

International Conference of Advanced Sustainable Engineering & Technology (ICASET 2025)

2nd September 2025 (DAY 1 - AFTERNOON)

ICASET Session 1; Venue : Pinnacle 1 at Level M1, The Vertical

THEME: ARTIFICIAL INTELLIGENCE (AI) AND SMART MANUFACTURING

Time (GMT +8)	Presentation Title	Presenter	Abstract ID	Chairperson
1415 – 1430	Digital Transformation and Social Sustainability: Examining the Role of Smart City Technologies in Enhancing Quality of Life	Nurelya Shafika Mohd Sam	FO - 289	Nor Farizah Binti Mohd Taib
1430 – 1445	A Super Twisting Control Strategy on Tracking Error Constrained for Upper-Limb Rehabilitation Chaotic System	Dr. Muhamad Fahezal Ismail	FO - 106	Nor Farizah Binti Mohd Taib
1445 – 1500	An Analysis-Based Expert System for Automotive Additively Manufactured Plastics Component in Indonesian Small and Medium Industries	Wachid Yahya	FO - 204	Nor Farizah Binti Mohd Taib
1500 – 1515	Heart Disease Augmented Reality (AR) in Industry 4.0	Dr. Myzan Noor	FO - 380	Nor Farizah Binti Mohd Taib
1515 – 1530	Intelligent Fatigue Detection with the Use of the YOLO Algorithm for Facial Marker Analysis	Dr. Mohammad Kazem Chamran	FO - 899	Nor Farizah Binti Mohd Taib
1530 – 1545	Physics-Informed Neural Networks for Sustainable Distributed Acoustic Sensing Data Denoising: A Review of Theory, Optimization, and Regularization	Dr. Muhammad Hammad Rasool	FO - 870	Nor Farizah Binti Mohd Taib

1545 – 1600	Healthy Cardio: Bridging Cardiovascular Disease Knowledge Gaps through a User-Centered Mobile Application	Dr. Suzana Basaruddin	FO - 336	Nor Farizah Binti Mohd Taib
1600 – 1615	Integrating Smart and Sustainable Manufacturing: A Review of Emerging Technologies and Transformative Pathways to UN SDGs	Dr. Yung Chieh Ong	FO - 294	Nor Farizah Binti Mohd Taib
1615 – 1630	Solid Acids, Their Potentials in Fuel Cell Applications, and Improvement of Thermomechanical Properties of Cesium Dihydrogen Phosphate	Dr. Chatr Panithipongwut Kowalski	FO - 940	Nor Farizah Binti Mohd Taib
1630 – 1645	Cellulose-based composite electrolyte as an environmentally friendly solid-state electrolyte for lithium-based battery	Mahshid Mohammadifar	FO - 941	Nor Farizah Binti Mohd Taib
1645 – 1700	Prediction of Influence on Carbon Monoxide in Industrial, Urban and Rural Areas of Peninsular Malaysia using Fixed Box Model	Dr. Hasmawati Mat Hassan	FO - 904	Nor Farizah Binti Mohd Taib
1700 – 1715	Investigate the effects of torrefaction treatment on bio-coke properties	Dr. Norain Abdullah	FO - 726	Nor Farizah Binti Mohd Taib
1715 – 1730	Towards Sustainable Energy Access: Evaluating Free Online Photovoltaic Design Tools in Support of the SDGs	AP Dr. Hendra Setiawan	FO - 914	Nor Farizah Binti Mohd Taib
1730 – 1745	Development of a Cost of Quality Framework in Waste-to-Energy Systems to Support Process Optimization	Irna Ekawati	FO - 795	Nor Farizah Binti Mohd Taib

1745 – 1800	Evaluating the Impact of Window Design Parameters on Energy Consumption in Cold Semi-Arid Regions of Afghanistan	Mustafa Karimi	FO - 691	Nor Farizah Binti Mohd Taib
1800 – 1815	From Intangible Cultural Heritage Materials to Ecological Design: Exploring the Pathway of Huaxian Coarse Cloth in Sustainable Cultural Tourism Spaces	Wanxue Zhu	FO - 675	Nor Farizah Binti Mohd Taib
1815 – 1830	Enhancing Photovoltaic Efficiency through Thermoelectric Water-Cooling Integration	Dr. Wan Mustafa Wan Sulong	FO - 784	Nor Farizah Binti Mohd Taib
1830 – 1845	Current Trend of Hydropower in Malaysia: Energy, Economy and Environment	A. P Dr. Khairul Parman Zakaria	FO - 551	Nor Farizah Binti Mohd Taib
1845 – 1900	Institutional dilemmas in adopting sustainable practices: A study exploring the determinants of educated unemployment	AP Dr. Ankita Awasthi	FO - 927	Nor Farizah Binti Mohd Taib
1900 – 1915	Modelling the Impact of Suspended Sediment on Turgo Turbine Efficiency in Run-of-River Hydropower	AP Dr. Engku Ahmad Azrulhisham	FO - 326	Nor Farizah Binti Mohd Taib

3rd September 2025 (DAY 2 - MORNING)

ICASET Session 2; Venue : Pinnacle 4 at Level M1, The Vertical

THEME: WATER ENGINEERING

Time (GMT +8)	Presentation Title	Presenter	Abstract ID	Chairperson
0900 – 0915	KEYNOTE SPEAKER 1: Prof. Dr. Kuldeep Kumar Saxena KEYNOTE SPEAKER 2: Ir. Dr. Nor Azhar Bin Mohd Arif KEYNOTE SPEAKER 3: Dr. Ir. Endah Murtiana Sari			
0915 – 0930				
0930 – 0945				
0945 – 1000				
1000 – 1015				
1015 – 1030				
1030 – 1045	AI Assurance in Cybersecurity: Formalizing a Risk Management Layer for Autonomous Systems	Krishna Rajagopal	FO - 953	Dr. Wan Iman Binti Wan Salim
1045 – 1100	Impact of Land Use Change on Flooding at the Downstream of Cikamiri Sub-Watershed, West Java, Indonesia	Chay Asdak	FO - 863	Dr. Wan Iman Binti Wan Salim
1100 – 1115	An Ensemble Learning Approach for Phishing Link Detection	Krishna Rajagopal	FO - 954	Dr. Wan Iman Binti Wan Salim
1115 – 1130	Hydrological Implications and Prediction of Land Use Change in Cikamiri Sub-Watershed, Garut, West Java, Indonesia	Sarah Fitri Soerya	FO - 864	Dr. Wan Iman Binti Wan Salim

1130 – 1145	Emotional Manipulation in Cybersecurity: Unmasking the Psychological Vulnerabilities	Krishna Rajagopal	FO - 955	Dr. Wan Iman Binti Wan Salim
1145 – 1200	Performance Analysis of Personalized and Mixing Ventilation System: Energy Consumption and Thermal Comfort Perspectives	Dr. Ahmad Siroji Bin Mohamed Apandi	FO - 439	Dr. Wan Iman Binti Wan Salim
1215 – 1230	A Machine Learning Approach to Ransomware Detection	Krishna Rajagopal	FO - 956	Dr. Wan Iman Binti Wan Salim
1230 – 1245	Performance Assessment of a Dual-Function Refrigeration System Featuring Attached Fin and Tube Heat Exchangers for Space Cooling and Water Heatin Applications	Rohaimi Abdullah	FO - 157	Dr. Wan Iman Binti Wan Salim

3rd September 2025 (DAY 2 - AFTERNOON)

ICASET Session 3; Venue : Pinnacle 4 at Level M1, The Vertical

THEME: WATER ENGINEERING

Time (GMT +8)	Presentation Title	Presenter	Abstract ID	Chairperson
1415 – 1430	Treatment of ammonium- rich industrial wastewater using microbial electrolysis cell (MEC)	AP Dr. Dzun Noraini Jimat	FO - 663	Dr. Wan Iman Binti Wan Salim
1430 – 1445	Stress Analysis on Naca Series Hydrofoil for Water Turbine Application	Ts. Azri Hamim Ab Adzis	FO - 142	Dr. Wan Iman Binti Wan Salim
1445 – 1500	The Enhancement of Transportation and Logistics for Maximum Efficiency in Ready-Mix Concrete (RMC) Manufacturing Facilities	Dr. Mohd Norzaimi Che Ani	FO - 298	Dr. Wan Iman Binti Wan Salim
1500 – 1515	Pump Foundation Vibration Due to Settlement Solutions in Kerteh Terengganu: A Case Study	Aishah Hussin	FO - 630	Dr. Wan Iman Binti Wan Salim
1515 – 1530	Contaminants transmission in a protective environment room: The impact of a healthcare worker	Dr. Mohd Hazzah Ahmad Siron	FO - 196	Dr. Wan Iman Binti Wan Salim
1530 – 1545	Effectiveness of Banana Stem Filters for Indoor Particulate Matter (PM2.5) Control	Dr. Che Hafizan Che Hassan	FO - 405	Dr. Wan Iman Binti Wan Salim
1545 – 1600	Sustainable Pathways in Additive Manufacturing: Linking Systemic Challenges with Resin-Based Innovations	Dr. Aphiwat Pongwisuthiruchte	FO - 935	Dr. Wan Iman Binti Wan Salim

1600 – 1615	Electrochemical Performance of BiVO ₄ Nanostructures as Photo Supercapacitor Electrode Material by Crystal Facet and Morphology Regulation Using pH-dependent Method	Muhammad Asim Abbas Khan	FO - 911	Dr. Wan Iman Binti Wan Salim
1615 – 1630	Oxidation-Induced Degradation of Welded AA6061: Porous Scale Formation at 600°C for 40 Hours	Dr. Nur Azida Che Lah	FO - 536	Dr. Wan Iman Binti Wan Salim
1630 – 1645	Effect of Groove Angle design on the Mechanical Properties of Low Carbon Steel ASTM A36 in Various Temperatures	Dr. Dahia Andud	FO - 241	Dr. Wan Iman Binti Wan Salim
1645 – 1700	The Effect of Fiber Content and Fiber Orientation on Tensile Properties of Abaca Fiber Metal Laminate Composite Fabricated by Press Molding Process	AP Dr. Mohd Iqbal	FO - 685	Dr. Wan Iman Binti Wan Salim
1700 – 1715	Mechanical Characterization and Repair of Burn-Through Defects In 5-Inch Schedule 120 Welded Pipes for Petrochemical Applications	Dr. Azman Ahmad	FO - 523	Dr. Wan Iman Binti Wan Salim
1715 – 1730	Impact of Ceramic Coating on the Structural Integrity of Hot Oil Expansion Vessel	Dr. Azman Ahmad	FO - 525	Dr. Wan Iman Binti Wan Salim
1730 – 1745	Pofa Sika Brick Versus Cement Bricks: A Study on Mechanical Properties and Practical Applications	Ts. Siti Hasmah Binti Mustapha	FO - 903	Dr. Wan Iman Binti Wan Salim
1745 – 1800	Predicting Hydraulic Flow Units for CO ₂ Storage Potential in Carbonate	James Egbokhare	FO - 884	Dr. Wan Iman Binti Wan Salim

	Reservoirs: A Case Study of the Central Luconia Province, Offshore Sarawak, Malaysia			
1800 – 1815	Active Confinement of Concrete Cylinders Using SMA Strips: A Comparative Experimental Study of Iron based-SMA and Nickel Titanium-SMA	Dr. Syaza Nur Iylia Zulkifli	FO - 835	Dr. Wan Iman Binti Wan Salim
1815 – 1830	Deformation mechanism of harmonic structured CoCrFeMnNi HE Alloys	Dr. Nurul Nadiah Mahmud	FO - 206	Dr. Wan Iman Binti Wan Salim
1830 – 1845	Optimization of Fused Deposition Modeling Printed Polyvinyl Butyral Patterns using Response Surface Methodology and Evaluation of Optimized Investment Casting Parts	Aaron Aye	FO - 225	Dr. Wan Iman Binti Wan Salim
1845 – 1900	The Effects of Infills in Fused Deposition Modelling Printed Polyvinyl Butyral Pattern on Mechanical Properties of Investment Cast Stainless Steel	Dr. Wan Mansor Wan Muhamad	FO - 228	Dr. Wan Iman Binti Wan Salim
1900 – 1915	Design Analysis on the Helical Tube in Coil Type Heat Exchanger Using FEA	Dr. Khairul Azhar Mohammad	FO - 221	Dr. Wan Iman Binti Wan Salim