysia

ORGANIZING COMMITTEE

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KEYNOTE SPEAKERS

SPEAKER 1: PROF. DR. ZAHARI TAHA



Prof. Dr. Zahari Taha is a Chartered Engineer (UK), Member Institution of Engineering Designers (UK), Fellow Academy Sciences Malaysia and Fellow and Board Member Asia Pacific Industrial Engineering and Management Society. He is the Founding Director of the Innovative Manufacturing, Mechatronics and Sports Laboratory. He was formerly a Professor at the Faculty of Engineering, University of Malaya and Faculty of Manufacturing Engineering, University of Malaysia Pahang. He has more than 30 years of experience in education, research and development in machine learning, automation and robotics, and simulation and modelling. Prof. Dr. Zahari has published over 300 papers and graduated over 70 PhD and Masters students. He has produced numerous software and hardware solutions for industry and universities. His company is currently develop solutions for machine learning in automated visual inspection and IOT in manufacturing.

SPEAKER 2: ASSOC. PROF. IR. TS. DR. ABD RAHIM ABU TALIB



Assoc. Prof. Ir. Ts. Dr. Abd. Rahim is the Head of Department of Aerospace Engineering, Universiti Putra Malaysia (UPM) since October 2017. He is also leading the Aerodynamics, Heat Transfer & Propulsion Group, an Associate Researcher at the Aerospace Malaysia Research Centre (AMRC) which serves and facilitates interdisciplinary research activities in the field of aerospace. As a pioneer in Engineering and Technology. Dr. Abd Rahim has been continuously offering professional consultancy services to the governmental and private organisations in Malaysia to enhance the higher education system and engineering industry development of the country. Dr. Abd

Rahim is currently a member of the Examination & Qualification Committee (since 2017) and Quality Committee (since 2007) for the Board of Engineers Malaysia. Dr. Abd Rahim is a registered Professional Engineer with practising certificate in Aeronautical Engineering with the Board of Engineers Malaysia (BEM) and a registered Professional Technologist in Aviation & Aerospace Technology with the Board of Technology Malaysia (MBoT). He is currently the Vice-President and Fellow Member of the society thereby undertaking responsibility to promote collaboration between the Federation of Engineering Institutions of Islamic Countries (FEIIC), Malaysian Society of Engineering and Technology (MySET), the Saudi Council of Engineers (SCE) and other intercontinental organisations. He is a committee member for the International Conference on Engineering Education (ICEE) which is held in Madinah every two years, since 2009.



SPEAKER 3: ASSOC. PROF. DR. YASSIERLI

Dr. Yassierli is an Associate Professor at Faculty of Industrial Technology, Institut Teknologi Bandung (ITB), Indonesia. He received his bachelor degree in Industrial Engineering at ITB. He continued his Master Degree in Industrial Engineering & Management at the same university, and earned his PhD Degree in Industrial & Systems Engineering at Virginia Tech, USA in 2005. Dr. Yassierli is now the Department Head of Industrial Engineering, ITB. He got his Certified Professional Ergonomist (CPE) from BCPE, USA. He had experiences as consultants in Ergonomics & Safety for a number of companies in Indonesia mainly in the area of oil & gas, mining, and manufacturing. His research interests are fatigue management, ergonomics assessment, transportation safety, musculoskeletal disorders and safety culture. He published more than 70 publications and 1 textbook. He is also now the President of Indonesian Ergonomics Society (PEI) and Past President of SEANES (Southeast Asian Network of Ergonomics Society).

CONFERENCE PROGRAM

TUESDAY, 27TH AUGUST 2019

Opening Ceremony Venue: Gamelan 1 and Gamelan 2

TIME	DETAILS
0830 - 0930	Registration
0930 - 0945	Welcoming Address by Assoc. Prof. Ir. Dr. Siti Zawiah Md Dawal
0945 - 1000	Opening Ceremony by Prof. Dr. Zahari Taha
1000 - 1030	Keynote speech by Prof. Dr. Zahari Taha
1030 - 1045	Q & A
1045 - 1100	Tea Break
1100 - 1130	Keynote speech by Assoc. Prof. Dr. Yassierli
1130 - 1145	Q & A
1145 - 1215	Keynote speech by Assoc. Prof. Ir. Ts. Dr. Abd Rahim Abu Talib
1215 - 1230	Q&A
1230 - 1400	Lunch
1400 - 1730	Oral presentation sessions

Oral Presentation Sessions

Time	Session	Venue		
		Gamelan 1	Gamelan 2	Gamelan 4
		Topic		
		AEROSPACE AND OTHERS	INDUSTRIAL ENGINEERING	ERGONOMICS
14.00 - 15.30	PARALLEL SESSION 1	<u>Chairperson:</u> Dr. Azmin Azliza Aziz A. P. Dr. Wan Nor Liza Wan Mahadi	<u>Chairperson:</u> Dr. Seuk Wai Phoong Dr. Nurul Shahida binti Mohd Salahim	<u>Chairperson:</u> Dr. Ruhaizin Sulaiman Dr. Ahmad Salahuddin Md Harituddin
1530 - 1600		Networking session and Tea Break		
16.00 - 17.30	PARALLEL SESSION 2	<u>Chairperson:</u> A. P. Dr. Haliza binti Abdul Rahman Dr. Marizan Mubin	<u>Chairperson:</u> Dr. Noorazliza Sulaiman Prof. Ir. Dr. Nukman Yusoff	<u>Chairperson:</u> Prof. Dr. Marzuki Ibrahim Prof. Dr. Norhayati Soin

**** Presenter will be given 12 minutes each for presentation.**

WEDNESDAY, 28TH AUGUST 2019

Time	Session	Venue		
		Gamelan 1	Gamelan 2	Gamelan 4
		Topic		
		AEROSPACE AND OTHERS	INDUSTRIAL ENGINEERING	ERGONOMICS
08.30 – 10.00	PARALLEL SESSION 3	<u>Chairperson:</u> Prof. Dr. Norhayati Soin Dr. Nurhayati Mohd Nur	<u>Chairperson:</u> Dr. Wan Omar Ali Saifuddin Wan Ismail Prof. Ir. Dr. Nukman Yusoff	<u>Chairperson:</u> A. P. Yogi Tri Prasetyo A. P. Dr. Siti Zawiah Md. Dawal
10.00 – 10.30		Networking session and Tea Break		
10.30 – 12.30	PARALLEL SESSION 4	<u>Chairperson:</u> Dr. Irwan Syah Md Yusoff Dr. Ezrin Hani Sukadarin	<u>Chairperson:</u> Dr. Hassan Alli A. P. Dr. Wan Nor Liza Wan Mahadi	<u>Chairperson:</u> Dr. Rosalam Che Me Dr. Ruhaizin Sulaiman
12.30 – 14.00		Networking session and Lunch		
14.00 – 15.30	PARALLEL SESSION 5	<u>Chairperson:</u> A. P. Dr. Dian Darina Indah Daruis Dr. Eida Nadirah binti Roslin	<u>Chairperson:</u> Dr. Shariff Bin Harun A. P. Dr. Wan Nor Liza Wan Mahadi	<u>Chairperson:</u> Dr. R Zirwatul Aida R Ibrahim Dr. Mirta Widia
15.30 – 16.00		Networking session and Tea Break		

**** Presenter will be given 12 minutes each for presentation.**

ORAL PRESENTATION SESSIONS 1 - 7

Tuesday, 27th August 2019

PARALLEL SESSION 1 (TIME: 14.00 – 15.30)

No	PAPER ID	TITLE	PRESENTER
Venue: GAMELAN 1			
1	20	Fatigue Analysis of the Work Shift Effect on Dump Truck Operators in a Coal Mining in Indonesia	Friesca Erwan
2	151	Preliminary Analysis of Hybrid Laminate Composite for Aircraft Radome Application	Mohd Yusoff Mohd Haris
3	116	Safety Climate, Safety Motivation, and Safety Knowledge in SMEs: An Insight of Workers' Safety Compliance and Safety Participation	Nachnul Ansori
4	176	Whiplash Injury Mechanisms of Car Rear Occupants	Nur Akmal Haniffah
5	93	Automatic Pick-and-Place Packaging System with Vacuum Lifter	Awais Farroqi
6	153	Analyzing the Robustness of the TSP Matrices with Unique Characteristics: A Combinatorial and Linear Programming Approach	Azmin Azliza Aziz
7	149	Influence of Yarn Structural Parameters on Cotton/Kenaf Blended Yarn Characteristics	Sharifah Fathin Adlina Syed Abdullah
Venue: GAMELAN 2			
1	173	Performance Measurement of Supply Chain Management in Small Medium Enterprise Using Supply Chain Operation Reference Model (Scor Version 12.0)	Elisa Kusrini
2	41	Sustainable Performance Measurement Framework for Malaysian Food Supply Chain	Fatin 'Izzati Ishak
3	205	Supply Chain Performance Measurement Using Supply Chain Operation Reference (SCOR) 12.0 Model: A Case Study in a Leather SME in Indonesia	Vembri Noor Helia

4	174	Determining Key Success Factors for Small Medium Enterprises (SME) Using Interpretive Structural Model (Ism) Method : A Case Study in One of SME in Indonesia	Elisa Kusrini
5	144	Modeling and Simulation of Manufacture Sector in Malaysia with Detection of Outliers: a ARMA-GARCH Approach	Intan Martina Md Ghani
6	58	Interorganization Mobility Among Women Technologist in Industry	Osman Kadir
7	140	Cashless Society: Readiness of SME to Implement Mobile Payment System	Seuk Wai Phoong
Venue: GAMELAN 4			
1	81	Ergonomics Study of Stretcher for Rescuer to Lift Drown Body	Ruhaizin Sulaiman
2	120	Linear Regression Model for Driving Comfort Perception and Muscle Contraction During Maneuvering Steering Wheel	Dian Darina Indah Daruis
3	200	The Process of Designing Special Wheelchair for People with Physical Disabilities	Mohd Hisham Omar
4	178	Postural Intervention of Batik Stamping Worker to Reduce Postural Load	Darlina Mohamad
5	209	Task Analysis on Maintenance Worker (Rail Grinder) of Light Rail Transit (LRT)	Jalil Azlis-Sani
6	183	E8-Design and Development of Ergonomic Table and Analyze using RULA Analysis	Mohd Hidayat Ab Rahman
7	42	The Influence of Children Playroom Interior Aspect to Parent's Safety Perception, Case Study: Children Playroom at Paskal 23 Bandung, Indonesia	Rizka Rachmawati

PARALLEL SESSION 2 (TIME: 16.00 – 17.30)

No	PAPER ID	TITLE	PRESENTER
Venue: GAMELAN 1			
1	198	An Integrated approach for Path Planning for Mobile Robot Using Bi-RRT	Faiza Gul
2	3	Robotic-based Model for Slow Learners Learning	Nurul Husna Mukhtar
3	101	Fabrication of Prosthetic Leg Socket Using Fiberglass Reinforced Composite	Wan Nursheila Wan Jusoh
4	210	Characterization of Banana Peels Waste Adsorbent for Preliminary Study of Methylene Blue Removal from Aqueous Solution	Noor Yahida Yahya
5	76	The Effectiveness of Fire and Burns at Home Education Among Primary School Children in Hulu Langat, Selangor	Haliza Abdul Rahman
6	106	Evolution of the Leading Edge Vortex Over a Flapping Wing Mechanism	Muhamad Ridzuan Arifin
7	6	Consequences of Performance Management and Accident in Malaysia Construction Safety	Nur Sabrina Azmi
Venue: GAMELAN 2			
1	63	Research in Halal Certification: A Literature Review	Qurtubi Qurtubi
2	136	Improvement of Storage System Upright Piano Cabinet using Class based Storage	Suci Miranda
3	74	Supplier Selection and Determination of Quantity of Raw Material Orders using Analytical Hierarchy Process (AHP) and Linear Programming: A Preliminary Insight	Dwi Handayani
4	73	The Reduction of Waste on Pile Production Process using Value Stream Analysis Tool (VALSAT) Method	Vembri Noor Helia
5	10	Exploratory Study on the Readiness of Non-Muslim Rice Manufacturer Towards the Implementation of Halal Logistics	Hairul Rizad Md Sapry
6	131	Review on Bio-inspired Algorithms Approach to Solve Assembly Line Balancing Problem	Noorazliza Sulaiman

7	36	Implementation Analysis of Halal Supply Chain Management Based on Food Services in Banda Aceh Hotels	Prima Denny Sentia
Venue: GAMELAN 4			
1	187	Validity and Inter-Rater Reliability of Postural Analysis Among New Raters	Ari Widyanti
2	193	UNISZA as a National Centre of Design for Disability in Malaysia	Marzuki Ibrahim
3	114	Investigation of Ergonomic Risk Factors Among Female Workers in Medical Manufacturing Company in Northern Malaysia	Athirah Yusof
4	201	Sleepiness and Daily Sleep of Malaysian Shift Workers in Electronic Manufacturing Industry	Mohamad Ezuan Abd Jalil
5	171	Ergonomic Display Design for Bus Route	Musyarofah Mutiram Suid
6	133	Evaluation of Universal Design Requirements Application in Public Mosques in Bandung	Rangga Firmansyah
7	2	Association Between Exposure to Whole-Body Vibrations (WBV) and Vigilance Level: Effect of Different Vibration Magnitude.	Mohd Amzar Azizan

Wednesday, 28th August 2019

PARALLEL SESSION 3 (TIME: 08.30 – 10.00)

No	PAPER ID	TITLE	PRESENTER
Venue: GAMELAN 1			
1	177	Effect of Auditory Distraction on Hand and Foot Reaction Time during Simulated Driving Task among Ageing Malaysian Automobile Drivers	Nazlin Hanie Abdullah
2	23	Eco-Process Innovation Performance: Production Waste Investigation through Discrete Event Simulation	Suziyana Mat Dahan
3	65	Research in Shariah Hotel: Issues and Challenges	Qurtubi
4	107	Supply Chain Performance Measurement Using Supply Chain Operation Reference (SCOR) in Sugar Company in Indonesia	Vembri Noor Helia
5	24	Effect of Processing Parameters and Material Mixture Fraction on Tensile Strength for Plastic Waste-Sawdust Composites	Wawan Trisnadi Putra
6	206	A System Dynamics Approach to Investigate the Effects of Disruption on The Supply Chain with a Mitigation Strategy	Hawa Hishamuddin
7	67	Analysis of Product Quality Control Using Six Sigma Method	Dwi Handayani
Venue: GAMELAN 2			
1	105	The Relationship between Perceived CSR and Turnover Intention among Private Higher Education Institutions' Employees in Klang Valley	Saadiatul Ibrahim
2	191	Identifying Factors that Affecting Tourists to Choose Sharia Hotel Based on Theory of Planned Behavior (TPB) Using Structural Equation Modelling	Elisa Kusriani
3	99	Technology Level Measurement in Small Medium Enterprise (SME) of Wood Product in Yogyakarta, Indonesia	Suci Miranda

4	56	Enhancement of Customer Satisfaction Through Determination of Ideal Public Facilities Capacity Through Adoption of Queuing Theory	Mohamad Ikbar Abdul Wahab
5	98	Nexus Between Green Intellectual Capital and Organisational Learning Capability. Evidence from Malaysian Manufacturing Sector	Yusmazida Mohd Yusoff
6	190	Mastery of Leadership Skills Among Mechanical Engineers by Industrial Needs	Wan Omar Ali Saifuddin Wan Ismail
7	215	Career Challenges Model among Female Engineers: PLS-SEM Analysis	Ummu Sakinah Mohamad Subri
Venue: GAMELAN 4			
1	194	Mapping of Risk Factors for Musculoskeletal Disorders on Construction Workers: A Meta-analysis Study	Wyke Kusmasari
2	78	Ergonomic Design of the Cutting Machine for Chopping Cyperaceae Plant	Lintang Zahrима Kalsum
3	113	Evaluating Southeast Asian Military Camouflage Design using Camouflage Similarity Index (CSI)	Ayogi Tri Prasetyo
4	28	Investigation on Young Adult Hand Grip Strength	Norashiken Othman
5	17	Comparison Study of the Spine Kinematics of Thoracic and Lumbar Spine Assuming as (1) An Individual and (2) Multi-Segmental During a Continuous Motion Sit-To-Stand (STS) in Healthy Asian Adults	Wan Aliff Abdul Saad
6	13	Development of Robotic Rovers : A Review	Roshahliza M Ramli
7	157	How Workplace Condition Affects Healthcare Worker: Assessment at Tertiary Hospitals	Rohayu Othman

PARALLEL SESSION 4 (TIME: 10.30 – 12.30)

No	PAPER ID	TITLE	PRESENTER
Venue: GAMELAN 1			
1	94	Physical Ergonomic Application Preferences in The Design Development Process Among Malaysian Designers	Muhamad Ezran Zainal Abdullah
2	79	Study of Cybersickness on Non-Immersive Virtual Reality using Smartphone	Muhamad Nashirulhaqi Izzuddin
3	83	Assessing Driving Posture among Elderly Taxi Drivers in Malaysian using RULA and QEC Approach	Irwan Syah Md Yusoff
4	103	Adaptation of Agonist and Antagonist Muscle Response to Assistive Force in Different Age Group.	Nursalbiah Nasir
5	51	Instrumental Music vs. Qur'an Recitation: Which has the Most Influence on the Accuracy and Speed of Work?	Ms. Yumi Meuthia
6	75	Association Between Schoolbag Weight and Back Pain among Primary Schoolchildren in Kajang, Selangor	Haliza Abdul Rahman
7	121	Correlation of Safety Perceptions and Safety Behavior in University Teaching Laboratory	Rahmat Nurcahyo
Venue: GAMELAN 2			
1	44	Analysis of Port Fare Increases on Container Yard Services using Logistic Regression Model	Sarika Zuhri
2	60	Palm Oil Marketing Model through Performance Analysis Approach in Simalungun Regency	Ira Apriyanti
3	8	Evaluating Exploratory Factor Analysis of Psychosocial Study and Work Performance in Manufacturing Industry	Nuruzzakiah Mohd Ishanuddin
4	9	Investigation of Customer Purchase Intention Towards the Car Battery On-Site Delivery Services	Hairul Rizad Md Sapry
5	180	Professional Skills Needed among Mechanical Engineers in Malaysia Based on MoE: Using Discriminant Analysis	W Omar Ali Saifuddin Wan Ismail

6	89	Development of Sustainable Product Design Method for Sustainability and Successful New Product	Hassan Alli
7	169	Modeling and Simulation of Three-Roll Bending Process of Bimetal Circular Billet	Abdulaziz S. Alaboodi
Venue: GAMELAN 4			
1	18	Investigating the Spine Kinematics of Thoracic and Lumbar Spine Assuming as (1) An Individual and (2) Multi-Segmental During A Continuous Motion Stand-To-Flexion (STF) in Healthy Asian Adults.	Wan Aliff Abdul Saad
2	45	The Measurement of Nurses' Mental Workload using NASA-TLX (A Case Study: RSUD Zainoel Abidin Banda Aceh, Indonesia)	Nur Izzaty
3	85	Non-Intrusive, Visual-less Wearable Haptic Stimuli Navigational Assistance for Elderly with Dementia	Rosalam Che Me
4	86	Pattern Of Muscle Contraction In Different Maintenance Activities	Nor Kamaliana Khamis
5	196	Development of Optimal Air Conditioning Control System with PMV Sensor Unit	Lusi Susanti
6	175	Ageing Drivers' Mental Workload in Real-Time Driving Task Based on Subjective and Objective Measures	Nurul Izzah Abd Rahman,
7	16	Assessment of Volatile Organic Compounds (VOCs) in Multi-Storey Shopping Mall in Malacca, Malaysia	R Zirwatul Aida R Ibrahim

PARALLEL SESSION 5 (TIME: 14.00 – 15.30)

No	PAPER ID	TITLE	PRESENTER
Venue: GAMELAN 1			
1	52	Redesign of Breastfeeding Chair for Nursery Room	Prima Fithri
2	184	Effect of Using Electronic Map while Driving on Human Error Probability	Lovely Lady
3	102	Designing Disaster Recovery Plan of Data System for Universities	Difana Meilani
4	127	The Using of UI Greenmetric Performance Measure in The Implementation of ISO 14001 Environmental Management System in Higher Education	Rahmat Nurcahyo
5	188	Exploring Quality Influencing Factors for Frozen Food Industry	Wan Muhammad Noor Sarbani Mat Daud
6	54	Workstation with Ergonomic Features for Universiti Kuala Lumpur MIDI Classroom	Shukri Mohamed Salleh
Venue: GAMELAN 2			
1	192	Local Search Algorithm for Solving Periodic Location Routing Problem	Nissa Prasanti
2	195	Simulated Annealing Algorithm for Solving Pickup and Delivery Problem with LIFO, Time Duration and Limited Vehicle Number	Andriansyah
3	181	Critical Thinking and Problems Solving Skills among Mechanical Engineering Students	W Omar Ali Saifuddin Wan Ismail
4	216	Work-Life Balance Conflict Model among Female Engineers: PLS-SEM Analysis	Ummu Sakinah Subri
5	139	Integration of Employees' Turnover Models in Assessing HRM Practices Impact on Behavioural Intentions	Shariff Harun
Venue: GAMELAN 4			
1	88	The Development of SORREL Systematic Roselle Harvesting System for Efficient Transfer Process	Khairul Manami Kamarudin

2	189	Ergonomic Risk Assessment on Selected Hot Work Workers at Company XXX	Sivabalan Sanmugum
3	199	Job Description Design Based on Business Process Mapping and Workload Measurement Using M-FTE and DRAWS	Ilham Akbar
4	211	Maximum Acceptable Lifting Frequency of Novice and Worker for Manual Material Handling Task	Mirta Widia
5	217	Large-Displacement Police Motorcycle: Muscle Discomfort Among Traffic Police Riders	Nur Athirah Diyana Mohammad Yusof

POSTER PRESENTATION

No	PAPER ID	TITLE	PRESENTER
Venue: GAMELAN 1			
1	212	Fractional Order PID Sliding Mode Control for Speed Regulation of Permanent Magnet Synchronous Motor	Marizan Mubin
2	186	Human Factors Analysis of Online Learning Process for Students in Indonesia (Preliminary Study)	Linda Studiyanti
3	213	Preliminary Study on the Ergonomic Design of Motorcycle Seat for Comfort Usage	Eida Nadirah Roslin
4	82	Ablution Workstations Design for Person with Physical Disabilities in Malaysia	Siti Zawiah Md Dawal
5	214	Integration of Psychological Capital in a Conceptual Work Productivity Model	Javed Iqra
6	117	Increasing Blink Rates: Reducing Dry Eye Symptoms with Eye Rest-Break Application	Dian Darina Indah Daruis
7	124	A Study of Accidents & Incidents on Boeing and Airbus Commercial Aircraft's Avionics-Related System in Two Decades (1996-2015)	Inarni Juliana Baidzawi

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