Service Track

Monday, 12 March 2007

11:00 - 12:10

T2s07:   Wireless Sensor Netwoks I

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: Jane Mang-Yan Fung (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong) and **Yuk Shing Wan** (The Hong Kong University of Science and Technology, Hong Kong)

T2s07p01: *Probabilistic Coverage Preserving Protocol with Energy Efficiency in Wireless Sensor Networks*
Jang-Ping Sheu (National Central University, Taiwan); **Huang-Fu Lin** (National Central University, Taiwan)

T2s07p02: *Coarse-grained Scheduling for Gateway Nodes in Wireless Sensor Networks*
Kui Wu (University of Victoria, Canada); **Chong Liu** (University of **Victoria, Canada); Yang Xiao (The University of Alabama, USA);** **Jiangchuan Liu** (Simon Fraser University, Canada)

T2s07p03: *Radar Sensor Network Design and Optimization for Blind Speed Alleviation*
Jing Liang (University of Texas at Arlington, USA); **Qilian Liang** (University of Texas at Arlington, USA); **Zheng Zhou** (Beijing University of Posts and Telecommunications, P.R. China)

T2s07p04: *A VSM-Based and Quality-Aware Query Processing Protocol for Wireless Sensor Networks*
Qingchun Ren (Univ of Texas at Arlington, USA); **Qilian Liang** (University of Texas at Arlington, USA)

14:00 – 15:25

T2s08:   Wireless Multimedia

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: Maggie Ng (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong) and **Chi Yuk Chiu** (The Hong Kong University of Science and Technology, Hong Kong)

T2s08p01: *Real-time Virtual Videophone for Low-bandwidth Wireless Networks*
Yang Xiao (The University of Alabama, USA); **Max Garzon** (University of Memphis, Ukraine); **Mike Nolen** (University of Memphis, Ukraine)

T2s08p02: *Simulating MPEG-4 over the IEEE 802.11 Wireless Local Area Networks*
Yang Xiao (The University of Alabama, USA); **Mike Nolen** (University of Memphis, Ukraine); **Xiaojiang Du** (North Dakota State University, USA); **Jingyuan Zhang** (University of Alabama, USA)

T2s08p03: *Price discount over Satellite Digital Multimedia Broadcast system through a Demand Sensitive Model*
Pasquale Pace (University of Calabria, Italy); **Zhili Sun** (University of Surrey, United Kingdom)

T2s08p04: *Content Based Video Quality Estimation for H.264/AVC Video Streaming*
Michal Ries (Vienna University of Technology, Austria); **Olivia Nemethova** (Vienna University of Technology, Austria); **Markus Rupp** (Technical University of Vienna, Austria)

15:55 – 17:00

T2s09: Wireless LANs

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: (UAE University, UAE) and **Corbett Rowell** (Applied Science and Technology Research Institute, Hong Kong)

T2s09p01: *P2P File Sharing System over MANET based on Swarm Intelligence: A Cross-layer Design*
Cheng-Chang Hoh (National Chung-Cheng University, Taiwan); **Ren-Hung Hwang** (National Chung-Cheng University, Taiwan)

T2s09p02: *Networked Hearing Aids Using Wireless LAN Technologies*
Mitsuhiro Ogihara (University of Fukui, Japan); **Kenzo Takahashi** (University of Fukui, Japan)

T2s09p03: *An Adaptive Multiple Access Protocol for WLAN equipped with Smart Antenna*
Changle Li (University of Moncton, Canada); **Jalal Almhana** (Universite de Moncton, Canada); **Jiandong Li** (Xidian University, P.R. China); **Zikuan Liu** (Universite de Moncton, Canada)

T2s09p04: *Impact of encryption on the Throughput of Infrastructure WLAN IEEE 802.11g*
> **Ezedin Barka** (UAE University, UAE)

Tuesday 13 March 2007

10:45 - 12:30

T2s10: Security I

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: Wassim El-Hajj (UAE University, UAE) and **Yongdong Wu** (Institute for Infocomm Research, Singapore)

T2s10p01: *Securing RFID Tags: Authentication Protocols with Completeness, Soundness, and Non-traceability*
> **Huafei Zhu** (Institute for Infocomm Research,, Singapore)

T2s10p02: *A Trust Answer to Distance Query*
> **Yongdong Wu** (Institute for Infocomm Research, Singapore)

T2s10p03: *Remarks on a Hypersphere Oriented Multiparty Key Agreement Protocol*
> **Wen Tao Zhu** (Graduate University of Chinese Academy of Sciences, P.R. China)

T2s10p04: *Nested One-Time Secret Mechanisms for Fast Mutual Authentication in Mobile Communications*
> **Chun-I Fan** (National Sun Yat-Sen University, Taiwan); **Pei-Hsiu Ho** (National Sun Yat-sen Universary, Taiwan); **Hsin-Yu Chen** (National Sun Yat-sen Universary, Taiwan)

T2s10p05: *Efficient 3GPP Authentication and Key Agreement with Robust User Privacy Protection*
> **Wen-Shenq Juang** (Shih Hsin University, Taiwan); **Jing-Lin Wu** (Shih Hsin University, Taiwan)

T2s01: Wireless Sensor Networks 2

Room Location: Ming I

Session Chairs: Tieyan Li (Institute for Infocomm Research, Singapore) and **Wen Tao Zhu** (Graduate University of Chinese Academy of Sciences, P.R. China)

T2s01p01: *A MICS Band Wireless Body Sensor Network*

Mehmet Rasit Yuce (University of Newcastle, Australia); **Steven Ng** (University of Newcastle, Australia); **Naung Myo** (University of Newcastle, Australia); **Chin Lee** (University of Newcastle, Australia); **Jamil Khan** (University of Newcastle, Australia); **Wentai Liu** (University of California Santa Cruz, USA)

T2s01p02: *Correlation-Based Data Dissemination in Traffic Monitoring Sensor Networks*

Alexandre Guitton (Birkbeck College / University of London, United Kingdom); **Antonios Skordylis** (Birkbeck College, University of London, United Kingdom); **Niki Trigoni** (Birkbeck College, University of London, United Kingdom)

T2s01p03: *PALM: A Partition Avoidance Lazy Movement Protocol for Mobile Sensor Networks*

Kuei-Ping Shih (Tamkang University, Taiwan); **Hung-Chang Chen** (Tamkang University, Taiwan); **Jing-Kuen Tsai** (Tamkang University, Taiwan); **Chun-Chih Li** (Tamkang University, Taiwan)

T2s01p04: *A Persistent Storage Middleware Service for Wireless Sensor Networks*

Huma Javed (Liverpool John Moores University, United Kingdom); **Madjid Merabti** (Liverpool John Moores University, United Kingdom); **Robert Askwith** (Liverpool John Moores University, United Kingdom)

T2s01p05: *Route Recovery with One-Hop Broadcast to Bypass Compromised Nodes in Wireless Sensor Networks*

Dong An (Arizona State University, USA); **Hasan Cam** (Arizona State University, USA)

T2s01p06: *Packets Transmission in Wireless Sensor Networks: Interference, Energy and Delay-Aware Approach*

Xinsheng Xia (The University of Texas at Arlington, USA); **Qilian Liang** (University of Texas at Arlington, USA)

10:00 – 12:30

T2s17: Services and Applications Posters 1

Room Location: **Ballroom Pre-Function Area**

T2s17p01: *WiBro-based Mobile RFID Service Development*

Kim Seok Hun (KT Network Tech Research Lab, Korea); Soonyong Song (Korea Telecom, Korea); Hyunsub Jung (Korea Telecom, Korea)

T2s17p02: *Service Delivery Platforms as IT Realization of OMA Service Environment: Service Oriented Architectures for Telecommunications*

Stephane Maes (Oracle, USA)

T2s17p03: *Fast Authentication Based on Heuristic Movement Prediction for Seamless Handover in Wireless Access Environment*
<u>Liang Zhang</u> (Vodafone K.K., Japan); Naoya Seta (Vodafone K.K., Japan); Haruya Miyajima (Vodafone K.K., Japan); Hideki Hayashi (Vodafone K.K., Japan)

14:00 – 15:25

T2s11:   Applications

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: **Aaron Yiu-Tin Kam** (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong) and **Joungil Yun** (Electronics and Telecommunications Research Institute (ETRI), Korea)

T2s11p01:   *Enhancing Accuracy Performance of Bluetooth Positioning*
Thanh Son Le (University Graduate Center (UniK), Norway)

T2s11p02:   *Analysis of T-DMB Ensemble Transport Signal for Mobile Video Services*
Joungil Yun (Electronics and Telecommunications Research Institute (ETRI), Korea); **Byungjun Bae** (Electronic and Telecommunications Research Institute, Korea); **Woosuk Kim** (ETRI, Korea); **Chung Hyun Ahn** (Electronics and Telecommunicaitons Research Institute, Korea); **Soo-In Lee** (Electronics and Telecommunications Research Institute, Korea)

T2s11p03:   *Telemedicine Usage and Potentials*
Yang Xiao (The University of Alabama, USA); **Daisuke Takahashi** (University of Alabama, Ukraine); **Fei Hu** (Rochester Insitute of Technology, USA)

T2s02:   Mobile Systems

Room Location: Ming I

Session Chairs: Skandar Iskandar (Waseda University, Japan) and **Karama Hamdi** (Hong Kong University of Science and Technology, Hong Kong)

T2s02p01:   *MOVE: a mobility model generator for vehicular network*
Feliz Karnadi (University of New South Wales, Australia); **Zhi Mo** (University of New South Wales, Australia); **Kun-chan Lan** (National ICT Australia Ltd., Australia)

T2s02p02: *Analysis of CDMA capacity for multiple stratospheric platform mobile communications under imperfect power control and fading*
Iskandar Iskandar (Waseda University, Japan)

T2s02p03: *Accuracy Improvement of Vehicular Collision Avoidance Support System (VCASS) for the next generation ITS*
Yuji Shimonaka (Kansai University, Japan)

T2s02p04: *SVG Map Delivery Scheme for Resources Constrained Mobile Phones*
Heien-Kun Chiang (National Changhua University of Education, Taiwan); **Hown-Wen Chen** (Dayeh University, Taiwan); **Long-Chyr Chang** (National Changhua University of Education, Taiwan); **Feng-Lan Kuo** (National Changhua University of Education, Taiwan); **Neng-Fu Lin** (National Changhua University of Education, Taiwan)

T2s02p05: *Enabling Context-Aware Computing for the Nomadic Mobile User: A Service Oriented and Quality Driven Approach*
Pravin Pawar (University of Twente, The Netherlands., The Netherlands); **Aart Halteren** (Philips Research, The Netherlands); **Kamran Sheikh** (University of Twente, The Netherlands)

14:00- 16:00

T2s18 Services and Applications Posters Session 2

Location: **Ballroom Pre-Function Area**

T2s18p01: *Measurements of a Utility Function for Video Download Service and its Application to Service Management*
Nobuyuki Shutto (Osaka University, Japan); **Yuji Handa** (osaka University, Japan); **Takeshi Higashino** (Osaka University, Japan); **Katsutoshi Tsukamoto** (Osaka University, Japan); **Shozo Komaki** (Osaka University, Japan)

T2s18p02: *DSASim: A simulation framework for dynamic spectrum allocation*
Ghaith Haddad (University of Central Florida, USA); **Damla Turgut** (University of Central Florida, USA)

15:55 – 17:00

T2s12: Wireless Access

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: Mohammed Boulmalf (UAE University, UAE) and **Ng Ka Ka** (ASTRI, Hong Kong)

T2s12p01: *Customizable Wireless Management System (CWMS) for Broadband Wireless Access Networks*
> **Ng Ka Ka** (ASTRI, Hong Kong); **Maggie Ng** (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong); **Jane Mang-Yan Fung** (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong); **Aaron Yiu-Tin Kam** (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong); **Billy Siu-Ping Chan** (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong)

T2s12p02: *Dynamic Spectrum Access and Joint Radio Resource Management Combining for Resource Allocation in the Cooperative Networks*
> **Miao Pan** (Beijing Univ. of Posts and Telecommunications, P.R. China); **Ruoju Liu** (WTI Institute, Beijing University of POsts&Telecoms, P.R. China); **Jie Chen** (BUPT, P.R. China); **Zhiyong Feng** (Beijing University of Posts and Telecommunications, P.R. China); **Ying Wang** (Beijing University of Posts and Telecommunications, P.R. China); **Ping Zhang** (WTI-BUPT, P.R. China)

T2s12p03: *Performance Evaluation of Wireless Transmissions in an Amazonian Climate*
> **Thienne Johnson** (University of Amazonia, Brazil); **Mauro Coutinho** (Universidade Federal do Para, Brazil)

Wednesday, 14 March 2007

8:30 - 10:15

T2s13: Wireless Sensor Networks 3

Room Location: Golden Pen – Peninsula Hotel

Session Chairs**:   Billy Siu-Ping Chan** (Hong Kong Applied Science and Technology Research Institute (ASTRI) Co. Ltd., Hong Kong) and **Heien-Kun Chiang** (National Changhua University of Education, Taiwan)

T2s13p01: *Minimizing Transmission Delay and Deployment Cost for Sensors Placement in Sparse Wireless Sensor Networks*
> **Ben-Jye Chang** (Chaoyang University of Technology, Taiwan); **Jia-Bin Peng** (Chaoyang University of Technology, Taiwan); **Ying-Hsin Liang** (Nankai Institute of Technology, Taiwan)

T2s13p02: *Event Region for Effective Distributed Acoustic Source Localization in Wireless Sensor Networks*

Youngbin You (Yonsei University, Korea); **Jaehyun Yoo** (Yonsei University, Korea); **Hojung Cha** (Yonsei University, S. Korea, USA)

T2s13p03: *Asynchronous Sampling of Correlated Data in Wireless Sensor Networks*

Jing Wang (University of Texas at Arlington, USA); **Yonghe Liu** (UT Arlington, USA); **Sajal Das** (The UniversityTexas at Arlington, USA)

T2s13p04: *A Cross-Layer Approach to Contour Nodes Inference with Data Fusion in Wireless Sensor Networks*

Pei-Kai Liao (University of Southern California, USA); **Min-Kuan Chang** (National Chung Hsing University, Taiwan); **C.C. Jay Kuo** (University of Southern California, USA)

T2s13p05: *On Providing Temporal Full-Coverage by Applying Energy-Efficient Hole-Movement Strategies for Mobile WSNs*

Chih-Yung Chang (Tamkang University, Taiwan); **Hsu-Ruey Chang** (Tamkang Univeristy, Taiwan); **Hsiao-Jung Liu** (Tamkang University, Taiwan); **Sheng-Wen Chang** (Tamkang University, Taiwan)

T2s13p06: *Sensor Data Collection Through Gateways in a Highly Mobile Mesh Network*

Andrew Jenkins (University of Colorado, USA); **Daniel Henkel** (University of Colorado at Boulder, USA); **Timothy Brown** (University of Colorado, USA)

T2s03: Intelligent Systems

Room Location: Ming I

Session Chairs: **Wei Zhang** (Hong Kong University of Science and Technology, Hong Kong) and **Hui Du** (Hunan University, P.R. China)

T2s03p01: *An Intelligent Assistant for Context-Aware Adaptation of Personal Communications*

Bassam El Saghir (Institut National des Télécommunications, France); **Noel Crespi** (GET-INT, France)

T2s03p02: *A Rule Based Publish/Subscribe Context Dissemination Middleware*

Guido Gehlen (Aachen University of Technology, Germany); **Fahad Aijaz** (Aachen University of Techology (RWTH), Germany); **Muhammad Sajjad** (Aachen University of Technology (RWTH), Germany)

T2s03p03: *Using a Fuzzy Logic Controller to Thwart Data Link Layer Attacks in Ethernet Networks*
> **Wassim El-Hajj** (UAE University, UAE); **Zouheir Trabelsi** (UAE University, UAE)

T2s03p04: *PREDATOR: A Protocol for Ad hoc and Brokered Dynamic Spectrum Management*
> **Jimmy Secretan** (University of Central Florida, USA); **Evan Turner** (University of Central Florida, USA); **Damla Turgut** (University of Central Florida, USA)

T2s03p05: *An Efficient Power Control Scheme for Cognitive Radios*
> **Hong-Sam Le** (University of Texas at Arlington, USA); **Qilian Liang** (University of Texas at Arlington, USA)

10:45 AM - 12:30 PM

T2s14: Wireless Protocols

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: Ying Dong (The University of Hong Kong, Hong Kong) and **Chi Ho Cheng** (The Hong Kong University of Science and Technology, Hong Kong)

T2s14p01: *Implementation and Evaluation of Channel Assignment Tool for Multi-Radio Multi-Channel Wireless Mesh Networks*
> **Wei Xie** (Xiamen University, P.R. China); **Mingbo Xiao** (Rice University, USA); **Fuyong Zhao** (Azalea Networks, USA); **Yan Yao** (Tsinghua University, P.R. China)

T2s14p02: *M-ary Signaling for Ultra Wideband Communication Systems Based on Pulse Position and Orthogonal Pulse*
> **Sudhan Majhi** (Nanyang Technological University, Singapore); **As Madhukumar** (Nanyang Technological University, Singapore); **A.b. Premkumar** (Nanyang Technological University, Singapore); **Francois Chin** (Institue for InfoComm Research, Singapore)

T2s14p03: *A Pulse Shape Design Method for Ultra-Wideband Communications*
> **Cheng Li** (Memorial University of Newfoundland, Canada); **Ramachandran Venkatesan** (Memorial University of Newfoundland, Canada); **Weihua Gao** (State University of New York at Buffalo, USA)

T2s14p04: *SIP-Based Handoff in 4G Mobile Networks*
> **Yen-Wen Lin** (National Taichung University, Taichung, Taiwan, Taiwan)

T2s14p05: *Social Distributed Hash Table. Share and collaborate in your social network.*

Marcin Matuszewski (Nokia Research Center, Finland)

T2s14p06: *EmbTrack: a wearable IEEE 802.15.4 tracking system for logistics.*

Fabio Bonizzi (Università di Modena e Reggio Emilia, Italy); **Lucio Sedoni** (Embit, Italy); **Davide Sganzerla** (Embit, Italy); **Umberto Manzoli** (embit co.ltd., Italy); **Paolo Pavan** (Università di Modena e Reggio Emilia, Italy)

T2s04: Wireless/Ad-Hoc Network Applications

Room Location: Ming I

Session Chairs: King Man Ho (The Hong Kong Polytechnic University, Hong Kong) and **Yuji Shimonaka** (Kansai University, Japan)

T2s04p01: *A New Statistical Model for the Behavior of Ranging Errors in TOA-Based Indoor Localization*

Mohammad Heidari (Worcester Polytechnic Institute - WPI, USA); **Kaveh Pahlavan** (Worcester Polytechnic Institute, USA)

T2s04p02: *A Method for Distributed Computation of Semi-Optimal Multicast Tree in MANET*

Eiichi Takashima (Nara Institute of Science and Technology, Japan); **Yoshihiro Murata** (NARA INSTITUTE of SCIENCE and TECHNOLOGY, Japan); **Naoki Shibata** (Shiga University, Japan); **Keiichi Yasumoto** (Nara Institute of Science and Technology, Japan); **Minoru Ito** (Nara Institute of Science and Technology, Japan)

T2s04p03: *Ad Hoc Gateway Service for Automatic Package Delivery using Networked Appliances*

Arshad Muhammad (Liverpool John Moores University, United Kingdom); **Madjid Merabti** (Liverpool John Moores University, United Kingdom); **Bob Askwith** (Liverpool John Moores University, United Kingdom); **Paul Fergus** (Liverpool John Moores University, United Kingdom)

T2s04p04: *A Context-aware Blogging and Learning Service in Mobile IPv6 Networks*

Sheng-Cheng Yeh (Ming Chuan University, Taiwan); **Wu-Hsiao Hsu** (Ming-Chuan University, Taiwan); **Ching-Hui Chen** (Ming Chuan University, Taiwan); **Rung-Huei Liang** (Ming Chuan University, Taiwan)

T2s04p05: *The Observer Design Pattern for tinyos*

Eleftheria Katsiri (Imperial College London, United Kingdom); **Alexis Petrounias** (Imperial College London, United Kingdom)

T2s04p06: *A Virtual dynamic topology for service discovery in mobile ad hoc networks*
> **Hamamache Kheddouci** (Claude Bernard University - Lyon, France); **Mohammed Haddad** (Claude Bernard University - Lyon, France)

10:00 – 12:30

T2s19: Services and Applications Posters Session 3

Location: Ballroom Pre-Function Area

T2s19p01: *Performance Analysis of Security Appliances - A Performance Model for SOA Firewall*
> **Lei Liu** (Sun Microsystems, Inc., USA)

T2s19p02: *Quantifying Trust Metrics of Recommendation Systems in Ad-hoc Networks*
> **Huafei Zhu** (Institute for Infocomm Research,, Singapore)

14:00 – 15:25

T2s15: Ad-Hoc Networks

Room Location: Golden Pen – Peninsula Hotel

Session Chairs: Lucas C.K. Hui (The University of Hong Kong, Hong Kong) and **Miao Pan** (Beijing Univ. of Posts and Telecommunications, P.R. China)

T2s15p01: *A Novel Gnutella Application Layer Multicast Protocol for Collaborative Virtual Environments over Mobile Ad-Hoc Network*
> **Azzedine Boukerche** (Univ. of Ottawa, Canada)

T2s15p02: *Computing Two-Terminal Reliability in Mobile Ad hoc Networks*
> **Wenye Wang** (NC State University, USA)

T2s15p03: *Self-Configuring Multi-hop Ad-hoc Wireless Telephony for Small Enterprises*
> **Sameh Gobriel** (University of Pittsburgh, USA); **A.s. Krishnakumar** (Avaya Labs, USA); **P. Krishnan** (Avaya Labs, USA); **Shalini Yajnik** (Avaya Labs, USA)

T2s15p04: *Securing Ad Hoc Wireless Networks Against Data Injection Attacks Using Firewalls*
> **Jun Cheol Park** (University of Utah, USA); **Sneha Kasera** (University of Utah, USA)

T2s15p05: *Video-Cooperative Design for Ad hoc Networks*
      Tien Pham Van (University of Paderborn, Germany)

T2s05: QoS

Room Location: Ming I

Session Chairs: Ying Dong (The University of Hong Kong, Hong Kong) and
WANG MING (Jinan University, P.R. China)

T2s05p01: *SPSD: A Scalable P2P-based Service Discovery Architecture*
      Wassef Louati (INT - GET, France); **Djamal Zeghlache** (INT, France)

T2s05p02: *Uplink Scheduling with QoS Provisioning for Cognitive Radio Systems*
      Karama Hamdi (Hong Kong University of Science and Technology, Hong Kong); **Wei Zhang** (Hong Kong University of Science and Technology, Hong Kong); **Khaled Letaief** (Hong Kong Univ. Science & Technology, Hong Kong)

T2s05p03: *A Scheduling Method Considering Available Bandwidth in Selective Contents Broadcasting*
      Yusuke Gotoh (Kyoto University, Japan); **Tomoki Yoshihisa** (Kyoto University, Japan); **Masanori Kanazawa** (Kyoto University, Japan)

T2s05p04: *An Experimental Performance Evaluation of SCPS-TP over Cislunar Communications Links*
      Naga Aryasomayajula (Lamar University, USA)

T2s05p05: *Real-Time UAV Data Relay Through Available Communication Networks*
      Yu Ming Chen (Western Michigan University, USA); **Liang Dong** (Western Michigan University, USA); **Jun-Seok Oh** (University of California, Irvine, USA)

14:00 – 16:00

T2s20: Services and Applications Posters Session 4

Location: Ballroom Pre-Function Area

T2s20p01: *Design of a Flat Fading 4 x 4 MIMO Testbed for Antenna Characterization using a Modular Approach*
      Chi Yuk Chiu (The Hong Kong University of Science and Technology, Hong Kong); **Chi Ho Cheng** (The Hong Kong University of Science and Technology, Hong Kong); **Yuk Shing Wan** (The Hong Kong University of

Science and Technology, Hong Kong); **Corbett Rowell** (Applied Science and Technology Research Institute, Hong Kong); **Ross Murch** (HKUST, Hong Kong)

T2s20p02: *Design Small-Size and Wide-Band T-shaped patch Antenna on Ceramic Substrate*
Cheng-Fu Yang (National University of Kaohsiung, Taiwan); Chang-Yi Hsieh (Southern Taiwan University, Taiwan); **Chien-Min Cheng** (Southern Taiwan University, Taiwan)

T2s20p03: *Impact of Mutual Admittance on Radiation Pattern of ESPAR Array*
Md Islam (Jahangirnagar University, savar, Dhaka, India); **Md. Shahriar Karim** (Ericsson Bangladesh Ltd., Bangladesh); **A.B.M. Siddique Hossain** (Bangladesh University of Engineering and Technology, Algeria)

15:55 – 17:00

T2s16: Wireless Sensor Networks 4

Room Location: Golden Pen – Peninsula Hotel

Session Chairs;   Siu Ming Yiu (The University of Hong Kong, Hong Kong) and **Cheng-Chang Hoh** (National Chung-Cheng University, Taiwan)

T2s16p01: *A New Representation Structure for Mining Association Rules from Wireless Sensor Networks*
Azzedine Boukerche (Univ. of Ottawa, Canada); **Samer Samarah** (University of Ottawa, Canada)

T2s16p02: *Channel Capacity of Virtual MIMO-Based Wireless Sensor Networks with Imperfect CSI*
Lingming Wang (U of Texas at Arlington, USA); **Qilian Liang** (University of Texas at Arlington, USA); **Zheng Zhou** (Beijing University of Posts and Telecommunications, P.R. China)

T2s16p03: *A Mobile Delay-tolerant Approach to Long-term Energy-efficient Underwater Sensor Networking*
Eugenio Magistretti (University of Bologna, Italy); **Jiejun Kong** (Scalable Network Technologies, Inc., USA); **Uichin Lee** (University of California, Los Angeles, USA); **Mario Gerla** (University of California at Los Angeles, USA); **Paolo Bellavista** (Università degli Studi di Bologna, Italy); **Antonio Corradi** (University of Bologna, Italy)

T2s16p04: *How Resilient is Grid-based WSN Coverage to Deployment Errors?*

Glen Takahara (Queen's University, Canada); **Kenan Xu** (Queen's University, Canada); **Hossam Hassanein** (Queens University, Canada)

T2s06: Security II

Room Location: Ming I

Session Chairs: **Huafei Zhu** (Institute for Infocomm Research, Singapore) and **Wen-Shenq Juang** (Shih Hsin University, Taiwan)

T2s06p01: *Adaptive Stream Authentication for Wireless Multimedia Communications*
Tieyan Li (Institute for Infocomm Research, Singapore); **Yongdong Wu** (Institute for Infocomm Research, Singapore)

T2s06p02: *Group Signature Scheme with no Group Manager*
WANG MING (Jinan University, P.R. China); **CHEN Huo-Yan** (Jinan University, P.R. China)

T2s06p03: *An IDS First Line of Defense for Ad Hoc Networks*
Alia Fourati (Paris-SUD XI University, France); **Khaldoun Al Agha** (University of Paris XI, France)

T2s06p04: *Dynamic Distributed Certificate Authority Ser-vices for Mobile Ad Hoc Networks*
Ying Dong (The University of Hong Kong, Hong Kong); **Victor Li** (University of Hong Kong, P.R. China); **Lucas C.K. Hui** (The University of Hong Kong, Hong Kong); **Siu Ming Yiu** (The University of Hong Kong, Hong Kong)