

Program for 2014 IEEE 2nd International Symposium on Telecommunication Technologies

Time	Ballroom 1	Ballroom 2	Kenchana 2	Kenchana 3
Monday, November 24				
08:30 AM		R1: Registration		
09:00 AM		T1 - 1: Tutorial 1: Mobile Communication Evolution from LTE Advanced Towards 5G	T2 - 1: Tutorial 2: Application of InSAR for Earth Surface Deformation Disaster Analysis	T3 - 1: Tutorial 3: Power Efficiency in Broadband Communication Systems
10:30 AM		BR1: Tea Break		
11:00 AM		T1 - 2: Tutorial 1: Mobile Communication Evolution from LTE Advanced Towards 5G	T2 -2: Tutorial 2: Application of InSAR for Earth Surface Deformation Disaster Analysis	T3 -2: Tutorial 3: Power Efficiency in Broadband Communication Systems
12:30 PM		LD1: Lunch		
02:00 PM		T4 - 1: Tutorial 4: Antennas for Small MIMO Terminals	T5 - 1: Tutorial 5: Opportunities, Challenges and Future Directions in TV White Space	T6 - 1: Tutorial 6: MikroTik: Wireless Network Application
03:30 PM		BR2: Tea Break		
04:00 PM		T4 -2: Tutorial 4: Antennas for Small MIMO Terminals	T5 -2: Tutorial 5: Opportunities, Challenges and Future Directions in TV White Space	T6 -2: Tutorial 6: MikroTik: Wireless Network Application
05:30 PM		D1-E: End of Day 1		
Tuesday, November 25				
07:30 AM		D2-R: Registration		
08:30 AM		S1-1: Session 1-1: LTE/LTE-A	Session 1-2: Session 1-2: Antenna System & Design 1	S1-3: Session 1 - 3 : Ad Hoc and Sensor Networking
10:00 AM		BR3: Tea Break		
10:15 AM	OP-1: Opening Ceremony - Welcoming Remarks			
10:30 AM	OC2: Opening Ceremony - Welcoming Remarks			
11:00 AM	KN-1: Keynote Address 1: Development of Synthetic Aperture Radar onboard UAV and Microsatellite			
11:45 AM	KN-2: Keynote Address 2: 5G Evolution and Candidate			

Technologies

12:30 PM	LD2: Lunch		
02:00 PM	IN-1: <i>[Invited Talk]- GIRN: Malaysian Government Emergency Communication Infrastructure</i>		
02:30 PM	IN-2: <i>[Invited Talk] - Emergency Communication Infra in Department of Irrigation and Drainage Malaysia</i>	S2-2: <i>Session 2-2 : Information & Coding Theory</i>	S2-1: <i>Session 2-1 : Cognitive Radio Network</i>
03:00 PM	S2-3: <i>Special Track 1 : Emergency Communications for Disaster Management 1</i>		
03:45 PM	BR4: Tea Break		
04:00 PM	IN-3: <i>[Invited Talk] Application of high-capacity E-band wireless links as disaster countermeasures</i>		
04:30 PM	S3-3: <i>Session 3-3: Special Track on Disaster Management 2</i>	S3-2: <i>Session 3-2 : Telecommunication Network</i>	S3-1: <i>Session 3-1 : Antenna Design & Applications</i>
08:00 PM	Dinner: Conference Dinner		
10:00 PM	D2-E: End of Day 2		

Wednesday, November 26

08:00 AM	D3-R: Registration		
08:30 AM	S4-3: <i>Session 4-3: Adhoc and Wireless Sensor Networking 2</i>	S4-2: <i>Session 4-2 (Optical Network and System)</i>	S4-1: <i>Session 4-1: WiMAX, LTE, WMAN and Other Emerging Broadband Wireless Network</i>
10:00 AM	BR5: Tea Break		
10:15 AM	KN3: <i>Keynote Address 3: Geospatial Information for Emergency Communications in Disaster Management</i>		
11:00 AM	KN4: <i>Keynote Address 4: Smartgrid Communications</i>		
11:45 AM	IP-1: <i>Industry Forum: Internet of Things</i>		
12:45 PM	LD3: Lunch		
02:00 PM	S5-3: <i>Special Track 2: Smart Grid and Utility Communication</i>	S5-2: <i>Session 5-2: Antenna & Propagation</i>	S5-1: <i>Session 5-1: Wireless Communication System</i>
03:30 PM	BR6: Tea Break		
04:00 PM	D3-E: ISTT2014 Conference End		

Monday, November 24

8:30 AM - 9:00 AM**R1: Registration** 

Registration

9:00 AM - 10:30 AM**T1 - 1: Tutorial 1: Mobile Communication Evolution from LTE Advanced Towards 5G** **Prof. Tharek Abd Rahman (Universiti Teknologi Malaysia)**

Room: Ballroom 2

T2 - 1: Tutorial 2: Application of InSAR for Earth Surface Deformation Disaster Analysis 

Dr. Luhur Bayuaji, Universiti Malaysia Pahang

Room: Kenchana 2

T3 - 1: Tutorial 3: Power Efficiency in Broadband Communication Systems **Dr. Pooria Varahram, Universiti Putra Malaysia**

Room: Kenchana 3

Chair: Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

10:30 AM - 11:00 AM**BR1: Tea Break** **11:00 AM - 12:30 PM****T1 - 2: Tutorial 1: Mobile Communication Evolution from LTE Advanced Towards 5G** 

Continue

Prof. Tharek Abd Rahman, Universiti Teknologi Malaysia

Room: Ballroom 2

T2 -2: Tutorial 2: Application of InSAR for Earth Surface Deformation Disaster Analysis 

Continue

Dr. Luhur Bayuaji, Universiti Pahang Malaysia

Room: Kenchana 2

T3 -2: Tutorial 3: Power Efficiency in Broadband Communication Systems **Dr. Pooria Varahram, Universiti Putra Malaysia**

Room: Kenchana 3

12:30 PM - 2:00 PM**LD1: Lunch** 

Lunch

2:00 PM - 3:30 PM

T4 - 1: Tutorial 4: Antennas for Small MIMO Terminals 

Dr. Azremi Abdullah Al-Hadi, Universiti Malaysia Perlis

Room: Ballroom 2

T5 - 1: Tutorial 5: Opportunities, Challenges and Future Directions in TV White Space 

Room: Kenchana 2

T6 - 1: Tutorial 6: MikroTik: Wireless Network Application 

Dr. Mohd Faizal Jamlos, Universiti Malaysia Perlis

Room: Kenchana 3

Chair: Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

3:30 PM - 4:00 PM

BR2: Tea Break 

4:00 PM - 5:30 PM

T4 -2: Tutorial 4: Antennas for Small MIMO Terminals 

Continue

Dr. Azremi Abdullah Al-Hadi, Universiti Malaysia Perlis

Room: Ballroom 2

T5 -2: Tutorial 5: Opportunities, Challenges and Future Directions in TV White Space 

Dr. Rosdiadee Nordin, Universiti Kebangsaan Malaysia

Room: Kenchana 2

T6 -2: Tutorial 6: MikroTik: Wireless Network Application 

Dr. Mohd Faizal Jamlos, Universiti Malaysia Perlis

Room: Kenchana 3

5:30 PM - 6:00 PM

D1-E: End of Day 1 

Tuesday, November 25

7:30 AM - 8:30 AM

D2-R: Registration 

Registration

8:30 AM - 10:00 AM

S1-1: Session 1-1: LTE/LTE-A 

Room: Ballroom 2

Chair: Sieh Kiong Tiong (UNITEN, Malaysia)

Optimization of Hybrid Renewable Energy Power System for Urban LTE Base Station Deployment in Malaysia

Mohammed Alsharif, Rosdiadee Nordin and Mahamod Ismail (Universiti Kebangsaan Malaysia, Malaysia)

Investigation of Rate-Loss Due to Limited Feedback in LTE-Advanced Distributed Antenna Systems

Mehran Behjati (National University of Malaysia (UKM), Malaysia); Rosdiadee Nordin and Mahamod Ismail (Universiti Kebangsaan Malaysia, Malaysia)

Self-organizing Joint Sensing and Power Allocation (SJSPA) Scheme to Coordinate Cross-Tier Interference for LTE-A Heterogeneous Networks

Mohammad Kamrul Hasan and Ahmad Fadzil Ismail (International Islamic University Malaysia, Malaysia); Aisha-Hassan Abdulla (International Islamic University Malaysia, Malaysia); Shayla Islam, Khairayu Badron and Khaizuran Abdullah (International Islamic University Malaysia, Malaysia)

A Channel Quality Indicator (CQI) Prediction Scheme Using Feed Forward Neural Network (FF-NN) technique for MU-MIMO LTE System

Muntadher Qasim Abdulhasan (Universiti Putra Malaysia, Malaysia); Mustafa Ismael Salman (UPM, Malaysia); Chee Kyun Ng, Nor K. Noordin, Shaiful Jahari Hashim and Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

Low complexity MIMO Interleaved SC-FDMA receiver using MRC with iterative detection

Takamasa Takahashi and Yasunori Iwanami (Nagoya Institute of Technology, Japan)

S1-3: Session 1 - 3 : Ad Hoc and Sensor Networking 

Session 1 - 3

Room: **Kenchana 3**

Chair: Norazizah Mohd Aripin (Dept. of Electronics and Communication Engineerin, UNITEN, Malaysia)

A Study on Relationship, Effects and Interactions Between Power Level and Received Signal Strength of 2.45 GHz Active Integrated Radio Frequency Identification System for Real Time Monitoring utilizing Wireless Sensor Network Platform

Farhana Ahmad Poad (Universiti Tun Hussein Onn Malaysia & UTHM, Malaysia); Widad Ismail (Engineering Campus, Universiti Sains Malaysia, Malaysia)

The Impact of Clustering Algorithms on Routing in Wireless Sensor Networks

Azrina Abd Aziz (Universiti Teknologi Petronas, Malaysia); Ahmet Sekercioglu (Monash University, Australia)

E-D2CARP: A Joint Path and Spectrum Diversity Based Routing Protocol with an Optimized Path Selection for Cognitive Radio Ad Hoc Networks

Zamree Che-aron (International Islamic University Malaysia (IIUM), Malaysia); Aisha-Hassan Abdulla (International Islamic University Malaysia, Malaysia); Khaizuran Abdullah (International Islamic University Malaysia, Malaysia); Arafatur Rahman (University of Naples Federico II, Italy)

Energy-Aware Cluster Based Cooperative Spectrum Sensing for Cognitive Radio Sensor Networks

Ibrahim Mustapha (Universiti Putra Malaysia, Malaysia); Borhan Ali (ITMA-UPM, Malaysia); Aduwati Sali (UPM, Malaysia); Mohd. Fadlee A. Rasid (Universiti Putra Malaysia, Malaysia); Hafizal Mohamad (MIMOS Berhad, Malaysia)

Enhancement of PZT energy harvester power density using natural rubber

Linaturiani Muhamad (Uniten, Malaysia)

Energy Efficient Protocol in Wireless Sensor Networks Using Mobile Base Station

Vijayalakshmi Devasvaran, Nurul Mu'azzah Abdul Latiff and Nik Noordini Nik Abd Malik
(Universiti Teknologi Malaysia, Malaysia)

Session 1-2: Session 1-2: Antenna System & Design 1 

Session 1-2

Room: **Kenchana 2**

Chair: Azremi Abdullah Al-Hadi (University Malaysia Perlis, Malaysia)

Compact Ultra High Frequency (UHF) slotted array antenna

Nur Akmal Abd. Rahman and Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

Combination of Defected Ground Structure (DGS) and Dielectric rod in Normal Mode Helical Antenna Design

Nabilah Ripin (UiTM, Malaysia); Ahmad Asari Sulaiman and Nur Emileen Abd Rashid
(Universiti Teknologi MARA, Malaysia); Mohamad Fahmi Hussin (UiTM, Malaysia)

High Performance of Coaxial Feed UWB Antenna for Human Brain Microwave Imaging

Aminudin Jamlos (Advanced Communication Engineering (ACE) Centre, Malaysia); Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

Rectangular Spiral Microstrip Patch Antenna Integrated With LED For Wifi Application

Mohd Syafiq Amari (Antenna Research Centre (ARC), Microwave Technology Centre (MTC) & Universiti Teknologi MARA, Malaysia); Mohd Tarmizi Ali (Universiti Teknologi Mara, Malaysia); Suhaila Subahir (Universiti Teknologi MARA, Malaysia); Siti Norhidayah Kamarudin (UITM, Malaysia); Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

Investigation and Analysis a Carbon Nanotube Antenna Array for Wireless Applications

Abdulrahman Shueai Mohsen Alqadami (Advanced Communication Engineering Centre (ACE), University Malaysia Perlis (UniMAP), Malaysia); Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

Analysis of GPS Link Ionospheric Scintillation during Solar Maximum at UTeM, Malaysia

Emad F. Aon (University Teknikal Malaysia of Malacca, Tripoli University, Libya, Malaysia); Abdul Rani Othman (, Malaysia); Yih Hwa Ho (Universiti Teknikal Malaysia Melaka, Malaysia); Redhwan Q. Shaddad (Universiti Teknologi Malaysia (UTM) & Taiz University, Malaysia)

10:00 AM - 10:15 AM

BR3: Tea Break 

Tea Break

10:15 AM - 10:30 AM

OP-1: Opening Ceremony - Welcoming Remarks 

YB Noor Sabrina Mohd Noor, Kedah State Executive Councillor, Chairman of Kedah Science, Innovation, Information Technology, Communications and High-Technology Committee

Room: **Ballroom 1**

Chair: Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

YB Noor Sabrina Mohd Noor, Kedah State Executive Councillor, Chairman of Kedah Science, Innovation, Information Technology, Communications and High-Technology Committee

10:30 AM - 11:00 AM**OC2: Opening Ceremony - Welcoming Remarks** 

Y.B. Dato' Jailani Bin Johari, Deputy Minister of Communications and Multimedia, Malaysia

Room: Ballroom 1

Chair: Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

Y.B. Dato' Jailani Bin Johari, Deputy Minister of Communications and Multimedia, Malaysia

11:00 AM - 11:45 AM**KN-1: Keynote Address 1: Development of Synthetic Aperture Radar onboard UAV and Microsatellite** 

Prof. Josaphat Tetuko Sri Sumantyo, Chiba University, Japan

Room: Ballroom 1

Chair: Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

11:45 AM - 12:30 PM**KN-2: Keynote Address 2: 5G Evolution and Candidate Technologies** 

Dr. Rath Vannithamby, Intel Corporation, USA

Room: Ballroom 1

Chair: Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

12:30 PM - 2:00 PM**LD2: Lunch** 

Lunch

Lunch

2:00 PM - 2:30 PM**IN-1: [Invited Talk]- GIRN: Malaysian Government Emergency Communication Infrastructure** 

En Mahzan Yusof, Sapura Secured Technologies, MALAYSIA

En Mahzan Yusof, Sapura Secured Technologies, MALAYSIA

Room: Ballroom 2

2:00 PM - 3:30 PM**S2-1: Session 2-1 : Cognitive Radio Network** 

Room: Kenchana 3

Chair: Ahmad Asari Sulaiman (Universiti Teknologi MARA, Malaysia)

Spectrum Opportunity Forecasting for Energy Efficient Sensing in Cognitive Radio Networks

Simon D Barnes and Bodhaswar TJ Maharaj (University of Pretoria, South Africa); Attahiru S. Alfa (University of Manitoba, Canada)

Base Station Blossoming and Withering Technique for Heterogeneous Wireless Networks Using Fuzzy Logic

Aida Al-Samawi and Aduwati Sali (UPM, Malaysia); Nor K. Noordin, Mohamed Othman and Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

Rural Broadband Plan in India:A TVWS Scenario

Priyanka Sharma (International Institute of Information Technology, Hyderabad, India); Rama Garimella (IIIT Hyderabad, India)

A RSSI-based Rogue Access Point Detection Framework for Wi-Fi Hotspots

Nazrul Muhaimin Ahmad (Multimedia University, Malaysia); Mohd Faizal Abdollah and Robiah Yusof (Universiti Teknikal Malaysia Melaka, Malaysia); Anang Hudaya Muhamad Amin (MMU, Malaysia); Subarmaniam Kannan (Multimedia University, Malaysia)

On the Detection Performance of Cooperative Spectrum Sensing using Particle Swarm Optimization Algorithms

Tareq M. Shami (MMU, Malaysia); Ayman A. El-Saleh (University Multimedia (MMU), Malaysia); Aymen M. Kareem (MMU, Cyberjaya, Malaysia)

S2-2: Session 2-2 : Information & Coding Theory

Room: Kenchana 2

Chair: Sieh Kiong Tiong (UNITEN, Malaysia)

Low Complexity Technique Exploiting 2D Source Correlation using Single Parity Check Codes

Mohd Azri Mohd Izhar, Hazilah Mad Kaidi, Rudzidatul Dziauddin and Norulhusna Ahmad (Universiti Teknologi Malaysia, Malaysia)

ReLab: A Subtree Based Labeling Scheme For Efficient XML Query Processing

Samini Subramaniam (Multimedia University, Malaysia); Su-Cheng Haw (MMU, Malaysia); Soon Lay-Ki (Multimedia University, Malaysia)

ME Labeling: A Robust Hybrid Scheme for Dynamic Update in XML Databases

Samini Subramaniam (Multimedia University, Malaysia); Su-Cheng Haw (MMU, Malaysia)

Performance Analysis of MapReduce on OpenStack-based Hadoop Virtual Cluster

Nazrul Muhaimin Ahmad (Multimedia University, Malaysia); Anang Hudaya Muhamad Amin (MMU, Malaysia); Subarmaniam Kannan and Asrul Hadi Yaacob (Multimedia University, Malaysia)

Hep-2 Cell Images Fluorescence Intensity Classification To Determine Positivity Based On Neural Network

Hasyeme Nasir (Universiti Teknologi PETRONAS, Malaysia); Zazilah May (Universiti Teknologi Petronas, Malaysia); Nor Zaihar Yahaya (Universiti Teknologi PETRONAS, Malaysia)

Wireless Infrared Proximity Array Sensor for Three-Dimensional Surface Reconstruction

Siti Asmah Daud, Nasrul Humaimi Mahmood and Pei Ling Leow (Universiti Teknologi Malaysia, Malaysia)

2:30 PM - 3:00 PM

IN-2: [Invited Talk] - Emergency Communication Infra in Department of Irrigation and Drainage Malaysia

Dato' Ir. Hj. Mohd Nassir Bin Bidin, Pegarah, Bahagian Pengurusan Sumber Air dan Hidrologi, Jabatan Pengaliran dan Saliran, Malaysia

Dato' Ir. Hj. Mohd Nassir Bin Bidin, Pegarah, Bahagian Pengurusan Sumber Air dan Hidrologi, Jabatan Pengaliran dan Saliran, Malaysia

Room: Ballroom 2

Chair: Norashidah Din (Universiti Tenaga Nasional, Malaysia)

3:00 PM - 3:30 PM

S2-3: Special Track 1 : Emergency Communications for Disaster Management 1

Special Track 1 : Emergency Communications for Disaster Management 1

Room: Ballroom 2

Development of Historical Landslide Database in Malay Peninsula

Satoshi Murakami (Ibaraki University & Faculty of Engineering, Japan); Tomomi Nishigaya (Ibaraki University, Japan); Tay Lea Tien and Habibah Lateh (Universiti Sains Malaysia, Malaysia)

Landslide Hazard Mapping of Penang Island Using Dominant Factors

Tay Lea Tien, Mutasem Sh. Alkhasawneh, Umi Kalthum Ngah and Habibah Lateh (Universiti Sains Malaysia, Malaysia)

Integrated Flood Analysis System (IFAS) for Kelantan River Basin

Aminah Shakirah Jaafar (Universiti Tenaga Nasional, Malaysia)

3:45 PM - 4:00 PM

BR4: Tea Break

Tea Break

4:00 PM - 4:30 PM

IN-3: [Invited Talk] Application of high-capacity E-band wireless links as disaster countermeasures

Mr Choo Chee Leong, Fujitsu Telecommunications Asia Sdn Bhd

Mr Choo Chee Leong, Fujitsu Telecommunications Asia Sdn Bhd

Room: Ballroom 2

4:00 PM - 5:45 PM

S3-1: Session 3-1 : Antenna Design & Applications

Room: Kenchana 3

Chair: Mohd Fais Mansor (Universiti Kebangsaan Malaysia, Malaysia)

Performance of Ultra-Wideband Antenna in Different Mediums: Free Space vs. Water

Siti Zubaidah Aziz (UNIMAP, Malaysia); Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

Circular Polarized Phased Shift 90° MIMO Array Antenna for 5.8 GHz Application

Mohd Khairul Azhar Nayan and Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

Comparison of Indoor Propagation Models for Multi Floor Staircase at 900 MHz and 1800 MHz

Omar Abdul Aziz (Universiti Teknologi Malaysia, Malaysia); Tharek Abdul Rahman (Wireless Communication Centre, Malaysia)

Hybrid Carbon Nanotubes with Copper Radiator for 4x2 Array Antennas at 2.6 GHz

Wan Wan Muhamad, Wan Muhamad and Razali Ngah (Universiti Teknologi Malaysia, Malaysia); Faizal Jamlos (Universiti Malaysia Perlis, Malaysia); Aminudin Jamlos (Advanced Communication Engineering (ACE) Centre, Malaysia)

On the Capacity of the Underwater Acoustic Channel with Dominant Noise Sources

Mustafa A Kishk and Ahmed Alaa (Cairo University, Egypt)

UWB Microwave Imaging of the Lungs: A Review

Oluwatosin Babarinde and Faizal Jamlos (Universiti Malaysia Perlis, Malaysia); Nordin Ramli (MIMOS Berhad, Malaysia)

Initial Analysis On Dual Frequency Operation For Single Layer Reflectarray Antenna

Siti Hafizah Yusop (Universiti Kebangsaan Malaysia, Malaysia); Norbahiah Misran (University Kebangsaan Malaysia, Malaysia); Mohd Fais Mansor (Universiti Kebangsaan Malaysia, Malaysia); Mohammad Tariqul Islam (Universiti Kebangsaan Malaysia & Universiti Kebangsaan Malaysia, Malaysia); Maisarah Abu (Universiti Teknikal Malaysia Melaka, Malaysia)

S3-2: Session 3-2 : Telecommunication Network

Room: Kenchana 2

Chair: Mohd Azri Mohd Izhar (Universiti Teknologi Malaysia, Malaysia)

Enhanced Bandwidth Estimation Design based on probe-rate model for Multimedia Network

Pik Jian Low (TM Research & Development, Malaysia); Mohamad Yusoff Alias (Multimedia University & Academic Honorary Visitor at University of Manchester, Malaysia)

Performance Analysis of Real Time Media Application in OpenFlow Network

Sahrul Hilmi Ibrahim (TM R&D Sdn Bhd, Malaysia); Sevia Mahdaliza Idrus (Faculty Of Electrical Engineering & Universiti Teknologi Malaysia, Malaysia); Nadiatulhuda Zulkifli (Universiti Teknologi Malaysia, Malaysia)

Steps Toward the Design of Hybrid Metaheuristics for the Multi-Objective Frequency Assignment Problem in Broadcasting

Akram Bedoui, A. (University of Lorraine & TDF Company, France); Philippe Debreux (TDF, France); Lhassane Idoumghar (University of Haute Alsace, France); René Schott (LORIA, France); Thierry Schott (TDF, France)

Analysis of Internet service user audiences for network security problems

Andrei Sukhov (Samara State Aerospace University & Internet TV Ltd., Russia); Evgeny Sagatov (Samara State Aerospace University & Internet TV Ltd., Russia); Alexander Baskakov (Samara State Aerospace University, Russia)

Energy Aware Resource Coordination in Heterogeneous Networks

Ayad Atiyah Abdulkafi (Universiti Tenaga Nasional & MIMOS, Malaysia); Sieh Kiong Tiong (UNITEN, Malaysia); David Chieng (MIMOS & Wireless Cluster, Malaysia); Alvin Kee Nghoh Ting (MIMOS, Malaysia); Johnny Koh (Universiti Tenaga Nasional, Malaysia); Abdulaziz M. Ghaleb (Qatar Mobility Innovations Center (QMIC), Qatar)

Recommendations for Enhancement on Ground Communication System at ANGKASA, Malaysia for Space Missions

Sock Theng Ooi and Hamid Salim (National Space Agency, Malaysia)

Optimal Null Steering of Minimum Variance Distortionless Response Adaptive

Beamforming Using Particle Swarm Optimization and Gravitational Search Algorithm

Soodabeh Darzi (Universiti Kebangsaan Malaysia, Malaysia); Sieh Kiong Tiong (UNITEN, Malaysia); Mohammad Tariqul Islam (University Kebangsaan Malaysia, Malaysia); Mahamod Ismail and Salehin Kibria (Universiti Kebangsaan Malaysia, Malaysia)

4:30 PM - 5:30 PM**S3-3: Session 3-3: Special Track on Disaster Management 2** 

Room: Ballroom 2

Development of a Semi-Automated SAR Test-Bed

Zafri Baharuddin (Chiba University & Universiti Tenaga Nasional, Japan); Kyohei Suto and Josaphat Tetuko Sri Sumantyo (Chiba University, Japan); Hiroaki Kuze (Center for Environmental Remote Sensing, Chiba University, Japan); Tien Sze Lim, Kuo Shen Jason Yee, Wen Guey Cheaw and Voon Koo (Multimedia University, Malaysia)

Hazard mapping of Slope failures in Malay Peninsula by using a Historical map of Slope disaster

Satoshi Murakami (Ibaraki University & Faculty of Engineering, Japan); Tomomi Nishigaya (Ibaraki University, Japan)

Dynamic Resource Block for Base Station Grouping in Macro-diversity Systems for LTE Public Safety Networks

Rosdiadee Nordin and Mohammed Alsharif (Universiti Kebangsaan Malaysia, Malaysia); Graeme K Woodward (University of Canterbury, New Zealand)

Generating 1 Meter Contour from ASTER-GDEM for Monitoring landslide in Merapuh Area

Mohd Firdaus Md Alip and Rohayu Che Omar (Universiti Tenaga Nasional, Malaysia)

8:00 PM - 10:00 PM**Dinner: Conference Dinner** 

Conference Dinner

10:00 PM - 11:00 PM**D2-E: End of Day 2** 

End of Day 2

Wednesday, November 26**8:00 AM - 8:30 AM****D3-R: Registration** 

Registration

8:30 AM - 10:00 AM**S4-1: Session 4-1: WiMAX, LTE, WMAN and Other Emerging Broadband Wireless Network** 

Session 4-1

Room: **Kenchana 3**

Chair: Chee Kyun Ng (Universiti Putra Malaysia, Malaysia)

Two-Dimensional Burst Construction with QoS Assurance for OFDMA Mobile WiMAX System

Ali Mohammed Alsaahag (University Putra Malaysia, Malaysia); Hafizal Mohamad and Nordin Ramli (MIMOS Berhad, Malaysia); Borhan Ali (ITMA-UPM, Malaysia); Nor K. Noordin (Universiti Putra Malaysia, Malaysia)

Implementation of high performance Advanced Encryption Standard-128 for WiMAX Application on FPGA

Rafidah Ahmad (Universiti Sains Malaysia & Collaborative MicroElectronic Design Excellence Centre (CEDEC), Malaysia); Widad Ismail (Engineering Campus, Universiti Sains Malaysia, Malaysia)

Investigation of User Scheduling Schemes Under Different MIMO Transmission Modes for Carrier Aggregation in LTE-A

Ahmed A Ali Sabri, Rosdiadee Nordin, Mahamod Ismail and Huda Abdullah (Universiti Kebangsaan Malaysia, Malaysia)

A Throughput Analysis of Uplink Subframe Polling in IEEE 802.16j Network

Mohd Daud Alang Hassan, Habibah Hashim, Darmawaty Mohd Ali and Azlina Idris (Universiti Teknologi MARA, Malaysia)

Distributed Resource Allocation For Spatially Distributed Irregular Cells

Hashim Safdar (Universiti Teknologi Malaysia & IEEE Student Membership, Malaysia); Norsheila Fisal (Universiti Teknologi Malaysia & Faculty of Electrical Engineering, Malaysia); Rahat Ullah (Universiti Teknologi Malaysia (UTM), Malaysia)

S4-2: Session 4-2 (Optical Network and System) 

Session 4-2

Room: **Kenchana 2**

FTTH Link Loss Analysis for Coexistence of TWDMPON System in Malaysia

Zulhedry Abd Manaf (TM R&D Sdn Bhd & National University of Malaysia, Malaysia); Dedy Tarsono (TM Research & Development, Malaysia); Asmahanim Ahmad (TM R&D Sdn Bhd, Malaysia); Ummi Supya Ismail (TMR&D Sdn. Bhd., Malaysia); Zamzuri Abdul Kadir (Telekom Research & Development, Malaysia); Mohammad Harris Mokhtar and Muhammad Zulhafiz Hamidun (TM Research & Development, Malaysia)

The study on pressure effect on characterization of directional coupler for different thickness of fiber cores in POF splitter development

Latifah Supian, Mohd Syuhaimi Ab. Rahman and Norhana Arsad (Universiti Kebangsaan Malaysia, Malaysia)

Multiple Access Ethernet Passive Optical Network Testbed

Sajaa Almola, Norashidah Din and Nurul Asyikin Mohd. Radzi (Universiti Tenaga Nasional, Malaysia); Mashkuri Yaacob (UNITEN, Malaysia); Martin Maier (Institut National de la Recherche Scientifique (INRS), Canada)

Planar Terahertz Metamaterial Using Triangular Spiral Ring Resonator

Nadeem Naeem (UPM, Malaysia); Alyani Ismail and Adam Alhawari (Universiti Putra Malaysia, Malaysia); Mohd. Adzir b. Mahdi (Photonics Laboratory, Department of Computer, Malaysia)

A new dynamic bandwidth allocation algorithm for fiber wireless network

Nurul Asyikin Mohd. Radzi and Norashidah Din (Universiti Tenaga Nasional, Malaysia); Mohammed Hayder Al-Mansoori (Sohar University & Faculty of Engineering, Oman); Nor Iza Mohd Rawi (Universiti Tenaga Nasional, Malaysia); Fairuz Abdullah (Universiti Tenaga

Nasional & Center for Photonic Technologies, Malaysia); [Aiman Ismail](#) (Universiti Tenaga Nasional, Malaysia)

Accuracy Issues in Microwave Characterization of Graphene Transmission Lines

[Nur Amira Abdul Rahim](#) (UITM, Malaysia); [Zaiki Awang](#) (Universiti Teknologi MARA, Malaysia)

S4-3: Session 4-3: Adhoc and Wireless Sensor Networking 2

Session 4-3

Room: **Ballroom 2**

Multi-Objective Biological Mimicry Optimization Algorithm for WSN Sensor Node Placement

[Husna Zainol Abidin](#) (Universiti Teknologi MARA, Malaysia); [Norashidah Din](#) and [Nurul Asyikin Mohd. Radzi](#) (Universiti Tenaga Nasional, Malaysia)

Collaborative Beamforming Null-Steering Array for Wireless Sensor Networks

[Nik Noordini Nik Abd Malik](#) and [Nurul Mu'azzah Abdul Latiff](#) (Universiti Teknologi Malaysia, Malaysia); [Mazlina Esa](#) (Universiti Teknologi Malaysia, Malaysia); [Sharifah K. Syed-Yusof](#) (Universiti Teknologi Malaysia, Malaysia)

Wireless Sensor Network: A Complete Solution for Poultry Farming

[Muhammad Ayaz Arshad](#) (University of Tabuk, KSA & University of Tabuk, Saudi Arabia); [Muhammad Ammad-uddin](#) (Sensor Networks and Cellular Systems University of Tabuk, Malaysia); [Muhammad Sajjad](#) (Government College Sahawal, Pakistan); [Hadi Aggoune](#) (University of Tabuk, Saudi Arabia)

Overcomplete Source Expansion Aided, Soft-bit Assisted Speech Transceiver

[Noor Shamsiah Othman](#) (Universiti Tenaga Nasional, Malaysia); [Nurul Farahin](#) (UNITEN, Malaysia); [Ahmed Al-Zydi](#) (University of Diyala & College Of Engineering, Iraq)

Energy Efficient Virtual Machine Provisioning in Cloud Data Centers

[Nasrin Akhter](#) and [Mohamed Othman](#) (Universiti Putra Malaysia, Malaysia)

Performance Investigations of Frequency Agile Enabled TelosB Testbed in Home Area Network

[Rozeha A. Rashid](#) and [Muhammad Rezan Resat](#) (Universiti Teknologi Malaysia, Malaysia); [Mohd Adib Sarijari](#) (Universiti Teknologi Malaysia & Delft University of Technology, Malaysia); [Nur HIja Mahalin](#) (UTM, Malaysia); [Mohd Sharil Abdullah](#) (Delft University of Technology & Universiti Teknologi Malaysia, The Netherlands); [Abdul Hadi Fikri Abdul Hamid](#) (Universiti Teknologi Malaysia, Malaysia)

Provisioning an Energy Efficient with Maximum Coverage WSN through Biological Inspired Sensor Node Placement

[Husna Zainol Abidin](#) (Universiti Teknologi MARA, Malaysia); [Norashidah Din](#) (Universiti Tenaga Nasional, Malaysia)

10:00 AM - 10:15 AM

BR5: Tea Break

Tea Break

10:15 AM - 11:00 AM

KN3: Keynote Address 3: Geospatial Information for Emergency Communications in Disaster Management

Assoc Prof Dr. Abdul Rashid Bin Mohamed Shariff, Universiti Putra Malaysia, MALAYSIA

Room: Ballroom 1

Chair: Borhan Ali (ITMA-UPM, Malaysia)

11:00 AM - 11:45 AM

KN4: Keynote Address 4: Smartgrid Communications 

Dr. Farrokh Farrokhi, Co-founder, EnVerv

Room: Ballroom 1

Chair: Borhan Ali (ITMA-UPM, Malaysia)

11:45 AM - 12:45 PM

IP-1: Industry Forum: Internet of Things 

Dr. Gopinath Rao (MIMOS), Mohd Parid Sulaiman (Intel) and Yew Kok Han (Commexion)

Room: Ballroom 1

Chair: Mahamod Ismail (Universiti Kebangsaan Malaysia, Malaysia)

Dr. Gopinath Rao (MIMOS), Mohd Parid Sulaiman (Intel) and Yew Kok Han (Commexion)

12:45 PM - 2:00 PM

LD3: Lunch 

Lunch

Lunch

2:00 PM - 3:30 PM

S5-1: Session 5-1: Wireless Communication System 

Room: Kenchana 3

Fractional Frequency Reuse for Irregular Cell Geometry OFDMA Systems

Rahat Ullah (Universiti Teknologi Malaysia (UTM), Malaysia); Norsheila Faisal (Universiti Teknologi Malaysia & Faculty of Electrical Engineering, Malaysia); Hashim Safdar (Universiti Teknologi Malaysia & IEEE Student Membership, Malaysia)

Compensation of Frequency In-dependent I/Q Imperfections using LMS algorithm

Faraz Talebpour (University Putra Malaysia, Malaysia); Pooria Varahram (UPM, Malaysia); Borhan Ali (ITMA-UPM, Malaysia); Aduwati Sali (UPM, Malaysia)

A Multihoming-based Mobility Management Scheme to Reduce Registration Delay on Proxy MIPv6 Domain in NEMO

Shayla Islam (International Islamic University Malaysia, Malaysia); Aisha-Hassan Abdulla (International Islamic University Malaysia, Malaysia); Mohamed Hadi Habaebi (International Islamic University Malaysia (IIUM), Malaysia); Suhaimi Latif and Mohammad Kamrul Hasan (International Islamic University Malaysia, Malaysia); Wan H Hassan (M'sia-Japan International Institute of Technology, UTM KL, Malaysia)

Mobility Recognition System for the Visually Impaired

Shapina Abdullah (Universiti Teknologi MARA, Malaysia)

A Dynamic Approach for Device Characteristics based on String Matching Technique

Nurshahrily Idura Ramli (Universiti Teknologi MARA & Faculty of Computer and Mathematical Sciences, Malaysia); Mohd Faisal Ibrahim, Saadiah Yahya and Mohd Nasir Taib (Universiti Teknologi MARA, Malaysia); Alya Geogiana Buja (Universiti Teknologi MARA Malaysia, Malaysia)

Distributed Channel Assignment Based on Congestion Information in Wireless Mesh Network

Arslan Musaddiq and Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

Performance Analysis of Coordinated MultiPoint (CoMP) in Long Term Evolution-Advanced

Liew Jiun Terng and Fazirulhisyam Hashim (Universiti Putra Malaysia, Malaysia)

S5-2: Session 5-2: Antenna & Propagation 

Session 5-2

Room: **Kenchana 2**

Chair: Mohd Fais Mansor (Universiti Kebangsaan Malaysia, Malaysia)

An Overview of Outdoor Propagation Prediction Models

Siti Fuziah Binti Hamim and Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

Assessment of ITU-R Predictions for Ku-Band Rain Attenuation in Malaysia

Muhamad Haziq Khairolanuar (International Islamic University of Malaysia, Malaysia); Ahmad Fadzil Ismail, Khairayu Badron, Ahmad Jusoh and Farah Nadia Mohd Isa (International Islamic University Malaysia, Malaysia); Sheroz Khan (International Islamic University Malaysia, Malaysia)

Assessment of Empirical Conversion Methods for Producing 1-min Integration Time Rainfall Rate in Malaysia

Muhamad Haziq Khairolanuar (International Islamic University of Malaysia, Malaysia); Ahmad Fadzil Ismail and Ahmad Jusoh (International Islamic University Malaysia, Malaysia)

Design of an Embedded Data Acquisition System for Remote Application

Mostafijur Rahman, Md. (Universiti Malaysia Perlis (UNIMAP), Malaysia); Alaa Mashkor (Unimap, Malaysia); Badlishah R Ahmad and Zahraa Ali (Universiti Malaysia Perlis, Malaysia)

Design and Development of C-Band Microwave Amplifier for Wireless Applications

Abdulrahman Shueai Mohsen Alqadami (Advanced Communication Engineering Centre (ACE), University Malaysia Perlis (UniMAP), Malaysia); Faizal Jamlos (Universiti Malaysia Perlis, Malaysia)

A Compact Ultra Wideband Antenna with Band-Notched Design

Yanti Erana Jalil and Chandan Chakrabarty (Universiti Tenaga Nasional, Malaysia); Baskaran Kasi (Universiti Infrastruktur Kuala Lumpur, Malaysia)

S5-3: Special Track 2: Smart Grid and Utility Communication 

Special Track 2: Smart Grid and Utility Communication

Room: **Ballroom 2**

Chair: Hang See Ong (Universiti Tenaga Nasional, Malaysia)

Special Track 2: Smart Grid and Utility Communication

A Robust Receiver for OFDM Systems in Nonlinear Impulse Channels

Der-Feng Tseng, Li-Chung Chang and Yunghsiang Sam Han (National Taiwan University of Science and Technology, Taiwan)

Performance of Cognitive Smart Grid Communication in Home Area Network

Yik Kuan Hiew (Universiti Tenaga Nasional, Malaysia); Norazizah Mohd Aripin (Dept. of Electronics and Communication Engineerin, UNITEN, Malaysia); Norashidah Din (Universiti Tenaga Nasional, Malaysia)

Investigation of Mobility Supports for Smart-Secured-Seamless (SSS) Public Transportation in Kuala-Lumpur Based on TV White Space

Hilary Anabi, Rosdiadee Nordin and Mahamod Ismail (Universiti Kebangsaan Malaysia, Malaysia)

High frequency AC characteristics of 132kV power cable

Chandan Chakrabarty (Universiti Tenaga Nasional, Malaysia)

Development of High Frequency Tan Delta Measurement Method for 132kV Transmission Underground Cables

Chandan Chakrabarty (Universiti Tenaga Nasional, Malaysia)

Optimized Load Balancing for Efficient Resource Provisioning in the Cloud

Ranesh Naha and Mohamed Othman (Universiti Putra Malaysia, Malaysia)

3:30 PM - 4:00 PM

BR6: Tea Break 

Tea Break

Tea Break

4:00 PM - 4:15 PM

D3-E: ISTT2014 Conference End 