

# International Conference on **Communication**

Day 1: March 19, 2014

CM1: Microwaves and Wireless Communication			
Chair: Suramate Chalermwisutkul, King Mongkut's University of Technology North Bangkok, Thailand			
Room: Venda 2, 15:20 – 17:20			
Time	Paper ID	Title	Authors
15:20-15:40	0016	Hybrid Location Awareness in Cognitive Radio System	Tawan Panichcharoenrat and Wilaiporn Lee, King Mongkut's University of Technology North Bangkok, Thailand
15:40-16:00	CM-INV004	Gain Improvement of MSAs Array by Using Curved Woodpile EBG and U-shaped Reflector	Rangsan Wongsan, Piyaporn Krachodnok and Paowphattra Kampikul, Suranaree University of Technology, Thailand
16:00-16:20	CM-INV011	Controlling the Resonances of Indefinite Materials for Maximizing Efficiency in Wireless Power Transfer	Yan Zhao and Ekachai Leelarasmee, Chulalongkorn University, Thailand
16:20-16:40	CM-INV002	An Improvement of Wilkinson Power Divider with SITLs Compensated Microstrip Bandstop Filter	Ravee Phromloungsri, Udonthani Rajabhat University, Thailand
16:40-17:00	0152	Adaptive Multi-Channel CTP for Wireless Sensor Networks	Aitthiwat Phokaew, Chayaphon Tanwongvarl and Soamsiri Chantaraskul, King Mongkut's University of Technology North Bangkok, Thailand
17:00-17:20	0165	FPGA-based Hardware/Software Implementation for MIMO Wireless Communications	Korkeart Boonyi <sup>1</sup> , Jukkrit Tagapanij <sup>1</sup> and Akkarat Boonpoonga <sup>2</sup> , <sup>1</sup> Mahanakorn University of Technology, Thailand, <sup>2</sup> King Mongkut's University of Technology North Bangkok, Thailand

**Day 2: March 20, 2014**

<b>CM2: Optical Communication, Antennas and Propagation</b>			
<b>Chair: Chuwong Pongchareonpanich, King Mongkut's Institute of Technology Ladkrabang, Thailand</b>			
<b>Room: Venda 1, 8:40 – 10:40</b>			
<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
8:40-9:00	0091	Optimal sizing of QAM constellation for indoor optical wireless OFDM transmissions without bandwidth limitation	Poompat Saengudomlert <sup>1</sup> , Jariya Panta <sup>2</sup> and Keattisak Sripimanwat <sup>3</sup> , <sup>1</sup> Bangkok University, Thailand, <sup>2</sup> Asian Institute of Technology, Thailand, <sup>3</sup> National Electronics and Computer Technology Center, Thailand
9:00-9:20	CM-INV005	Localized modes in a nonlinear medium with a PT symmetric dipole	Thawatchai Mayteevarunyoo <sup>1</sup> , Athikom Reoksabutr <sup>1</sup> and Boris A. Malomed <sup>2</sup> , <sup>1</sup> Mahanokorn University of Technology, Thailand, <sup>2</sup> Tel Aviv University, Israel
9:20-9:40	0032	Scattering Parameter Analysis of Different Transparent Conductive Thin Films Element on Polycrystalline Silicon Cell	Arshad Selamat <sup>1</sup> , Norbahiah Misran <sup>1</sup> , Mohammad Tariqul Islam <sup>2</sup> and Mohd Fais Mansor <sup>3</sup> , <sup>1</sup> Universiti Kebangsaan Malaysia, <sup>2</sup> Universiti Kebangsaan Malaysia and <sup>3</sup> National Metrology Laboratory, Malaysia
9:40-10:00	0095	Design of a dielectric hole plasmonic nanoantenna with broad wavelength range	Yuan-Fong Chau and Chien Hsin, University of Science and Technology, Taiwan
10:00-10:20	0062	A Comparative Study of Dielectric Materials as Nano-plasmonic Couplers	Md. Ghulam Saber and Rakibul Hasan Sagor, Islamic University of Technology, Bangladesh
10:20-10:40	0030	Linear Analog Current Modulation on Light Emitting Diodes in Optical Wireless Communications	Muhammad Sohail <sup>1</sup> , Karel L Sterckx <sup>2</sup> and Poompat Saengudomlert <sup>2</sup> , <sup>1</sup> Asian Institute of Technology, Thailand, <sup>2</sup> Bangkok University, Thailand

**CM3: Microwaves, Antennas and Propagation****Chair: Nattakan Puttarak, King Mongkut's Institute of Technology Ladkrabang, Thailand****Room: Venda 2, 13:30 – 15:10**

<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
13:30-13:50	CM-INV003	Numerical Simulations of A Domestic Microwave Oven Used to Eradicate Pests in Milled Rice	Apichan Kanjanavapastit, Udon Thani Rajabhat University, Thailand
13:50-14:10	CM-INV010	DVB-T2 Field Trial and Optimized Parameters in Thailand	Anurat Ingun, National Broadcasting and Telecommunication Commission, Thailand
14:10-14:30	CM-INV006	Tag Antenna Using Printed Dipole with H-Slot for UHF RFID Applications	Teerapol Phatarachaisakul, Tajchai Pumpoung, Chuwong Phongcharoenpanich and Sompol Kosulvit, King Mongkut's Institute of Technology Ladkrabang, Thailand
14:30-14:50	CM-INV007	A Low-Cost Microwave Heating System with Coaxial Applicator for Experimental Use	Suwicha Jantori, Nutdechatorn Puangngernmak and Suramate Chalermwisutkul, King Mongkut's University of Technology North Bangkok, Thailand
14:50-15:10	CM-INV009	Study on Surface Wave Contribution on Material Coated PEC with Discontinuity	Montree Saowadee and Titipong Lertwiriaprapa, King Mongkut's University of Technology North Bangkok, Thailand

**CM-SS1: Electromagnetic Applications****Chair: Rardchawadee Silapun, King Mongkut's University of Technology Thonburi, Thailand****Room : Venda 2, 15:50 – 17:50**

<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
15:50-16:10	0169	Radar Target Identification Using Cauchy Method	Nattawat Chantasen <sup>1</sup> , Akkarat Boonpoonga <sup>1</sup> and Santana Burintramart <sup>2</sup> , <sup>1</sup> King Mongkut's University of Technology North Bangkok, , Thailand, <sup>2</sup> Thailand Military Research and Development Center, Thailand
16:10-16:30	CM-INV001	Analysis of the Far-field Radiation of a Hertzian Dipole Embedded in EBG Structures of Periodic Lossy Multilayers Using the Equivalent BCITL Model	Suppakit Kawdungta <sup>1</sup> and Danai Torrungrueng <sup>2</sup> , <sup>1</sup> Rajamangala University of Technology Lanna, Thailand, <sup>2</sup> Asian University, Thailand
16:30-16:50	0161	Investigation of Mounting Effect for Single Layer Dual Mode Antenna for UHF RFID Tag using Open Stubs	Denchai Worasawate, Sittikit Pechsuwan, Sawanee Aimsaard and Kittapas Pawiang, Kasetsart University, Thailand
16:50-17:10	0173	Study of Localized Surface Plasmon Properties on Metallic Nano-Rods Towards Optical Antennas	Komkrit Choosak <sup>1</sup> , Rardchawadee Silapunt <sup>1</sup> and Waleed S. Mohammed <sup>2</sup> , <sup>1</sup> University of Technology North Bangkok, Thailand <sup>2</sup> , Bangkok University, Thailand
17:10-17:30	0170	Analysis of Object Buried in Soil by using Matrix Pencil Method	Cheepchanok Yochanang <sup>1</sup> , Akkarat Boonpoonga <sup>1</sup> and Santana Burintramart <sup>2</sup> , <sup>1</sup> King Mongkut's University of Technology North Bangkok, Thailand, <sup>2</sup> Military Research and Development Center, Thailand
17:30-17:50	0172	Performance Evaluation of Target Identification Using Matrix Pencil Method Operation in Different Frequency Range	Lakkhana Bannawat <sup>1</sup> , Akkarat Boonpoonga <sup>1</sup> and Santana Burintramart <sup>2</sup> , <sup>1</sup> King Mongkut's University of Technology North Bangkok, Thailand, <sup>2</sup> Military Research and Development Center, Thailand

**Day 3: March 21, 2014**

<b>CM-SS2: Smart Technology in Campus Electric Vehicle System</b>			
<b>Chair: Settha Tangkawanit, Naresuan University, Thailand</b>			
<b>Room: Venda 2, 8:40 – 10:00</b>			
<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
8:40-9:00	0075	An improvement of Electric Vehicle Data Updating Time using Fuzzy Logic	Settha Tangkawanit, Krisana Wataniyanon and Surachet Kanprachar, Naresuan University, Thailand
9:00-9:20	0114	Security Analysis and Improvement of NU-EV Tracking and Monitoring System	Panupong Sornkhom and Settha Tangkawanit, Naresuan University, Thailand
9:20-9:40	0120	Computer Vision Approach for Detection and Counting of Motorcycle Riders in University Campus	Rattapoom Waranusast, Vasan Timtong, Nannaphat Bundon and Chainarong Tangnoi, Naresuan University, Thailand
9:40-10:00	0132	Electric Vehicle Tracking and Notification Application for Smart Phones	Settha Tangkawanit, Chakkrit Termrittikun and Surachet Kanprachar, Naresuan University, Thailand

**CM4: Communication Theory and Channel Coding****Chair: Phisan Kaewprapha, Thammasat University, Thailand****Room: Lotus, 8:40 – 10:40**

<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
8:40-9:00	0145	Distributive Wireless Network Resource Allocation with Nash Equilibrium and Internal-Regret-Learning of Non-stationary Actions	Grit Monrat <sup>1</sup> , Wuttipong Kumwilaisak <sup>1</sup> and Poopat Saengudomlert <sup>2</sup> , <sup>1</sup> King Mongkut's University of Technology Thonburi, Thailand, <sup>2</sup> Bangkok University, Thailand
9:00-9:20	CM-INV008	Recent Advances in Communication Technologies for Smart Grid Application: A Review	Chaiyod Pirak, King Mongkut's University of Technology North Bangkok, Thailand
9:20-9:40	CM-INV012	PEG-Like Algorithm for LDPC Codes	Gan Srirutchataboon <sup>1</sup> , Ambar Bajpai <sup>1</sup> , Lunchakorn Wuttisittikulij <sup>1</sup> , and Piya kovintavewat <sup>2</sup> , <sup>1</sup> Chulalongkorn University, Thailand, <sup>2</sup> Nakhon Pathom Rajabhat University, Thailand
9:40-10:00	0021	Outage Probability of MRC Diversity for Arbitrary Parameters in Nakagami Fading	Narongrit Mekloi, Rajamangala University of Technology Krungthep, Thailand
10:00-10:20	0107	Low-Density MDS Array Codes Based on Rigid Graph Structure	Nattakan Puttarak <sup>1</sup> and Phisan Kaewprapha <sup>2</sup> , <sup>1</sup> King Mongkut's Institute of Technology Ladkrabang, Thailand, <sup>2</sup> Thammasat University, Thailand
10:20-10:40	0064	Decoding Matrix for Two Dimensional Convolutional Codes	Pramote Jangisarakul and Chalie Charoenlarnopparut, Thammasat University, Thailand