

**VENUE: Fakultas Teknik Universitas Indonesia (Building K)**  
**Jalan Kampus UI, Kukusan, Beji, Kukusan, Kecamatan Beji, Kota Depok, Jawa Barat**  
**16424.(021) 78888430**

## Schedule DAY-1: Friday 28th June 2019

Time	Venue	Program	Duration
08:00	K-301	<b>Conference Registration</b>	<b>60 minutes</b>
09:00		Ms. Tikka "Commencement of 2 <sup>nd</sup> ICIRD and 4 <sup>th</sup> IESC"	02 minutes
		A short video on Safety Induction	03 minutes
09:05		Welcoming Speech by Conference Executive Chair Professor Dr. Asadullah Shah (2 <sup>nd</sup> ICIRD 2019)	05 minutes
09:10		Welcoming Speech by Dr. Badrul Munir (4 <sup>th</sup> IESC)	05 minutes
09:15		Opening speech by Dr. Ir. Hendri D.S. Budiono. M. Eng. (Dean Faculty of Engineering, Universitas Indonesia)	05 minutes
09:20		Token of appreciation by ICIRD Executive Chair and Dean (Faculty of Engineering, Universitas Indonesia)	05 minutes
09:25		Photo Session	05 minutes
<b>Keynote Plenary Session (Moderator: Prof. Dr. Sheroz Khan)</b>			
09:30	K-301	Professor Dr. Eng. Wisnu Jatmiko S.T., M.Kom (IEEE Indonesian Chair)	35 minutes each
		Dr. Syed. Ismail Shah (ITU Jakarta office)	
		Awarding shields to keynote speakers by Dean (Faculty of Engineering, Universitas Indonesia)	10 minutes
		Words of Thanks by Dr. M. Yaqoob Koondhar, Secretary ICIRD 2019	05 minutes
11:00	<b>Prayer Break and Lunch (K-211)</b>		<b>150 minutes</b>
01:30	K-201	IT and SOFTWARE Parallel session	(10 min of presentations + 5 min of Q&A)
	K-202	ENGINEERING Parallel session	
	K-207	COMMUNICATION and Technology Parallel session	
15:00	<b>Refreshment Break</b>		<b>30 minutes</b>
15:30	K-201	IT and SOFTWARE Parallel session	(10 min of presentations + 5 min of Q&A)
	K-202	ENGINEERING Parallel session	
	K-207	COMMUNICATION Parallel session	
17:00	<b>Tea Break</b>		
<b>END of Day 1</b>			

## Schedule DAY-2: Saturday 29th June 2019

Time	Venue	Program	Duration
09:00	K-201	IT and SOFTWARE Parallel session	(10 min of presentations + 5 min of Q&A)
	K-202	ENGINEERING Parallel session	
	K-207	COMMUNICATION and TECHNOLOGY Parallel session	
10:30	<b>Refreshment Break (K-211)</b>		<b>30 minutes</b>
11:00	K-201	IT and SOFTWARE Parallel session	(10 min of presentations + 5 min of Q&A)
	K-202	ENGINEERING Parallel session	
	K-207	COMMUNICATION and TECHNOLOGY Parallel session	
12:30	<b>Lunch Break (K-211)</b>		<b>60 minutes</b>
13:30	K-201	IT and SOFTWARE Parallel session	(10 min of presentations + 5 min of Q&A)
	K-202	ENGINEERING Parallel session	
	K-207	COMMUNICATION and TECHNOLOGY Parallel session	
15:00	K-301	<b>Closing Ceremony &amp; Award Distribution</b> Speech by Technical General Chair Dr. Sheroz Khan	<b>30 minutes</b>
15:30	<b>Tea and End of Conference</b>		

## TECHNICAL SESSIONS: SCHEDULE

### IT AND SOFTWARE TRACK

TIME(Hrs.)	PAPER ID	PAPER TITLE
<b>DAY-1: Friday 28th June 2019: Room 1</b>		
13:30	10	Technical and Economical Feasibility Utilization of Exhaust Gas from Oil Wells Venting System in Y Offshore Platform
13:45	23	Internet of Things Platform to Monitoring & Controlling Project Remotely: A Qualitative Analysis
14:00	27	On Developing Network Scheduling Simulator: IR-TASA Visualization
14:15	38	An Analytical Hierarchy Process Assessment of The Environmental Management System on Higher Education Institute in Indonesia
14:30	39	Scheduling The Arrival of Raw Material Suppliers Using Truck Turnaround Time Method in FMCG Company
14:45	40	Measuring Quality of Service (QoS) and Quality of Experience (QoE) on 5G Technology: A Review
15:00	<b>Lunch and Prayer (150 MIN)</b>	
15:30	44	Failure analysis of superheater tubes in a circulating fluidized bed boiler
15:45	47	Comprehensive ICT Framework for Educational Institutes of Kuwait: An Empirical Study
16:00	55	Potential Implementation of A2G Technology for IFC Services on Flights in Indonesia
16:15	74	Time and Cost Optimization of a Nuclear Reactor Project Using Combined-Method
16:30	84	Development of Rainwater Utilization Scheme as an Alternative of Water Source at a Hotel
16:45	90	Question Answering Systems: A Survey and classification
17:00	<b>END of Day</b>	

TIME(Hrs)	PAPER ID	PAPER TITLE
<b>DAY-2: Saturday 29th June 2019: Room TBD</b>		
09:00	95	Development of Greywater Utilization Scheme as an Alternative of Water Source in a Hotel
09:15	101	Rainwater Harvesting Scheme as Additional Source of Clean Water at an Apartment
09:30	108	Digital Literacy and the Attitude of Educators Towards MOOC Platform in GCC Countries
09:45	111	Authentication System Comparison on Android Application
10:00	113	LoRa Network Planning for Smart Meter Utilities in Jakarta and Tangerang Area
10:15	115	Voice User Interface Optimization Based On Android Speech API and PocketSphinx for Indonesian Language on Radio Internet Application
10:30	<b>Refreshment Break (30 MIN)</b>	
11:00	116	Valuation of Indonesian Biodiesel Formula Prices By The Characteristics-Related Palm-Based Biodiesel' Pricing System
11:15	32	Efficient Power and Routing in UAV Communication Networks
11:30	48	Pervasive Learning Environment For Educational Makerspaces With Emerging Technologies And Teaching And Learning Transformation
11:45	81	M2M Connectivity and Business Strategy Analysis : Case Study of PT XYZ in Jabodetabek Area
12:00	18	Strategy of National Fiber Optic Backbone Network Utilization Enhancement in Rural Area of Indonesia
12:15	80	Evaluation of The Implementation of Fixed Broadband Access Provision Policy in Accelerating Fixed Broadband Penetration in Indonesia
12:30	<b>Lunch Break</b>	
13:30	93	Municipal Solid Waste to Electricity Using Anaerobic Digestion and Incineration Conversion Technologies: A Comparative Study
13:45	15	Modeling Vertical Roller Mill Raw Meal Residue by Implementing Neural Network
14:00	106	Application of Risk Matrices and Analytic Hierarchy Process (AHP) in Risk Analysis of Gas Turbine Power Plant Maintenance
14:15	119	Partial Hydrogenation of Polyunsaturated FAMES in a Trickle Bed Reactor
14:30	123	Mathematical Investigation of Upgrading Biodiesel to H-FAME via Partial Hydrogenation Process in Slurry Bubble Column Reactor
14:45		
15:00	<b>END OF DAY 2</b>	

## ENGINEERING TRACK

TIME(Hrs.)	PAPER ID	PAPER TITLE
<b>DAY-1: Friday 28th June 2019: Room 2</b>		
13:30	25	Control of Electronic Devices Using Neural Network Based Sundanese Speech Recognition
13:45	26	Modeling and Designing Direct Inverse Control Using Back-propagation Neural Network for Skid Steering Boat Model
14:00	33	Improving Loss of Load Probability through Biomass Power Plant Integration : A Case Study in Tanjung Balai Karimun
14:15	36	MICROGRID DESIGN FOR SEBIRA ISLAND IN KEPULAUAN SERIBU WITH TECHNICAL AND ECONOMICAL ANALYSIS Abstract
14:30	41	Economical Analysis Optimization of East Sumba Microgrids
14:45	43	Design of Single Input Multiple Output Full Bridges DC-DC Converters For Personal Computer Power Supply
15:00	<b>Lunch and Prayer (150 MIN)</b>	
15:30	46	Disturbance Characteristics in Frequency 9 kHz-150 kHz on Photovoltaic System with RLC Load
15:45	31	PERFORMANCE EVALUATION OF NILM DATA PREPROCESSING FOR NAÏVE BAYES CLASSIFIER
16:00	59	Installation of Hybrid Power System in Ro-Ro Passenger Vessel
16:15	62	Economic Load Dispatch Optimization of Thermal Power Plant Based on Merit Order and Bat Algorithm
16:30	64	Rectangular Microstrip Array Antenna for Enhancing Terahertz Imaging Quality
16:45	65	Optimization of Tugboat as Lifting Operation Support Vessel in Indonesia's Upstream Oil and Gas Terminals using Differential Evolution Algorithm
17:00	<b>END of Day 1</b>	

TIME(Hrs)	PAPER ID	PAPER TITLE
<b>DAY-2: Saturday 29th June 2019: Room TBD</b>		
09:00	68	Antifungal Test of Bee Propolis Microcapsule Tetragonula spp. With Maltodextrins and Gum Arab Coating
09:15	69	Voltage Stability Improvement Using Load Shedding and Static VAR Compensator (SVC): Study Case of Senayan - Sambas Power System
09:30	71	Medical Image Analysis using Deep Learning: A Review
09:45	73	Study on Short Circuit Current Contribution after Photovoltaic Solar Plant Integration in Lombok's Distribution Network
10:00	75	A Method to Improve Frequency Stability Using Location-based Load Shedding: Study Case of Senayan-Sambas Power System
10:15	76	Planar Microstrip Array Antenna with Rectangular Configuration Fed with Chebyshev Power Distribution for C-Band Satellite Application
10:30	<b>Refreshment Break (30 MIN)</b>	
11:00	122	Street lighting Poles Top Solar Power Generation for Typical Housing Area in Kuwait
11:15	110	Solar Irradiance Estimation at Certain Location Using Artificial Neural Network and ASHRAE Clear-Sky Mode
11:30	105	Design of Low-Cost Energy Metering Device for Direct Load Control and Air Conditioning Energy Monitoring
11:45	60	Prediction of Power Transformers Lifetime Using Thermal Modeling Analysis
12:00	89	Molecular Docking Study of Anti-Inflammatory Biomarkers in Sulawesi Propolis as Potent Inhibitors of Cyclooxygenase-2
12:15	118	Performance Analysis of Solar-Powered Submersible DC Water Pump
12:30	<b>Lunch (60 MIN)</b>	
13:30	92	Effect of Repetitive Recycling on the Optical Properties of Polypropylene Based on Material Value Conservation Paradigm
13:45	99	Analysis of Discharge Rate and Ambient Temperature Effects on Lead Acid Battery Capacity
14:00	11	SEMI PORTABLE BIOGAS POWER PLANT USING ENGINE GENERATOR SET FOR DISASTER AREA
14:15	104	Mitigation of Voltage Sag Caused by Unbalanced Load by Using DFT Controlled DVR
14:30	1	Synthesis of Cu-doped TiO <sub>2</sub> -SiO <sub>2</sub> Nanocomposite and Its Antibacterial Activity
14:45	82	Analysis of Regional Electricity Supply Planning based on Reliability, Costs and Emissions (Case Study of East Kalimantan Region)
15:00	<b>END OF DAY 2</b>	

## Communication and Technology Track

TIME(Hrs.)	PAPER ID	PAPER TITLE
<b>DAY-1: Friday 28th June 2019: Room 3</b>		
13:30	16	Literature Review Related Causal Factor Risk of Delay at Construction Project: Meta-Analysis
13:45	20	Cost Overrun Risk Factors in Jakarta MRT Project Phase 1: What Does Literature Tell Us?
14:00	21	Effects of Composition Variation of CrO <sub>3</sub> Doped on Phase Transformation and Microstructure of TiO <sub>2</sub> Nanomaterial as CO Gas Sensor
14:15	78	Effect of Curing duration and environment on mechanical properties and bonding strength of composite-metal
14:30	29	Effect of Hardness Natural Rubber to KNF 700 Performance
14:45	45	Optimization of Propane Reliquefaction Cycle in LPG Plant
15:00	<b>Lunch and Prayer (150 MIN)</b>	
15:30	50	Causal Factors of Change Order and Variation Order in Construction Project: A Literature Review
15:45	53	Economic Analysis of Renewable Energy Power Plant in Sumatera, Indonesia
16:00	63	Optimal Degree Distribution with Minimal Stopping Sets for Massive IoT Communications
16:15	66	Implementation of DMAIC Six Sigma to Reduces Defects in Slab Construction Process: A Case Study Of Highrise XYZ Building Construction
16:30	83	Contagion Analysis of Asian Financial Conditions Towards Indonesian LNG Price as an Investment Strategy
16:45	85	Impact of Design for Material Value Conservation on Flexible Plastic Packaging towards the Life Cycle of Plastic Materials
17:00	<b>END of Day 1</b>	

TIME(Hrs)	PAPER ID	PAPER TITLE
<b>DAY-2: Saturday 29th June 2019: Room TBD</b>		
09:00	86	NB-IoT Planning in Jakarta Area for Smart Meter Utilities
09:15	87	Universitas Indonesia Welding Center Sub Sea Personel Qualification GAP Analysis
09:30	91	Newly Installed Subsea Pipeline Potential Failure Analysis Using Risk FMEA Method
09:45	98	Quality Analysis and Lifetime Prediction of SF <sub>6</sub> in High Voltage Gas Insulated Switchgear (GIS) at CSW Bulungan
10:00	112	Performance Implementation of Multi-access Edge Computing at Indonesia Telco Operator
10:15	42	An S-bend based Optical Directional Coupler Using GaN Semiconductor
10:30	<b>Refreshment Break (30 MIN)</b>	
11:00	77	Optimum Location for PV Implementation Based on Load-flow Analysis Using Newton-Raphson Method for Lombok Electrical Network
11:15	88	Prediction of Electricity Load Growth of Tangerang City using SIMPLE-E
11:30	100	Optimization of Point-to-Point CO <sub>2</sub> Pipeline Transport for Carbon Capture Utilization Sequestration (CCUS)
11:45	121	An Implementation of Electroencephalogram Signals Acquisition to Control Manipulator through Brain Computer Interface
12:00	109	Calibration of 100 A/50 mA Instrument Current Transformer Energy Meter Using Bisection Method
12:15	114	Comparison of Automatic Indonesian Plate Number Recognition Using K-Nearest Neighbor And Neural Network Method
12:30	<b>Lunch (60 MIN)</b>	
13:30	117	COMPRESSIVE SENSING IMAGE RECONSTRUCTION WITH TOTAL VARIATION AND L <sub>2,1</sub> NORM FOR MICROWAVE IMAGING
13:45	120	High-Gain Rectangular-Fins Shaped Balanced Antipodal Vivaldi Antenna Array Extended by Dielectric for wide-band Imaging Application
14:00	35	Establishing National Science and Technology Park in Pakistan
14:15	24	Some Aspects of Plasma-Driven Catalysis in Triglyceride Conversion Technology into Diesel Engine Fuel Using Cold Plasma DBD Reactor
14:30	70	Study of Areca Flower Extract as Green Corrosion Inhibitor on Steel API 5L Gr X60 in 1 M HCl Solution
14:45	72	Polyvinyl Alcohol Hydrogel Coated by Poly(lactic-co-glycolic) Acid and Poly(lactic) Acid for Extended Release of Pyrazinamide
15:00	<b>END OF DAY 2</b>	