# **2012 International Symposium on Telecommunication Technologies**

## (ISTT 2012)

### Kuala Lumpur, Malaysia 26-28 November 2012



IEEE Catalog Number: ISBN: CFP12STT-PRT 978-1-4673-4784-6

#### ISTT 2012 Programme

Day 1: Monday, 26<sup>th</sup> November 2012 Welcoming High-Tea Reception at KL Tower

Venue: KL Tower

Time/Venue	Agenda
14:30 - 15:00	Pre-registration at the base of KL Tower
15:00 - 18:00	High-Tea at 360° Restaurant in KL Tower

#### Day 2: Tuesday, 27<sup>th</sup> November 2012

Venue: Citrus Hotel

Time/Venue	Ballroom		
08:00 - 08:45	REGISTRATION		
08:45 - 09:00	OPENING	CEREMONY	
09:00 - 09:05	Welcome remarks by Chair of IEEE	ComSoc/VTS Join Chapter Malaysia	
09:10 - 09:20	Speech and opening of confer	ence by Chair of IEEE Malaysia	
09:20 - 10:10	Keynote	Address 1	
10:10 - 11:00	Keynote	Address 2	
11:00 - 11:20	TEA E	BREAK	
Time/Venue	Ballroom	Kristal 5	
11:20 - 13:00	Mobile and Wireless Communications 1	Wireless Ad-Hoc and Sensor Networks 1	
	(MWC1)	(WAHSN1)	
13:00 - 14:00	LUNCH		
14:00 - 15:20	Optical Communication System (OCS)	Wireless Ad-Hoc and Sensor Networks 2	
		(WAHSN2)	
15:20 - 15:40	TEA BREAK		
15:40 - 17:40	Mobile and Wireless Communications 2	Wireless Ad-Hoc and Sensor Networks 3	
	(MWC2)	(WAHSN3) and Mobile and Wireless	
		Communications 3 (MWC3)	

### Day 3: Wednesday, 28<sup>th</sup> November 2012

Venue: Citrus Hotel			
Time/Venue	Ballroom	Kristal 5	
09:00 - 10:40	Mobile and Wireless Communications 4	Information and Coding Theory (ICT)	
	(MWC4)		
10:40 - 11:00	TEA E	BREAK	
11:00 - 12:40	Mobile and Wireless Communications 5	Mobile and Wireless Communications 6	
	(MWC5)	(MWC6)	
12:40 - 14:00	LUNCH		
14:00 - 15:20	Mobile and Wireless Communications 7	Telecommunication Networks 1 (TN1)	
	(MWC7)		
15:20 - 15:40	TEA E	BREAK	
15:40 - 17:00	Mobile and Wireless Communications 8	Telecommunication Networks 2 (TN2) and	
	(MWC8)	Internet Technologies (IT)	
	Ballroom		
17:00 - 17:30	Best Paper Award Prize Giving and Closing Ceremony		

#### List of Papers

#### Day 2: Tuesday, 27<sup>th</sup> November 2012

Time: 11:20 – 13:00 Venue: Ballroom Session: Mobile and Wireless Communications 1 (MWC1)

Paper ID	Title	Authors
MWC1-01	A Compact Ultra Wideband Antenna with WLAN (IEEE 802.11 a) Band Rejection $$	Yanti Erana Jalil; Chandan Chakrabarty; Baskaran Kasi
MWC1-02	Reflection Loss Performance of Double Pyramidal Microwave Absorber	Mohd Fareq Abd Malek; Nornikman Hassan; Liyana Zahid; Wee Fwen Hoon
MWC01-03	Use of Geographic Information System (GIS) Tools as Network Planning Aid for Antenna Mounting in Remote Areas "	Intan Shafinaz Mustafa; Norashidah Din; Aiman Ismail; Rohayu Che Omar
MWC1-04	Investigation of Single and Two Notch on Circular Polarized Patch Antenna $$	Mohamad Zoinol Abidin Bin Abd Aziz

#### Day 2: Tuesday, 27<sup>th</sup> November 2012

Time: 14:00 – 15:20 Venue: Ballroom Session: Optical Communication System (OCS)

Paper ID	Title	Authors
OCS-01	Reliability Performance of Shuffle Exchange Omega Network	Nur Arzilawati Md Yunus
OCS-02	Implementing static bandwidth allocation in EPON testbed	Nurul Asyikin Mohd. Radzi
OCS-03	Effect of FWM in Dispersion-Managed Ultra-High Speed DWDM Transmission System	Mohammad Faisal; Mashad Saleh; Iqbal Hasan; Nabeela Jeny
OCS-04	Mode Power Evolution in Tapered Single-Mode Fiber	Siti Azlida Ibrahim; Nor Azura Malini Ahmad Hambali; Katrina Dambul; Syabeela Syahali

#### Day 2: Tuesday, 27<sup>th</sup> November 2012

Time: 15:40 – 17:40 Venue: Ballroom Session: Mobile and Wireless Communications 2 (MWC2)

Paper ID	Title	Authors
MWC2-01	Design of Microstrip Antenna for Modern Wireless	Thana Pakkiam Krishnan;
	Communication "	Mandeep Jit Singh;
		Mohammad Tariqul Islam
MWC2-02	Analysis and Design between Plasma Antenna and Monopole	Hajar Ja'afar; Mohd Tarmizi
	Antenna "	Ali; Nur Aina Halili; Hanisah
		Mohd Zali; Ahmad Nazri
		Dagang
MWC2-03	Study of Monopole Plasma Antenna Using Fluorescent Tube in	Hanisah Mohd Zali; Mohd
	Wireless Transmission Experiments	Tarmizi Ali; Nur Aina Halili;
		Hajar Ja'afar; Idnin Pasya
MWC2-04	A Study on Plasma Antenna Characteristics with Different	Nur Aina Halili; Mohd
	Gases "	Tarmizi Ali; Hanisah Mohd
		Zali; Hajar Ja'afar; Idnin
		Pasya
MWC2-05	Dual Frequency Reflectarray Antenna Based on Method of Moment	Noor Hafizah Sulaiman;
	Mathematical Model <sup>…</sup>	Muhammad Yusof Ismail

#### Day 2: Tuesday, 27<sup>th</sup> November 2012

Time: 11:20 – 13:00 Venue: Kristal 5 Session: Wireless Ad-Hoc and Sensor Networks 1 (WAHSN1)

Paper ID	Title	Authors
WAHSN1-01	Mobility Management Schemes and Mobility Issues in Low Power	Teo Kar Hoey; Gopinath Rao
	Wireless Sensor Network	Sinniah; Reza Khoshdelniat;
		Azizol Abdullah; Shamala
		Subramaniam
WAHSN1-02	A Sinkhole Attack Detection Scheme in Mintroute Wireless Sensor	Murad Abdo Rassam;
	Networks	Anazida Zainal; Mohd Aizaini
		Maarof; Mohammed Al-
		Shaboti
WAHSN1-03	An asynchronous multi-channel MAC protocol with Pulse/Tone	Ryo Manzoku; Hiroo Sekiya;
	exchange for RTS collision avoidance	Jing Ma; Kosuke Sanada;
		Shiro Sakata
WAHSN1-04	Sensor Node Placement based on Lexicographic Minimax	Husna Zainol Abidin;
		Norashidah Din
WAHSN1-05	A Proposed Network Management Protocol for Cognitive Radio	Suleiman Zubair; Norsheila
	Sensor Networks (CRSN)	Fisal; Mohammed. B
		Abazeed; Bala A. Salihu

#### Day 2: Tuesday, 27<sup>th</sup> November 2012

Time: 14:00 – 15:20 Venue: Kristal 5 Session: Wireless Ad-Hoc and Sensor Networks 2 (WAHSN2)

Paper ID	Title	Authors
WAHSN2-01	DkCS: An Efficient Dynamic k-Coverage Scheduling Algorithm for	Ahmed Al-Shalabi; Mazani
	Wireless Sensor Networks	Manaf
WAHSN2-02	Distributed Contention Arbitration using RTS/CTS versus	Azlan Awang
	DATA/ACK for Wireless Sensor Networks	

WAHSN2-04	Flooding Control by using Angle Based Cone for UWSNs	Tariq Ali	

#### Day 2: Tuesday, 27<sup>th</sup> November 2012

Time: 15:40 – 17:40

Venue: Kristal 5

Session: Wireless Ad-Hoc and Sensor Networks 3 (WAHSN3) and Mobile and Wireless Communications 3 (MWC3)

Paper ID	Title	Authors
WAHSN3-01	An Efficient CSMA-CA Algorithm for IEEE 802.15.4 Wireless Sensor Networks <sup>…</sup>	Zahraa Dahham
WAHSN3-02	Evaluation of Optimal Cluster Size in Heterogenous Energy Wireless Sensor Networks	Norah Tuah
WAHSN3-03	Performance Analysis of Implicit Acknowledgement Coordination Scheme for Opportunistic Routing in Wireless Sensor Networks	Mohd Rusli
MWC3-01	E1PD: Enhanced 1-Persistence Data Dissemination Protocol for Vehicle Ad hoc Networks in Highway Enviornmnents	Fahimeh Rostami; Tat-Chee Wan
MWC3-02	Range Estimation Based on a Deep Fade Linearity Function	Kamaludin Mohamad Yuso

Time: 09:00 – 10:40 Venue: Ballroom Session: Mobile and Wireless Communications 4 (MWC4)

Paper ID	Title	Authors
MWC4-01	Evolutionary Second-Order Statistical Model for Nonstationarity Wideband Communication Channels	Uche A.K. Chude Okonkwo; Razali Ngah; Tharek Abdul Rahman; Chollette Chude
MWC4-02	Integration of PIN Diodes with Slot Embedded Patch Elements for Active Reflectarray Antenna Design	Muhammad Inam Abbasi; Muhammad Yusof Ismail
MWC4-03	Phase Distribution Analysis of Reflectarray Resonant Elements based on Linear and Non-linear Materials	Muhammad Hashim Dahri; Muhammad Yusof Ismail
MWC4-04	Numerical Model for Phase Distribution Characterization of Reflectarray Elements	Arslan Kiyani; Muhammad Yusof Ismail

#### Day 3: Wednesday, 28<sup>th</sup> November 2012

Time: 11:00 – 12:40 Venue: Ballroom Session: Mobile and Wireless Communications 5 (MWC5)

Paper ID	Title	Authors
MWC5-01	Wran System on ZBC TV: A New Way to Internet Connectivity for	Rasty Chimheno; Mardeni
	Rural Areas in Zimbabwe	Roslee

MWC5-03	Performance Evaluation of Uncoordinated Beamforming over Cognitive Radio Network	Wan Nadzlia Shazwanie Wan Mohd Zuferi; Nordin Bin Ramli; Hafizal Mohamad; Khaizuran Abdullah
MWC5-04	Performance Prediction of Future V-band Earth-space Link in the Tropics $$	Ahmad Fadzil Ismail
MWC5-05	Design a New Confidant Protocol for Master Mode TV Band Devices	Mubark Elmubark; Rashid Saeed; Hashim Elshafie

Time: 14:00 – 15:20 Venue: Ballroom Session: Mobile and Wireless Communications 7 (MWC7)

Paper ID	Title	Authors
MWC7-01	Resource Allocation in Multi-Cell Decode-and-Forward Relaying OFDMA Cellular Networks in the Presence of Multi-Cell Interference	Mohamad Hossein Moghaddam; Kamal Mohamed-pour; Seyed Mehdi Hosseini Andargoli
MWC7-02	Peak-to-Average Power Ratio Reduction of OFDM Signals using IIR Filters "	Ashvin Jayapalasingam; Mohamad Yusoff Alias
MWC7-03	Performance Investigation between DSI-SLM and DSI-PTS Schemes in OFDM Signals	Somayeh Mohammady
MWC6-02	Design and Implementation of New Non-Contiguous Carrier Aggregation in Release 10	Aws Zuheer Yonis; Mohammad Faiz Liew Abdullah

#### Day 3: Wednesday, 28<sup>th</sup> November 2012

Time: 15:40 – 17:00 Venue: Ballroom Session: Mobile and Wireless Communications 8 (MWC8)

Paper ID Title	Authors
----------------	---------

MWC8-04	Improvement of Higher Order Modulations for MUROS	Dong-ha Han; Seung-Hoon
		Hwang; Jaeho Shin

Time: 09:00 – 10:40 Venue: Kristal 5 Session: Information and Coding Theory (ICT)

Paper ID	Title	Authors
ICT-01	IR-HARQ Scheme on Bit-Interleaved Coded Modulation	Hazilah Mad Kaidi; Norulhusna Ahmad; Norsheila Fisal; Sharifah K.
		Syed-Yusof; Sharifah Hafizah Syed Ariffin
ICT-02	Multiple Description Coding with Side Information for Stereoscopic 3D	Hezerul Abdul Karim; Farli Rossi; Nor Azhar Mohd Arif; Aduwati Sali; Ryoichi Komiya
ICT-03	Performance Analysis of Utilizing Genetic Algorithm to Minimize Coding Nodes in Wireless Networks	Shee Eng Tan; Zhan Wei Siew; Scott Carr Ken Lye; Hou Pin Yoong; Kenneth Tze Kin Teo
ICT-04	Performance Evaluation of Rank Sort Parallelism	Mostafijur Rahman, Md.

#### Day 3: Wednesday, 28<sup>th</sup> November 2012

Time: 11:00 – 12:40 Venue: Kristal 5 Session: Mobile and Wireless Communications 6 (MWC6)

Paper ID	Title	Authors
MWC6-01	Energy Efficiency of LTE Macro Base Station	Ayad Atiyah Abdulkafi; Sieh
		Kiong Tiong; Johnny Koh;
		David Chieng; Alvin Ting;
		Abdulaziz Mohammed
		Ghaleb
MWC6-03	A Simple Algorithm for Subcarrier and Power Allocation in WiMAX	Dahiru Sani Shu'aibu;
	Network	Sharifah K. Syed-Yusof
MWC6-04	Matched Filter Detection Technique For GSM Band	Mas Haslinda Mohamad;
		Cui Wen Haw; Mahamod
		Ismail

Time: 14:00 – 15:20 Venue: Kristal 5 Session: Telecommunication Networks 1 (TN1)

Paper ID	Title	Authors
		1

TN1-02	Technical Examination for Interference Analysis of MLA-GOV RF Communication System	Noor Hidayah Tauhid Ahmad; Dasimah Zainal; Mohammed Phillip Wray; Effandi Hassan
TN1-03	Power Allocation via Interference Compensation in Underlay Cognitive Radio Networks: A Game Theoretic Perspective	Omar B. Abdulghafoor; Mahamod Ismail; Rosdiadee Nordin

#### Day 3: Wednesday, 28<sup>th</sup> November 2012

Time: 15:40 – 17:00 Venue: Kristal 5 Session: Telecommunication Networks 2 (TN2) and Internet Technologies (IT)

Paper ID	Title	Authors
TN2-01	Service Availability Evaluation for a Protection Model in Hybrid	Majda Wazzan; Ayman
	Cloud Computing Architecture	Fayoumi
TN2-02	Enhancing DCCP Congestion Control Mechanism for Long Delay Link	Shahrudin Awang Nor
IT-01	A New Content Distribution Model With Path Probing Mechanism for P2P Overlay Networks	Maryam Feily; Alireza Shahrestani; Salah Noori; Sureswaran Ramadass
IT-02	Visualization of Invariant Bot Behavior for Effective Botnet Traffic Detection	Alireza Shahrestani; Maryam Feily; Balakrishnan Muniandy; Mona Masood