







# 2013 IEICE ICTF

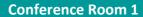
**Information and Communication Technology Forum** 



May 29-31, 2013

Sarajevo, Bosnia and Herzegovina

### Day 1 29th May 2013



#### **Oppening**

9:00-09:10

#### **Opening Remarks**

Dr Haris Gacanin, Alcatel-Lucent Bell N.V., Belgium IEICE Europe Section, Chair

#### Communications 1

(K-1)

9:10-09:50

(I-1)

9:50-10:10

(1-2)

10:10-10:30

Inter-industry Innovation

Dr Yuji Inoue, Toyota ICT IEICE, President

Remote Monitoring of Life Functions in Home Environment and Information Fusion Network for Assistive Medical Decision Making Assoc. Prof. Imre Cikajlo, University Rehabilitation Institute, Slovenia

> **Nonlinearity Compensation in Coherent Optical Communication Systems**

Assoc. Prof. Darko Zibar, DTU Fotonik, Denmark

Coffe Break 10:30-10:50

#### **Electronics**

(1-3)

10:50-11:10

(T-1)

11:10-11:30

A Few Applications of Superconducting Digital Electronics

Assoc. Prof. Pascal Febvre, University of Savoie, France

Approaches in Implementing Multi-band CMOS Low Noise Amplifiers

Dr Cristian Andriesei,

Gheorghe Asachi Technical University of Iasi, Romania

(T-2)

11:30-11:50

Noise Cancellation Techniques Used in CMOS Low Noise Amplifiers

Dr Cristian Andriesei,

Gheorghe Asachi Technical University of Iasi, Romania

11:50-13:10

Lunch

#### **Communications 2**

(K-2)

13:10-13:50

(1-4)

13:50-14:10

(T-3)

14:10-14:30

Communications 2

**Disaster-resilient Multilayered Communications Network**Prof. Fumiyuki Adachi, Tohoku University, Japan

PAPR Reduction and Related Techniques for Power Efficient

Multi-carrier/Multi-code Wireless Communication Systems
Dr Osamu Muta, Kyushu University, Japan

BER Performance Comparison Between OFDM/TDM and MC-CDMA with MMSE-FDE

Amir Ligata, IPSA Institute, Bosnia and Herzegovina, Haris Gacanin, Alcatel-Lucent Bell N.V., Belgium

14:30—14:50 **Coffe Break** 

#### **Communications 3**

(1-5)

14:50-15:10

(1-6)

15:10-15:30

**Adaptive Powerline Communication Systems** 

Dr Haris Gacanin, Alcatel-Lucent Bell N.V., Belgium IEICE Europe Section, Chair

DLC+VIT4IP: A High rate Narrowband PLC for Smart Grid Applications

Dr Bamidele Adebisi, Manchester Metropolitan University, UK

(1-7)

15:30-15:50

(1-8)

15:50-16:10

(1-9)

16:10-16:30

(1-10)

16:30-16:50

**Modeling Human Activity with Opportunistic Analytics** 

Dr Fahim Kawsar, Bell Labs, Belgium

Innovation on M2M Communications Systems for Future Smart
Community

Dr Shinichi Baba, Toshiba Research Europe Limited

Recent Developments of Transmitter and Receiver Integrated Circuits for Optical Front-ends

Prof. Johan Bauwelinck, Ghent University, Belgium

Photonic Technologies for Optical Fiber-wireless
Seamless Data Connectivity

Prof. Idelfonso Tafur Monroy, DTU Fotonik, Denmark

19:00-21:00

Dinner

Day 2 30th May 2013

#### **Communications 4**

(K-3)

8:30-09:10

(1-9)

9:10-09:30

(T-4)

09:30-09:50

(T-5)

09:50-10:10

**Modelling Traffic Control Mechanism in Mobile Networks** 

Prof. Maciej Stasiak, Poznan University of Technology, Poland

Modelling of Multi-service Networks with Overflow Traffic

Assoc. Prof. Mariusz Glabowski, Poznan University of Technology, Poland

**Quality of Multicast Trees in Ad-Hoc Networks** 

Maciej Piechowiak and Piotr Zwierzykowski, Poznan University of Technology, Poland

ShortestPathACO Based Strategy to Find the Shortest
Path Between Two Nodes

Mariusz Głąbowski, Bartosz Musznicki, Przemysław Nowak and Piotr Zwierzykowski, Poznan University of Technology, Poland

10:10—10:30 Coffe Break

#### **Engineering**

(I-11)

10:30-10:50

(T-6)

10:50-11:10

(T-7)

11:10-11:30

Virtual Restoration and Analysis of Digitized Paintings

Prof. Aleksandra Pizurica, Ghent University, Belgium

Context Aware Image Inpainting with Application to Virtual Restoration of Old Paintings

Tijana Ruzic and Aleksandra Pizurica, Ghent University, Belgium

Quantitative Microwave Imaging Based on a Huber Regularization

Funing Bai, Wilfried Philips and Aleksandra Pizurica,
Ghent University, Belgium

(T-8)

11:30-11:50

11:50-13:30

A Study of Filter-Bank Processing of ECG Signal for Diagnostic Applications

Emir Turajlic and Dzenan Softic, Sarajevo School of Science and Technology, B&H

Lunch

#### **Communications 5**

(1-12)

13:30-13:50

(I-13)

13:50-14:10

(T-9)

14:10-14:30

(T-10)

14:30-14:50

**Cooperative Communications with Confidential Messages** 

Dr Ninoslav Marina, EPFL, Switzerland

RAN Capacity Incensement in Smartphone Era; Scenario and Technologies

Dr Hidetoshi Kayama, DoCoMo Bejing Labs, China

Energy efficiency of video broadcasting services in LTE Heterogeneous Networks

Dragan Rastovac $^1$ , Chadi Khirallah $^2$ , Dejan Vukobratovic $^1$  and John Thompson $^2$ 

<sup>1</sup> University of Novi Sad, Serbia, <sup>2</sup> University of Edinburgh, UK

A Solution for Improving BER Performance of OFDM based Simple Cooperative Relaying

Ugljesa Urosevic, Zoran Veljovic and Ana Jovanovic
University of Montenegro, Montenegro

14:50—15:10 Coffe Break

#### **Communications 6**

(T-11)

15:10-15:30

(T-12) 15:30—15:50

(T-13)

15:50-16:10

16:10-16:30

16:30-17:00

A Delay-aware NUM-driven Framework with Terminal-based Mobility Support for Heterogeneous Wireless Multi-hop Networks

Salvatore Vanini<sup>1</sup>, Dario Gallucci<sup>1</sup>, Silvia Giordano<sup>1</sup> and Andrzej Szwabe<sup>2</sup>

<sup>1</sup>Information Systems and Networking Institute SUPSI, Switzerland

<sup>2</sup>Poznan University of Technology, Poland

Sphere and Cone Composite Realtime Shadows in OpenGL

Aldina Pljaskovic<sup>1</sup>, Dzenan Avdic<sup>1</sup>, Petar Spalevic<sup>2</sup> and Dejan Rancic<sup>3</sup>

<sup>1</sup>State University of Novi Pazar, Serbia

<sup>2</sup>Faculty of Technical Science Kosovska Mitrovica, Serbia

<sup>3</sup>Faculty of Electrical Engineering, University of Nis, Serbia

Boosting Committee Machines to Detect the Parkinson's Disease by Neural Networks

Mehmet Can

International University of Sarajevo, Bosnia and Herzegovina

Closing

**IEICE-EUS Meeting**