

Conference Program of ISMAC 2017

August 23-25, 2017

Day 1 : Wednesday 23 August 2017

Room	Yodia Room	Second Floor
13.30 – 16.00	Registration	

Day 2 : Thursday 24 August 2017

Room	Yodia Room	Second Floor
08.00 – 16.00	Registration	
08.45 - 09.00	Opening Ceremony	
09.00 - 09.45	Keynote Speech I : <i>Current Business Status of Japan's Telecommunications Operators</i> <i>by Prof. Kazuyoshi Sawada, Audit & Supervisory Board Member, WebMoney Corporation, Japan</i>	
09.45 - 10.30	Keynote Speech II : <i>Complex Network; Case Study on ECG-Based Feature Extraction for Epileptic Seizure Detection, and EMG-Based Feature Extraction for Myopathy and Neuropathy Detection</i> <i>by Prof. Kosin Chamnongthai, King Mongkut's University of Technology Thonburi (KMUTT), Thailand</i>	
10.30 - 10.40	Coffee/Tea Break	

Session Room	YODIA	SAI	PRADU
Time	THM1: Image processing and its application	Committee of Research and Development Institute Meeting	THM2: Communication circuit design
10.40 – 11.00	THM1-1		THM2-1
11.00 – 11.20	THM1-2		THM2-2
11.20 – 11.40	THM1-3		THM2-3
11.40 – 12.00	THM1-4		

12.00 - 13.00	Lunch	
Room	Yodia Room	Second Floor
13.00 – 13.45	Keynote Speech III : <i>Innovative Sensor Technology Developed for Thai Industry</i> <i>by Prof. Prayoot Akkaraekthalin, King Mongkut's University of Technology North Bangkok (KMUTNB), Thailand</i>	

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Day 2 : Thursday 24 August 2017

Room	Yodia Room	Second Floor	
13.45 – 14.30	Keynote Speech IV : <i>Global Navigation Satellite System (GNSS) Research for Aviation and Atmospheric Study</i> <i>by Prof. Pornchai Supnithi, King Mongkut's Institute of Technology Ladkrabang (KMITL), Thailand</i>		
14.30 - 14.40	Coffee/Tea Break		
Room	Yodia Room	Second Floor	
14.40 – 15.20	Thai Sanko Co., LTD., present about Technology and Product.		
15.20 – 16.00	Meiden Electric (Thailand) LTD., present about Technology and Product.		
Session Room	YODIA	SAI	PRADU
Time	THA1: Biomedical signal processing and applications	THA2: Wireless Networking and Related Technologies for Constructing the Research Environment	THA3: Wireless communication systems I
16.00 – 16.20	THA1-1	THA2-1	THA3-1
16.20 – 16.40	THA1-2	THA2-2	THA3-2
16.40 – 17.00	THA1-3	THA2-3	THA3-3
17.00 – 17.20	THA1-4	THA4-4	THA3-4
17.20 – 17.40	THA1-5	THA5-5	
17.40 – 18.00	THA1-6		
18.30 - 21.30	Banquet		

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Day 3 : Friday 25 August 2017

Room	Yodia Room	Second Floor
08.00 – 13.00	Registration	
Session Room	YODIA	SAI
Time	FRM1: Signal processing and applications	FRM2: Optimization and Engineering Management
09.20 – 09.40	FRM1-1	FRM2-1
09.40 – 10.00	FRM1-2	FRM2-2
10.00 – 10.20	FRM1-3	FRM2-3
10.20 – 10.30	Coffee/Tea Break	
10.30 – 10.50	FRM1-4	FRM2-4
10.50 – 11.10	FRM1-5	FRM2-5
11.10 – 11.30		FRM2-6
11.30 - 13.00	Lunch	
Session Room	YODIA	PRADU
Time	FRA1: Innovation and business engineering	FRA2: Electrical power systems and applications
13.00 – 13.20	FRA1-1	FRA2-1
13.20 – 13.40	FRA1-2	FRA2-2
13.40 – 14.00	FRA1-3	FRA2-3
14.00 – 14.20	FRA1-4	
14.20 – 14.40	FRA1-5	
14.40 – 15.00	Coffee/Tea Break	

Keynote Speaker I : Prof. Kazuyoshi Sawada

Topic: Current Business Status of Japan's Telecommunications Operators.

Keynote Speaker II : Prof. Kosin Chamnongthai

Topic: Complex Network; Case Study on ECG-Based Feature Extraction for Epileptic Seizure Detection, and EMG-Based Feature Extraction for Myopathy and Neuropathy Detection.

Keynote Speaker III : Prof. Prayoot Akkaraekthalin

Topic: Innovative Sensor Technology Developed for Thai Industry.

Keynote Speaker IV : Prof. Pornchai Supnithi

Topic: Global Navigation Satellite System (GNSS) Research for Aviation and Atmospheric Study.

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THM1: Image processing and its application

THM1-1	An Evaluation of Foreground Extraction Using Background Subtraction and GrabCut
THM1-2	PDE-based image upscaling that suppresses coding artifacts
THM1-3	Color Image Enhancement in HSI Color Space with Saturation Correction
THM1-4	Color Image Enhancement Method with Variable Enhancement Degree

THM2: Communication circuit design

THM2-1	Low Power Hybrid Memristor-CMOS Full Adder Circuit using NAND gate
THM2-2	Quaternary CMOS Schmitt Trigger Circuit Design
THM2-3	A 4-Quadrant Analog Multiplier/Divider Using CCTA-based Voltage to Current Converter

THA1: Biomedical signal processing and applications

THA1-1	Ground Penetrating Radar (GPR) by using Finite Element Method
THA1-2	Solving for Complex Permittivity of Biomedical Tissue from Open-Ended Probe Measurement
THA1-3	Investigation of Lumbosacral Orthotics's Effect in Bending Posture
THA1-4	Development of Phantom Model for the Dielectric Property Measurement
THA1-5	Through the wall radar Simulation of human Dielectric scattering
THA1-6	Dielectric Properties of Tissue Analysis for Breast Cancer Detection

THA2: Wireless Networking and Related Technologies for Constructing the Research Environment

- THA2-1 A Circuit Design for IEEE 802.11ac by ASIC-FPGA Co-Design
- THA2-2 A Study on Human Motion Learning Support System with Augmented Reality Enabling Wireless Technology
- THA2-3 Low-Cost Adaptive Block-Based Lossless Compression Method for Memory Bandwidth Reduction
- THA2-4 A Virtual Collaboration Environment on the Cloud Computing
- THA2-5 Enumeration of Coherent Signals and Their Independent Components Based on MDL Principle

THA3: Wireless communication systems I

- THA3-1 EVM analysis for DVB-T2 in Thailand
- THA3-2 On the Uplink Blind Equalization in a Massive MU-MIMO Systems to Avoid Pilot Contamination
- THA3-3 Performance of Uplink Channel Estimation in a Massive MU-MIMO System
- THA3-4 Fabric Antenna for Wireless Body Area Network at 2.4 GHz

FRM1: Signal processing and applications

- FRM1-1 Pre-Inverse active noise control with auxiliary noise power scheduling
- FRM1-2 Noise robust phrase speech recognition for similar words
- FRM1-3 Robust Speech Recognition Using Low-pass Processing RSA in the Frequency domain
- FRM1-4 Tunable Single-Input Multi-Outputs Biquadratic Digital Filter
- FRM1-5 Digital Compensation Filter for Analog Reconstruction Filter Effect in DSP System using Least Square Technique

FRM2: Optimization and Engineering Management

- FRM2-1 Accuracy Improvement in Two-Dimensional Coordinate Mapping: A Parallel Robot for Engineering Laboratory
- FRM2-2 Application of Firefly Algorithm for Solving Travelling Salesman Problem
- FRM2-3 Environmental Analysis of a Hypothetical Online Shopping System in Thailand
- FRM2-4 Epidemic Convergence Detection in Decentralized Network Systems towards Industry 4.0
- FRM2-5 Parametric Study on Mesh Size Optimization in FEM for Elastic Materials under Tensile Loading Condition
- FRM2-6 Performance Investigation of Wire Electrical Discharge Machining for Cobalt Chromium

FRM3: Wireless communication systems II

- FRM3-1 Variations of bottom side thickness parameters at the northern and the southern of EIA crests during solar maximum of 24th solar cycle
- FRM3-2 Flat Antenna using Wide Aperture with Strips for WLAN Applications
- FRM3-3 Planar Antenna with Modified FSS Superstrate and EBG Structure
- FRM3-4 Investigated of DOCSIS Measurement Results for Performance Improvement

FRA1: Innovation and business engineering

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| FRA1-1 | Feasibility Analysis of Investment Cost for LED Driver Production in Thailand Industry |
| FRA1-2 | A Study of Opinion Summarization in Underground System Project at Silpakorn University |
| FRA1-3 | Feasibility Analysis of Waste Management at Silpakorn University |
| FRA1-4 | Image Processing Technique for Quality Control in Industrial Production |
| FRA1-5 | Basic calibration for underwater sound recording apparatus |

FRA2: Electrical power systems and applications

Session Chair:

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| FRA2-1 | Economic of Solar Photovoltaic for Rural Electrification in Agriculture Area-based in Ratchaburi Province, Thailand |
| FRA2-2 | The Effect of Magnetic field due to Lightning Strokes current for the Electronic devices |
| FRA2-3 | Overvoltage Effects on Mesh-Distributed and Edge-Distributed Rods in Ground Grid Systems of High Voltage Substations |