Conference Schedule

<table>
<tr><td colspan="2">Tuesday, July 9, 2017
09:00~16:00 Registration</td></tr>
<tr><td>09:00~10:00</td><td colspan="3">Registration at Desk</td></tr>
<tr><td>10:00~11:45</td><td colspan="3">Opening Ceremony

Opening

Performance

Welcome Remarks

Keynote Speech

Speaker: Professor, Pekanbaru Hang Tuah Institute of Health,Riau, Indonesia
Title: The Application of Indonesian Qualification Frame Work Review in Studies of Nutrion</td></tr>
<tr><td>11:45~13:00</td><td>Session 1 A</td><td>Session 1 B</td><td>Session 1 C</td></tr>
<tr><td>13:00~14:00</td><td colspan="3">Lunch</td></tr>
<tr><td>14:00~15:15</td><td>Session 2 A</td><td>Session 2 B</td><td>Session 2 C</td></tr>
<tr><td>15:15~15:30</td><td colspan="3">Breakfast & Tea Break</td></tr>
<tr><td>15:30~16:45</td><td>Session 3 A</td><td>Session 3 B</td><td>Session 3 C</td></tr>
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Thursday, July 10, 2017 09:30-16:00 Registration			
Time	Room A	Room B	Room C
09:30~10:45	Session 4 A	Session 4 B	Session 4 C
10:45~11:00	Poster session I & Coffee Break		
11:00~12:15	Session 5 A	Session 5 B	Session 5 C
12:15~13:30	**Lunch**		
13:30~14:30	Poster session II		
14:00~15:30	Poster session III		
15:30~16:30	Certificate Distribution & Award Ceremony		
16:30~	Closing Ceremony		

July 9, 2017
11:45~13:00

Session 1A : 5G/6G Mobile Communications
Chair: Haneul Ko (Korea University, Korea)

[1A-1] Preamble Design Technique for Millimeter-Wave Cellular Systems Using Zadoff-Chu Sequences
Dae Gen Han (Chung-Ang University, Korea), Yeong Jun Kim (LG Electronics, Korea), and Yong Soo Cho (Chung-Ang University, Korea)

[1A-2] Adaptive Control CRE Technique for eICIC in HetNet *Norihiro Naganuma and Sho Nakazawa (Kogakuin University, Japan), Satoshi Suyama and Yukihiko Okumura (NTT DOCOMO INC, Japan), and Hiroyuki Otsuka (Kogakuin University, Japan)*

[1A-3] Throughput Improvement by Transmitter-side Three- Dimensional Beamforming in Mobile Systems
Ryota Nakao, Sho Nakazawa, and Hiroyuki Otsuka (Kogakuin University, Japan)

[1A-4] Small Cell Offloading Algorithm Based on the Social Context
Hye-Rim Cheon (Ajou University, Korea), Seung-Que Lee (Electronics and Telecommunication Research Institute, Korea), and Jae-Hyun Kim (Ajou University, Korea)

[1A-5] Performance of Analog and Digital Modulation Schemes Under Sweep Jamming
Dong-Yeol Choi, Won-Kyung Kim, and Jae-Hyun Kim (Ajou University, Korea), and Huirae Cho (National Security Research Institute, Korea)

Session 1B : Cognitive Radio Communication and Network
Chair: Won Cheol Lee (Soongsil University, Korea)

[1B-1] EEF Criterion Based User Selection for Cooperative Spectrum Sensing in Cognitive Radio Network
Aleksandra Stefanovska (Chongqing Univ. of Posts and Telecommunications, The Republic of Macedonia), Kai Gao and Bin Shen (Chongqing Univ. of Posts and Telecommunications, China)

[1B-2] An Efficient Power Allocation Scheme for Multiple
TVWS Devices Based on the Location Probability Hyung Min Chang, Chuyen Khoa Huynh, and Won Cheol Lee (Soongsil University, Korea)

[1B-3] Study of a Multi-relay Scheme and Co-channel Interference within an Underlay Cognitive Radio Network
Jamal Hussein (Newcastle University, UK), Salama Ikki (Lakehead University, Canada), and Said Boussakta, Charalampos Tsimenidis, and Yasir Al-Mathehaji (Newcastle University, UK)

[1B-4] Primary Receiver-Aware Opportunistic Broadcasting in Cognitive Radio Ad Hoc Networks
Yasir Al-Mathehaji, Said Boussakta, Martin Johnston, and Jamal Hussein (Newcastle University, UK)

[1B-5] Throughput of an opportunistic spectrum access scheme under a frame structure
Jagadeeshchandra Shetty and Jamadagni H.S. (Indian Institute of science, India)

Session 1C : Optical-Wireless LED
Chair: Yeong Min Jang (Koomin University, Korea)

[1C-1] Performance Analysis of a Generalized Color Modulation Under the Channel Model for High-rate PD Communication
Jai-Eun Kim, Ji-Won Kim, and Ki-Doo Kim (Kookmin University, Korea)

[1C-2] Visible Light Communication based Vehicle Positioning using a Rolling Shutter CMOS Sensor
Trong-Hop Do and Myungsik Yoo (Soongsil University, Korea)

[1C-3] Performance Evaluation of High-Speed Visible Light Communication Combining Low-Speed Image Sensor and Polygon Mirror In an Outdoor Environment
Yoshihito Imai, Tadashi Ebihara, Koichi Mizutani, and Naoto Wakatsuki (University of Tsukuba, Japan)

[1C-4] The High-efficiency LED Driver for Visible Light Communication Applications
Yu-Chen Lee, Jyun-Liang Lai, and Chueh-Hao Yu (Industrial Technology Research Institute, Taiwan), and Cihun-Siyong Alex Gong (Chang Gung University & Chang Gung Memorial Hospital, Taiwan)

July 9, 2017
14:00~15:15

Session 2A : DroneCAN

Chair: Hwangnam Kim (Korea University, Korea)

[2A-1] Devising Geographic Diffusion for Drone Networks *Jiyeon Lee, Kangho Kim, Hyunsoon Kim, and Hwangnam Kim (Korea University, Korea)*

[2A-2] Information Propagation Modeling in a Drone Network using Disease Epidemic Models

Yoojoong Kim, Jong-Kook Kim, and Junhee Seok (Korea University, Korea), and Byoung Du Kim (Victoria University, New Zealand)

[2A-3] Research on Potential of Sound-based Direction Sensing for Drones

Ha Young Shin, Jongtack Jung, and Hwangnam Kim (Korea University, Korea)

[2A-4] Camera-GPS-IMU Sensor Fusion for Autonomous Flying

Yongseok Lee, Jaemin Yoon, Hyunsoo Yang, Changu Kim, and Dongjun Lee (Seoul National University, Korea)

[2A-5] Spatial Retreat of Net-Drones under Communication Failure

Jin-Hyeok Kang and Kyung-Joon Park¬ (DGIST, Korea)

Session 2B : 5G/6G Mobile Communications

Chair: Hwangnam Kim (Korea University, Korea)

[2B-1] Tactical Beamforming Against High-Power Reactive Jammer

Sung-Ho Lim, Sungmin Han, Jaeseok Lee, and Ji-Woong Choi (Daegu Gyeongbuk Institute of Science & Technology (DGIST), Korea)

[2B-2] Joint Hierarchical Modulation and Network Coding for Asymmetric Data Rate Transmission Over Multiple-Access Relay Channel

Dongho You, Ye Hoon Lee, Seung Ho Choi, and Dong Ho Kim (Seoul National University of Science and Technology(SeoulTech), Korea), and Sunghyun Cho (Hanyang University, Korea)

[2B-3] Random Access Success Probability in Full-duplex Radio Networks

Sungmin Han, Jaeseok Lee, and Ji-Woong Choi (DGIST, Korea)

[2B-4] Optimal Placement of Service Function in Service Function Chaining

Haneul Ko, Dongeun Suh, Hosung Baek, and Sangheon Pack (Korea University, Korea), and Jiyoung Kwak (ETRI, Korea)

[2A-5] Asymptotic Performance Comparison of Concatenated Codes with Different Inner Decoding Schemes in Frequency- Hopping Spread Spectrum Packet Radio Networks

Ye Hoon Lee and Dong Ho Kim (Seoul National University of Science and Technology, Korea), and Sunghyun Cho (Hanyang University, Korea)

Session 2C : Optical-Wireless LED

Chair: Cihun-Siyong Alex Gong (Chang Gung University, Taiwan)

[2C-1] Flicker-Free Spatial-PSK Modulation Scheme for Vehicular Image Sensor Communications

Trang Nguyen, Nam Tuan Le, Mohammad Arif Hossain, Chang Hyun Hong, Amirul Islam, and Yeong Min Jang (Kookmin University, Korea)

[2C-2] Interference Mitigation Technique for Time-of-Flight (ToF) Camera

Amirul Islam, Mohammad Arif Hossain, and Yeong Min Jang (Kookmin University, Korea)

[2C-3] Performance Evaluation of MIMO Optical Camera Communications Based Rolling Shutter Image Sensor

Nam-Tuan Le and Yeong Min Jang (Kookmin University, Korea)

[2C-4] Adaptive Rate Scheduling for ITLinQ under Fast Fading in D2D Networks

Yeon Joon Choi, Kyungmin Lee, and Sang-Hyo Kim (Sungkyunkwan University, Korea)

July 9, 2017
15:30~16:45

Session 3A : MIMO

Chair: Joon-Sang Park (Hongik University, Korea)

[3A-1] Performance Analysis for Pilot Decontamination of Massive MIMO Using Alternating Projection
Yiliang Chen, Rong Ran, and Seongkeun Oh (Ajou University, Korea)

[3A-2] The Achievable Sum Rate of Large-Scale Fading in Multi-pair AF Massive MIMO Systems
Yang Liu (Yangzhou University, P.R. China), Jie Ding (Yangzhou University & Beihang University, P.R. China), Jing Yang, and Qiqing Yang (Yangzhou University, P.R. China)

[3A-3] Training Design and Two-stage Channel Estimation for Correlated Two-way MIMO Relay Systems
Huiming Chen and Wong Hing Lam (University of Hong Kong, P.R. China)

[3A-4] Achievable Rate Analysis for Multi-Pair Two-Way Amplify-and-Forward MIMO System in Ricean Fading Caihong Xu *(Yangzhou University, P.R. China), Jing Yang (Yangzhou University & Southeast University, P.R. China), Lei Zhou, and Yuren Du (Yangzhou University, P.R. China)*

Session 3B : Channel/Source Codes

Chair: Hsu-Feng Hsiao (National Chiao Tung University, Taiwan)

[3B-1] Cognitive HF Communication System with Adaptive Complementary Codes
Johanna Vartiainen, Pekka Pirinen, and Risto Vuohtoniemi (University of Oulu, Finland)

[3B-2] Generation of Cyclically Permutable Codes by Galois Field Fourier Transform
Ting-Ya Yang, Houshou Chen, and Kuo-Cheng Chung (National Chung Hsing University, Taiwan)

[3B-3] Nonuniform Overlapped Rateless Codes for Streaming over Error Prone Channels
Yu-Shu Chang and Hsu-Feng Hsiao (National Chiao Tung University, Taiwan)

[3B-4] Construction and Complement Circuit of a Quantum Stabilizer Code with Length 7
Duc Manh Nguyen and Sunghwan Kim (University of Ulsan, Korea)

Session 3C : Wireless Communications

Chair: Tae Won Ban (Gyeongsang National University, Korea)

[3C-1] Outage Probability of Macrodiversity system in the presence of Gamma long term fading Rayleigh short term fading and Nakagami-m CCI
Dusan Stefanovic (Collage of Applied technical Sciences, Serbia) and Caslav Stefanovic (University of Pristina, Serbia)

[3C-2] Mixed RF/FSO Two-Way Relaying System Under Generalized FSO Channel with Pointing Error
Lei Kong, Wei Xu, Hua Zhang, and Chunming Zhao (Southeast University, P.R. China)

[3C-3] On the DoF of Co-existing 2x2 X Channel and 2x2 Interference Channel
Cong Li, Feng Liu, and Liansun Zeng (Shanghai Maritime University, P.R. China)

[3C-4] Exact BER Performance Analysis of Incremental Relaying over Rayleigh Fading Channels
Özgür Özdemir (Selcuk University, Turkey)

[3C-5] The Novel Positioning System Based on Coverage Elimination in Wireless Sensor Networks s
Shih-Chang Huang (National Formosa University, Taiwan)

July 10, 2017
09:30~10:45

Session 4A : Resource Allocation

Chair: Eisuke Kudoh (Tohoku Institute of Technology, Japan)

[4A-1] Cooperative Spectrum Sharing with Space Time Block Coding and Non-orthogonal Multiple Access
Md Fazlul Kader and Soo Young Shin (Kumoh National Institute of Technology, Korea)

[4A-2] A Convex Optimization for Sum Rate Maximization in a MIMO Cognitive Radio Network
Hieu V. Nguyen, Van-Dinh Nguyen, Hyeon Min Kim, and Oh-Soon Shin (Soongsil University, Korea)

[4A-3] Coalition based Low-Complexity Algorithm for Nash Bargaining Solution
Jisoo Choi, Seunghyun Jung, and Hyunggon Park (Ewha Womans University, Korea)

Session 4B : Poster

Chair: Joon-Sang Park (Hongik University, Korea)

[4B-1] Design of a Collision-free Backoff Method to Improve the IEEE 802.11 DCF
Xiaoying Lei (Yangzhou University, China) and Seung Hyong Rhee (Kwangwoon University, Korea)

[4B-2] Adaptive Access Class Barring for Machine-Type Communications in LTE-A
Jihun Moon (University of Suwon, Korea) and Yujin Lim (Sookmyung Women's Univsersity, Korea)

[4B-3] Joint Power Allocation and Relay Selection for Two- Way Relaying with Digital Network Coding
Thinh Phu Do and Yun Hee Kim (Kyung Hee University, Korea)

[4B-4] Improvement of Key Exchange Protocol to prevent Man-in-the-middle Attack in the Satellite Environment
In-A Song and Young-Seok Lee (Kunsan National University, Korea)

[4B-5] Content-Centric Distribution in Wireless Networks *Mahfuzur Rahman Bosunia and Seong-Ho Jeong (Hankuk University of Foreign Studies, Korea)*

[4B-6] Test Node-Based WCL Algorithm for Wireless Sensor Networks
Kwang-Yul Kim and Yoan Shin (Soongsil University, Korea)

Session 4C : MIMO

Chair: Joon-Sang Park (Hongik University, Korea)

[4C-1] A Study on Turbo Equalization for MIMO System based on LDPC codes
Chang-uk Baek and Ji-won Jung (Korea Maritime and Ocean University, Korea)

[4C-2] A Study on MIMO-FTN Scheme based on Layered Space Time Code using Turbo Codes
Gun-Woong Park and Ji-won Jung (Korea Maritime and Ocean University, Korea)

[4C-3] MIMO-HFM: Acoustic System Design for Reliability and High Data Rate in Underwater Sensor Networks Sungryul Kim, *Jiseong Lee, and Younghwan Yoo (Pusan National University, Korea)*

Session 5A : Wireless Network

Chair: Purnendu Karmakar (The LNM Institute of Information Technology, India)

[5A-1] QoE Assessment of a Reliable Groupcast Scheme in Audiovisual Transmission Over a Wireless LAN

Toshiro Nunome, Haruki Yamamoto, and Yuma Honda (Nagoya Institute of Technology, Japan)

[5A-2] Cross Layer Multi QoS Metric Routing for Multimedia Traffic in 802.11E Over MANETs

Mahadev A. Gawas, Lucy J. Gudino, and K. R. Anupama (BITS-Pilani K.K.Birla, India)

[5A-3] A New MAC Protocol for Emergency Handling in Wireless Body Area Networks

Sabita Nepal, Amod Pudasaini, Jae-young Pyun, Suk-seung Hwang, Chung Ghiu Lee, and Seokjoo Shin (Chosun University, Korea)

Session 5B : Internet of Things

Chair: Najam Ul Hasan (Dhofar University, Oman)

[5B-1] Hop-Interval Based Decision of Operational Mode In RPL With Multi-Instance

Yonghwan Jeong, Sungwon Lee, Eunbae Moon, and Hyeongcheol Park (Kyungpook National University, Korea), Hongseok Yoo (Kyungwoon University, Korea), and Dongkyun Kim (Kyungpook National University, Korea)

[5B-2] A Positioning Algorithm in the Internet of Things

Ha. Nguyen Thi (Hoa Sen University, Viet Nam) and Khanh. Ngo Tan Vu (Tien Giang University, Viet Nam)

[5B-3] Resource Aware Hierarchical Routing in Heterogeneous Wireless IoT Networks

Jianlin Guo and Philip Orlik (Mitsubishi Electric Research Laboratories, USA), and Koichi Ishibashi (Mitsubishi Electric Corporation IT R&D Center, Japan)

Session 5C : Wireless Communications

Chair: Tae Won Ban (Gyeongsang National University, Korea)

[5C-1] Novel Channel Estimation Scheme for Backhaul System based on LTE-Advanced

Myeonghun Chu, Jihye Lee, Soonho Kwon, Sangmi Moon, and Intae Hwang (Chonnam National University, Korea)

[5C -2] Channel Equalizer Performance Analysis for Hybrid 3DTV in ATSC 3.0 Standard

Sol Lim and Dae Jin Kim (Chonnam National University, Korea), Sung-Hoon Kim and Hui Yong Kim (Electronics and Telecommunications Research Institute, Korea)

[5C-3] FSC Receiver for Performance Improvement of D2D Communication in LTE-Advanced System

Sangmi Moon, Myeonghun Chu, Jihye Lee, Soonho Kwon, and Intae Hwang (Chonnam National University, Korea)