

# FoITIC 2017

## PRELIMINARY PROGRAM FOR INTERNATIONAL CONFERENCE

Venue:

Faculty Building (Darmawan Building), The 3<sup>rd</sup> Floor, campus of Itenas Bandung  
Jl. PKHH Mustapa No. 23 Bandung 40124, West Java – Indonesia

Room for opening and closing ceremony: 14301

Rooms for Parallel sessions: Room 1 (14301); Room 2 (14303 A); Room 3 (14303 B)

	Time	International Conference Program		
Day 1 October 9, 2017	17:00 – 19:00	Registration		
		Welcoming reception		
Day 2 October 10, 2017	07:00 – 08:30	Registration		
	08.30 – 09.00	Opening ceremony: 1. Dean of FTI Itenas (Dr. Dani Rusirawan) 2. Rector of Itenas (Dr. Imam Aschuri)		
	09:00 – 09.45	Keynote speaker: Prof. Dr. Istvan Farkas (Szent Istvan University – Hungary)		
	09:45 – 10:15	Coffee break		
	10:15 – 11:00	Keynote speaker: Prof. Dr. Soegijardjo Soegijoko (Institut Teknologi Nasional Bandung – Indonesia & IEEE Indonesia SSIT Chapter)		
	11:00 – 11:45	Keynote speaker: Ahmad Taufik Joenoes, M. Eng., PhD (Indonesia Society for Reliability)		
	11:45 – 12:45	Lunch break		
	12:45 – 13.00	Preparation for parallel session		
	13:00 – 14:30	Parallel session 1		
		Room 1	Room 2	Room 3
		Speaker 1	Speaker 1	Speaker 1
		Speaker 2	Speaker 2	Speaker 2
		Speaker 3	Speaker 3	Speaker 3
		Speaker 4	Speaker 4	Speaker 4
		Speaker 5	Speaker 5	Speaker 5
		Spekaer 6	Speaker 6	Speaker 6
	14:30 – 15:00	Coffee break		
	15:00 – 15:30	Travel to Saung Angklung Udjo		
	15:30 – 18:00	Cultural evening (playing with angklung)		
	18:00 – 18:30	Break for praying		
	18:30 – 19:30	Dinner and networking		
	19:30 – 20:00	Travel to Itenas		

Day 3 October 11, 2017	08:00 – 08:30	Registration		
	08:30 – 09:15	Invited speaker: Prof. Dr. Rizalman Mamat (Universiti Malaysia Pahang)		
	09:15 – 10:00	Invited speaker: Mr. Soeripno Martosaputro (Indonesian Wind Energy Society)		
	10:00 – 10:30	Coffee break		
	10:30 – 12:00	Parallel session 2		
		Room 1	Room 2	Room 3
		Speaker 1	Speaker 1	Speaker 1
		Speaker 2	Speaker 2	Speaker 2
		Speaker 3	Speaker 3	Speaker 3
		Speaker 4	Speaker 4	Speaker 4
		Speaker 5	Speaker 5	Speaker 5
		Speaker 6	Speaker 6	Speaker 6
	12:00 – 13:00	Lunch break		
	13:00 – 14:15	Parallel session 3		
		Room 1	Room 2	Room 3
		Speaker 1	Speaker 1	Speaker 1
		Speaker 2	Speaker 2	Speaker 2
		Speaker 3	Speaker 3	Speaker 3
		Speaker 4	Speaker 4	Speaker 4
		Speaker 5	Speaker 5	Speaker 5
	14:15 – 14:45	Closing ceremony		
	14:45 – 15:15	Coffee break		

<b>Parallel Session 1 (Tuesday, October 10, 2017)</b>		
Room 1	Renewable Energy Resources Assessment	
	Time: 13:00 – 14:30	
Paper ID	Paper Title	Author & Affiliation
5	Analizing of wave energy resource in Gulf of Cadiz, Spain	Mohamed Hatim Ouahabi, Higinio Sánchez Sáinz, Luis Fernández-Ramírez (University Abdelmalek Essaadi Tetouan – Morocco, Cadiz University – Spain)
9	Distribution of Direct and Diffuse Radiation on Bawean Island, East Java, Indonesia	Yusuf Suryo Utomo (Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences – Indonesia)
27	Comparison Study of Solar Flat Plate Collector With Two Different Absorber Materials	Amrizal, Amrul, Ahmad Yonanda, Zulfa (Universitas

		Lampung – Indonesia)
33	Effect of combustion saturated and unsaturated fatty acids pure vegetable oil for noise	Dony Perdana, Eddy Gunawan (Maarif Hasyim Latif University, Sidoarjo, East Java – Indonesia)
47	An experimental model piezoelectric cantilever beam for energy harvesting	Aditya Sukma Nugraha and Sapdo Utomo (Indonesia Institute of Science – Indonesia)
51	Design and Optimization of Hybrid Power Plant in Household Scales Using Homer Models	Ibrahim Syaharuddin, Dani Rusirawan (Institut Teknologi Nasional Bandung – Indonesia)

Room 2	Automation and measurement technologies; Computer aided engineering; Computing Technology for Sustainable Industrial System; Supply Chain Management & Logistics	
Time: 13:00 – 14:30		
Paper ID	Paper Title	Author & Affiliation
32	Proposed Ideas For Preventing Operational Risk On PT. Global Indo Pangan's Supply Chain Using House Of Risk 1 Method*	Edi Susanto, Nanda Fadhil A and Melati Kurniawati (Institut Teknologi Nasional Bandung – Indonesia)
49	Making Automatic Unloading Tools on The Goodway GV-500 Machine	Suhartinah, Laeli Nur Rohmawati and Muhammad Hidayat (Polman Astra – Indonesia)
14	Realization and Key Analysis on Blockchain Bitcoin	Muhammad Lazuardi Wirananda Putra, Surya Michrandi Nasution and Marisa W Paryasto (Telkom University – Indonesia)
26	Object Oriented Simulation For Improving Unloading And Loading Process At Tanjung Priok Port	Said Baisa, Fadillah Ramadhan and Arif Imran (Institut Teknologi Nasional Bandung – Indonesia)
15	Investigation of Classification Algorithm for Land Cover Mapping in Oil Palm Area Using Optical Remote Sensing	Anggun Tridawati and Soni Darmawan (Institut Teknologi Nasional Bandung – Indonesia)
70	Robust Indirect Adaptive Control Using RLS for DC Motor	Sabat Anwari (Institut Teknologi Nasional Bandung – Indonesia)

Room 3	Other topics	
Time: 13:00 – 14:30		
Paper ID	Paper Title	Author & Affiliation
52	Higher Education Engineering: A New Holistic Paradigm	Sulistyo Setiawan (Institut Teknologi Nasional Bandung – Indonesia)
22	Aero-hidroponic products for rural forest farming	Edi Setiadi Putra and Jamaludin Wiartakusumah (Institut Teknologi Nasional Bandung – Indonesia)
30	Task Assessment as Learning Tools to Meet Actual Architectural Issues	Shirley Wahadamaputera, Bambang Subekti, Theresia Pynkyawati (Institut Teknologi Nasional Bandung – Indonesia)
31	Application of "Stilasi" Techniques in Motif Various as a Method for Improving Creative Ability of Small Medium Enterprise (SME) of Footwear Industry	Arif Waskito and Agus Mulyana (Institut Teknologi Nasional Bandung – Indonesia)
28	Exploration of Plastic PVC Material for Jewelry Accessories	Dedy Ismail (Institut Teknologi Nasional Bandung – Indonesia)
29	Invention of Glass Bottle Waste Musical Instrument	Agung Pramudya Wijaya (Institut Teknologi Nasional Bandung – Indonesia)

<b>Parallel Session 2 (Wednesday, October 11, 2017)</b>		
Room 1	Producing and storing renewable electricity; Off-grid & rural energy access; Renewable energy grid integration & distribution: utilities of the future	
Time: 10:30 – 11:45		
Paper ID	Paper Title	Author & Affiliation
23	Hybrid System Solution for Off Grid and Rural Energy Access in Indonesia	Soeripno Martosaputro, Eduardus Jonathan (Indonesia Wind Energy Society - Indonesia)
17	Storage-Integrated Hybrid Renewable Energy Optimization to Reduce Intermittency in Weak Grids	Bimo Kusumo (Jakarta – Indonesia)
36	Fixed Bed Pyrolysis of Biomass Solid Wastes for Bio-fuels in Brunei Darussalam	Mohammad Nurul Islam, Mohamed Hairol Ali, Abdul Hafiz Said, Farid Nasir Ani

		(Universiti Teknologi Brunai – Brunai Darussalam)
43	Characteristic of Taperless Blade Wind Turbine	Muhammad Haekal, Dani Rusirawan (Institut Teknologi Nasional Bandung – Indonesia)
13	Off-grid Renewable Energy Program for Sustainable Rural Electrification	Ilyas Taufiqurrohman (The Australian National University – Australia)

Room 2	From laboratory to the real world renewable energy system; Environmental Technologies; Other Relevant Topics	
Time: 10:30 – 11:45		
Paper ID	Paper Title	Author & Affiliation
3	The Development of Investment Casting Technology for the Manufacture of Import Substitution Casting Products by Using of Local Raw Materials	Hafid, T. Taryaman, S.B. Pratomo (Metal Industries Development Centre (MIDC) - Ministry of Industry Indonesia – Indonesia)
64	Experimental investigation on combustion and emission of CI engine fueled with gasoline-biodiesel blends in early injection HCCI mode	Yanuandri Putrasari and Ocktaeck Lim (School of Mechanical Engineering, University of Ulsan, South Korea)
44	Stress And Displacement Analysis On Communal Horizontal Composter 40 Kg Capacity Using Solidwork	Noviyanti Nugraha, M Azis Mahardika and Alfie Pratama (Institut Teknologi Nasional Bandung – Indonesia)
35	Utilization of Bottle Plastic Waste at Community Level through Gamification Method	Rio Korio Utoro (Institut Teknologi Nasional Bandung – Indonesia)
48	Building a Decision Support System (DSS) for Banking Credit Application using Simple Additive Weighting (SAW) Method (Case Study: BPR Syariah)	Budi Raharjo, Mira Musrini and Willy Edya Sukma (Institut Teknologi Nasional Bandung – Indonesia)

Room 3	Automation and measurement technologies	
Time: 10:30 – 11:45		
Paper ID	Paper Title	Author & Affiliation
37	Alumni Face Recognition Using Fisherface Method	Gelar Aulia Prima Putra, Asep Nana Hermana and Irma Amelia Dewi Miftahuddin (Institut Teknologi Nasional Bandung – Indonesia)

38	Implementation of Body Surface Area for Counting Human Weight Using Image Processing	Siti Nurlaela, Muhammad Ichwan and Yusuf Miftahuddin (Institut Teknologi Nasional Bandung – Indonesia)
40	Automated Sorting System of Tomatoes Based on Ripeness Level and Size Using Fuzzy Model	Gian Permana, Muhammad Ichwan and Dina Budhi Utami (Institut Teknologi Nasional Bandung – Indonesia)
41	Recognition the Ripeness Level of Tomatoes Based on Color Image in Case Study Development of Automated Sorting System	Mochamad Angga Anggriawan, Muhammad Ichwan and Dina Budhi Utami (Institut Teknologi Nasional Bandung – Indonesia)
42	Recognition of Tomatoes Size Based on Digital Image in Case Study Development of Automated Sorting System	Sandha Rineka Putra, Muhammad Ichwan and Dina Budhi Utami Miftahuddin (Institut Teknologi Nasional Bandung – Indonesia)
74	Implementation of Vigenere Cipher with Euler Key Generator to Secure Text Document	Mira Musrini, Budi Rahardjo, Ramdani Krisnadi (Institut Teknologi Nasional Bandung – Indonesia)

**Parallel Session 3 (Wednesday, October 11, 2017)**

<b>Parallel Session 3 (Wednesday, October 11, 2017)</b>		
Room 1	Electric power and energy efficiencies; Renewable energy grid integration & distribution: utilities of the future; Automation and measurement technologies	
Time: 13:00 – 14:15		
Paper ID	Paper Title	Author & Affiliation
13	Optimal Scheduling for Dynamic Loads Using Direct Method	Hermagasantos Zein, Jangkung Raharjo, Yusra Sabri (Politeknik Bandung – Indonesia)
46	Development Control System Of Parallel Inverter by Reconfiguration PV Circuit Using Fuzzy Logic on Islanding Microgrid	Hartono Budi Santoso (Politeknik Bandung – Indonesia)
62	Development of a Drowsiness Detector based on the Duration of Eye closure using A Low-Cost EMG	Dian Artanto, Ign. Deradjad Pranowo, M. Prayadi Sulistyanto, Ervan Erry Pramesta (Politeknik Mekatronika Sanata Dharma, Yogyakarta – Indonesia)

11	Effect of Air Gap on Armature Voltage on Axial Flux Permanent-Magnet Generator ac by Using NdFeB 53	Asep Andang, Nurul Hiron (Siliwangi University Tasikmalaya – Indonesia)
69	Implementation of Digital Communication System on DSK TMS320C6713	Lita Lidyawati, Arsyad D. Darlis, Dwi Aryanta, Lucia Jambola and Feri Kurnia (Institut Teknologi Nasional Bandung – Indonesia)

Room 2	From laboratory to the real world renewable energy system; Producing and storing renewable electricity	
Time: 13:00 – 14:15		
Paper ID	Paper Title	Author & Affiliation
63	A Study on the Spray Characteristics of an 800 kPa CNG Port Injector	Sakda Thongchai and Ocktaeck Lim (University of Ulsan – South Korea and Indonesian Institute of Sciences (LIPI) – Indonesia)
67	Simulation of Water Flow Distribution on Low Head Picohydro Capacity 2 kW	Agung M. Werdhana and , Agus Hermanto (Institut Teknologi Nasional Bandung – Indonesia)
61	Investigation of Flow Field Modeling on Gasoline Engine of Motor Cycles	Bambang Wahono, Yanuandri Putrasari and Ocktaeck Lim (University of Ulsan – South Korea and Indonesian Institute of Sciences (LIPI) – Indonesia)
66	Influence of Configuration Steam Ejector – LRVP on Geothermal Power Plant 55 MW Capacity	Fajri Jayakelana and Agus Hermanto (Institut Teknologi Nasional Bandung – Indonesia)
72	Study of Hybrid "Photovoltaic and Wind Turbine" System Using Homer Program for Regional Cidahu Central - District Kuningan	Agus Adi Nursalim and Dani Rusirawan (Institut Teknologi Nasional Bandung – Indonesia)

Room 3	Reliability of renewable energy system; Environmental Technologies	
Time: 13:00 – 14:15		
Paper ID	Paper Title	Author & Affiliation
71	Determining Mean Time between Failure (MTBF) on Machinery using Reliability Analysis	Nuha Desi Anggraeni (Institut Teknologi Nasional Bandung)
53	Analysis of Reliability Pressure Safety Valve On Separator Using Weibull Distribution Method (Satria)	Satria Azis, Faris Shiddiq, Dani Rusirawan, Ahmad Taufik Joenoes (Institut

		Teknologi Nasional Bandung)
18	Investigation of Land Cover Classification in Oil Palm Area Based on ALOS PALSAR 2 Image	Endyana Amin and Soni Darmawan (Institut Teknologi Nasional Bandung)
65	Evolutionary Design of Melamine – Urea Formaldehyde Resin towards Lower Formaldehyde Emission for Medium Density Fiberboard Application	Dicky Dermawan, Said Afiff and Eko Setio Wibowo (Institut Teknologi Nasional Bandung – Indonesia and PT Dover Chemical, Merak – Indonesia)
73	Comparative Performance of Several Fixed Bed Dryer Arrangement for Seaweed Product Drying	Salafuddin, Daren Ferreiro, Ronny Kurniawan, Nayl Diab (Institut Teknologi Nasional Bandung – Indonesia)