

Day	Time	Room			
		A	B	C	D
Tuesday October 6	17 ⁰⁰	Registration			
	19 ⁰⁰				
Wednesday October 7	09 ⁰⁰	Registration			
	10 ³⁰	Opening and Plenary Lecture			
	11 ⁰⁰				
	13 ⁰⁰	TELSIKS Welcome Cocktail Party			
	15 ⁰⁰				Ericsson
					IEEE
		ME	TN	RT I	CP01
					CP02
	17 ⁰⁰	WS	WC	Women in Engineering	PO1-PO3
	19 ⁰⁰	Reception at the Mayor of Niš			
21 ⁰⁰	Musical performance				
Thursday October 8	09 ⁰⁰	Registration			
	11 ⁰⁰	MT	BMC	CP03	
				CP04	
		SP I	CIT	CP05	
				CP06	
	13 ⁰⁰				Serbian Cable
					RT II
	15 ⁰⁰	Sightseeing tour			
	17 ⁰⁰	SP II			
	19 ⁰⁰				
21 ⁰⁰	Conference Dinner				
Friday October 9	09 ⁰⁰	Registration			
	11 ⁰⁰	CEM	CMT	CP07	
				CP08	
		AP	CP09		
				CP10	
	13 ⁰⁰				
15 ⁰⁰					
17 ⁰⁰					

Session Name		Session mark
Microwave Electronics		ME
Microwave Technique		MT
Antennas and Propagation		AP
Computational Electromagnetics		CEM
Signal Processing		SP I
Signal Processing II		SP II
Coding and Modulation Techniques		CMT
Broadcasting and Multimedia Communications		BMC
Wireless Communications		WC
Telecommunication Networks and Services		TN
Computer Systems and Internet Technologies		CIT
Posters	Microwaves, Antennas and Computational Electromagnetics	PO1
	Digital Signal Processing, Computer Systems and Internet Technologies	PO2
	Control Systems and Measurements	PO3
	Telecommunication Networks and Distribution Systems	PO4
	New Telecommunications Technologies and Services	PO5
Workshop		WS
Round Table I		RT I
Round Table II		RT II

Commercial Presentation: CP01-CP10
Women in Engineering Meeting: Women in Engineering
Serbian Cable Operators Meeting: Serbian Cable
IEEE Meeting: IEEE



TELSIS 2009
CONFERENCE
PROGRAM



Wednesday, October 7

Lecture Hall
10:30

OPENING
SESSION

Chairmen

Prof. **Bratislav Milovanović**
University of Niš, Serbia

Prof. **Kamisetty Rao**
University of Texas at Arlington, USA

Prof. **Ulrich Rohde**
Synergy Microwave Corporation, USA

Prof. **Peter Russer**
University of Munich, Germany

Prof. **Aleksandar Marinčić**
Serbian Academy of Science and Art, Serbia

Prof. **Ujjval Buch**
Government Polytechnic, India

Prof. **Georgi Stoyanov**
Technical University of Sofia, Bulgaria

Prof. **Octavian Fratu**
University Politehnica of Bucharest, Romania

WELCOME TO TELSIS 2009

Prof. **Vladimir Katić**
Serbia and Montenegro IEEE Section, Serbia

Prof. **Andrew Muller**
IET Communications, UK

Prof. **Aleksandar Marinčić**
Serbian Academy of Science and Art, Serbia

Prof. **Veljko Milutinović**
University of Belgrade, Serbia

Prof. **Dragan Antić**
*Dean of the Faculty of Electronic Engineering,
University of Niš, Serbia*

Mr. **Miloš Simonović**
Mayor of Niš, Serbia

OPENING ADDRESS

Prof. **Gradimir Milovanović**
*President of National Council for Scientific and
Technological Development, Serbia*

12:15

End of session



Wednesday, October 7

Lecture
Hall
11:40

PLENARY
SESSION

Chairman

A. Marinčić
*Serbian Academy of Science and Art,
Serbia*

**PL.1 Joint Video Encoding in DVB/ATSC Multi-
program Transmission: MPEG-2 vs.
H.264/AVC Bitrate Control**

K. R. Rao, Z. Bojković*, D. Milovanović*
University of Texas at Arlington, USA
**University of Belgrade, Serbia*

12:00

End of session



Room A
15:00

Wednesday, October 7

MICROWAVE ELECTRONICS

Chairmen

A. Poddar

Synergy Microwave Corporation, USA

V. Marković

University of Niš, Serbia

C. Mitrovski

Faculty of Technical Sciences, Bitola, Macedonia

Regular papers:

ME.1 A Novel Voltage Controlled High Frequency Crystal Oscillator Circuits

U. Rohde, A. Poddar
Synergy Microwave Corp., USA

ME.2 Mode-Coupling and Phase-Injection Mechanism Enables EMI-Insensitive Crystal Oscillator Circuits

U. Rohde, A. Poddar
Synergy Microwave Corp., USA

ME.3 Advantages of Bipolar SiGe over Silicon CMOS for a 2.1 GHz LNA

N. Logan, J. Noras
University of Bradford, United Kingdom

ME.4 Linearity Issue in 2.4 GHz 0.35 μ m BiCMOS Low Noise Amplifier

J. Radić, A. Đugova, M. Videnović-Mišić
University of Novi Sad, Serbia

ME.5 Harmonic Controlled Three-way Doherty Amplifier with Improved Efficiency and Linearity

A. Atanasković, N. Maleš-Ilić, B. Milovanović
University of Niš, Serbia

ME.6 Combined Empirical and Look-up Table Approach for Non-Quasi-Static Modelling of GaN HEMTs

G. Crupi, D. Schreurs*, A. Caddemi, I. Angelov**,
R. Liu***, M. Germain***, W. De Raedt***
University of Messina, Italy
**Katholieke Universiteit Leuven, Belgium*
***Chalmers University of Technology, Sweden*
****IMEC, Belgium*

ME.7 Hybrid PKI Empirical-Neural Bias Dependent Noise Models of Microwave Transistors

Z. Marinković, O. Pronić Rančić, V. Marković
University of Niš, Serbia

ME.8 High Frequency Low Cost Fast Channel Switching Synthesizer

N. Mitrović, D. Obradović, S. Tasić
IMTEL Communications, Serbia

17:00 End of session



Wednesday, October 7

Room B
15:00

TELECOMMUNICATION
NETWORKS AND SERVICES

Chairmen

Ž. Čučej
University of Maribor, Slovenia

V. Aćimović-Raspopović
University of Belgrade, Serbia

D. Draić
University of Belgrade, Serbia

Invited papers:

- TN.1** **Data Source Statistics Modelling based on Measured Packed Traffic: A Case Study of Protocol Algorithm and Analytical Transformation Approach**
Ž. Čučej, M. Fras
University of Maribor, Slovenia
- TN.2** **Power Management and Energy Harvesting Techniques for Wireless Sensor Nodes**
M. Stojčev, M. Kosanović, Lj. Golubović*
University of Niš, Serbia
**University of Kragujevac, Serbia*

Regular papers:

- TN.3** **Responsive Pricing Model for Partially Elastic Users**
V. Radonjić, V. Aćimović-Raspopović
University of Belgrade, Serbia
- TN.4** **Radio Frequency Interference Mitigation in GDSL MIMO Systems using Adaptive Complex Narrowband Filter Banks**
V. Poulkov, M. Ovtcharov, G. Iliev, Z. Nikolova
Technical University of Sofia, Bulgaria
- TN.5** **Analysis of a Traffic Flow Optimization Protocol for Hybrid MANETs**
R. Zoican, D. Galatchi
University Politehnica of Bucharest, Romania
- TN.6** **Comparison of ETX and HOP Count Metrics using Glomosim Simulator**
M. Malnar, N. Nešković
University of Belgrade, Serbia

17:00

End of session



Wednesday, October 7

Room B
17:00

WIRELESS
COMMUNICATIONS

Chairmen

S. Tomažič
University of Ljubljana, Slovenia
L. Gavrilovska
Univ. "Ss. Cyril & Methodius", Skopje, Macedonia
O. Fratu
University Politehnica of Bucharest, Romania

Invited papers:

- WC.1 Long Term Evolution: Towards 4th Generation of Mobile Telephony and Beyond**
S. Tomažič, G. Jakuš
University of Ljubljana, Slovenia
- WC.2 Resource Management in Wireless Heterogeneous Networks (WHNs)**
L. Gavrilovska, V. Atanasovski
Univ. "Ss. Cyril & Methodius", Skopje, Macedonia
- WC.3 Consideration on Interoperability of Different Wireless Access Networks using the IEEE 802.21 Approach**
O. Fratu, E. Popovici, S. V. Halunga, E. Stănescu*
University Politehnica of Bucharest, Romania
**National Research Institute in Informatics, Romania*

Regular papers:

- WC.4 Several Aspects of the Uplink Scheduling in WIMAX**
R. Cirstea, S. Ciochina, O. Fratu, S. V. Halunga
University Politehnica of Bucharest, Romania
- WC.5 QoS Analysis of Resource Allocation in Wireless Mesh Networks**
T. Šuminoski, T. Janevski
Univ. "Ss. Cyril & Methodius", Skopje, Macedonia
- WC.6 Performances of Internet Transport Protocols in Wireless Environment**
T. Janevski, I. Petrov*
Univ. "Ss. Cyril & Methodius", Skopje, Macedonia
**Macedonian Telecom, Macedonia*
- WC.7 Improving Optimization of Mobile Networks by using Fuzzy Logic Techniques**
P. Campan, Gh. Gavrioloaia*, L. Anton*
Ericsson Telecommunications Romania S.R.L., Romania
**Military Tech. Academy of Bucharest, Romania*
- WC.8 Performance Analysis of Reconfigurable Receiver in DSSS System in the Presence of Interference**
B. Dimitrijević, N. Milošević, Z. Nikolić, D. Drajić*
University of Niš, Serbia
**University of Belgrade, Serbia*

19:00

End of session



Room A
09:00

Thursday, October 8

MICROWAVE TECHNIQUE

Chairmen

O. Borić-Lubecke

University of Hawaii, USA

B. Kolundžija

Faculty of Electrical Engineering, Belgrade, Serbia

B. Jokanović

IMTEL Communications, Serbia

Invited papers:

MT.1 Heartbeat Interval Extraction using Doppler Radar for Health Monitoring

O. Borić-Lubecke^{***}, V. Lubecke^{***}, B.-K. Park^{**},
W. Massagram^{***}, B. Jokanović^{****}

**University of Hawaii at Manoa, USA*

***Kai Sensors, Honolulu, USA*

****Naresuan University, Phitsanulok, Thailand*

*****IMTEL Communications, Belgrade, Serbia*

Regular papers:

MT.2 Exact Analytical Treatment of the Graded Interfaces between Positive and Negative Refractive Index Media

Ph. Tassin, N. Dalarsson*, M. Dalarsson*,
Z. Jakšić**

Vrije Universiteit Brussel, Belgium

**Royal Institute of Technology, Sweden*

***IHTM Institute, Serbia*

MT.3 Left-Handed Unit Cell based on Hilbert Grounded Patch for Multi-Band Filtering Applications

V. Radonić, N. Janković, V. Crnojević-Bengin

University of Novi Sad, Serbia

MT.4 Dual-Mode Closed-Loop Microstrip Filters for Wireless Applications

L. Athukorala, Dj. Budimir

University of Westminster, United Kingdom

MT.5 Analyse of One Type of Resonant Cell

D. Nešić, B. Kolundžija*

IHTM Institute, Serbia

**University of Belgrade, Serbia*

MT.6 New Modified Microstrip Bandstop Filter with only One (First Order) Bandstop

D. Nešić, B. Kolundžija*

IHTM Institute, Serbia

**University of Belgrade, Serbia*

MT.7 Formulation of Microwave Circuit Equations: An Educational Viewpoint

D. Tošić, V. Petrović

University of Belgrade, Serbia

11:00

End of session



Thursday, October 8

Room A

11:00

SIGNAL PROCESSING I

Chairmen

G. Stoyanov

Technical University of Sofia, Bulgaria

L. Milić

Institute Mihailo Pupin, Serbia

M. Lutovac

University of Belgrade, Serbia

Invited papers:

SP I.1 High-Accuracy Design and Realization of Fixed and Variable Allpass-based Fractional Delay Digital Filters

G. Stoyanov, K. Nikolova, V. Markova
Technical University of Sofia, Bulgaria

SP I.2 Recursive Digital Filters and Two-Channel Filter Banks: Frequency-Response Masking Approach

Lj. Milić, J. Čertić*
Institute Mihailo Pupin, Belgrade, Serbia
**University of Belgrade, Serbia*

SP I.3 Invariant Subspaces in N-th Order Digital Filters with Two's Complement Overflow

C. Mitrovski
Faculty of Technical Sciences, Bitola, Macedonia

Regular papers:

SP I.4 Post-Processing with Advanced Symbolic Simulation and Design using Schematicsolver and Mathematica

M. Lutovac, V. Mladenović*
University of Belgrade, Serbia
**School of Mechanical & Electrical Engineering, Paraćin, Serbia*

SP I.5 A Wave Digital Approach in Obtaining z-domain Functions for Microstrip Stub-line Structures

B. Stošić, M. Gmitrović
University of Niš, Serbia

SP I.6 Limit Cycle Frequency Jittering of an Asynchronous Sigma-Delta Modulator

T. Matić, T. Švedek, M. Herceg
Faculty of Electrical Engineering, Osijek, Croatia

SP I.7 Cyclic Spectral Analysis of TH-PPM UWB Impulse Radio Signals

D. Vučić, M. Erić*, I. Pokrajac**
School of Computing, Belgrade, Serbia
**Military Technical Institute, Belgrade, Serbia*
***Military Academy, Belgrade, Serbia*

13:00

End of session



Thursday, October 8

Room A
17:00

SIGNAL PROCESSING II

Chairmen

R. Kountchev

Technical University of Sofia, Bulgaria

B. Reljin

University of Belgrade, Serbia

D. Pokrajac

Delaware State University, USA

Invited papers:

SP II.1 New Method for Adaptive Karhunen-Loève Color Transfor

R. Kountchev, R. Kountcheva
Technical University of Sofia, Bulgaria

Regular papers:

SP II.2 Evaluation of Automated License Plate Reader Accuracy

D. Pokrajac, C. Borcean*, A. Johnson, A. Hobbs,
L. Agodio, S. Nieves, M. Balbes*, L. McCauley*,
J. Tice*, N. Dare*, J. McKie*, B. Lombardo*,
BJ Self*, J. Austin
Delaware State University, USA
**Asynchrony Solutions, USA*

SP II.3 Selection of Wavelet Decomposition Levels in ECG Filtering

A. Gavrovska, D. Jevtić, B. Reljin
University of Belgrade, Serbia

SP II.4 The Influence of the Feature Vector Content on the CBIR System Efficiency

N. Kojić, G. Zajić, S. Čabarkapa, M. Pavlović,
V. Radosavljević*, B. Reljin
University of Belgrade, Serbia
**Temple University, USA*

SP II.5 Multipath Mitigation of GPS Signal using Sequential Monte-Carlo Filter

M. Đogatović, M. Stanojević
University of Belgrade, Serbia

SP II.6 A Delay Locked Loop for Analog Signal

G. Jovanović, M. Stojčev
University of Niš, Serbia

SP II.7 A Nonlinear Acoustic Echo Cancellation Scheme Implementation using the Blackfin Microcomputer

S. Zoican
University Politehnica of Bucharest, Romania

SP II.8 Piecewise Polynomial Approximation based on Taylor Series with Efficient Realization Using Farrow Structure

Đ. Babić
Union University, Serbia

19:00 End of session



Thursday, October 8

Room B
09:00

BROADCASTING AND
MULTIMEDIA COMMUNICATIONS

Chairmen

C. Capsalis

National Technical University of Athens, Greece

B. Zovko-Cihlar

University of Zagreb, Croatia

Z. Bojković

University of Belgrade, Serbia

Invited papers:

BMC.1 Compatibility of DVB-T Services and IMT-2000 Compliant Mobile Telecommunications in the UHF Band of 470-862 MHz
V. Kalogirou, E. Nanou, N. Capsalis,
T.-H. Velivasaki, C. Capsalis
National Technical University of Athens, Greece

BMC.2 Terrestrial Digital Video Broadcasting Technology
B. Zovko-Cihlar
University of Zagreb, Croatia

BMC.3 DVB Standards Development
I. Reljin, A. Sugaris*
University of Belgrade, Serbia
**Telegroup, Serbia*

Regular papers:

BMC.4 Film Archives as a Future Enhancement of Digital Cinema Technology
Z. Bojković, A. Samčović
University of Belgrade, Serbia

BMC.5 New Technology Forecasting using the Bass Model
V. Radojčić, G. Marković
University of Belgrade, Serbia

BMC.6 High-quality OCXO for Digital TV
D. Dujković, D. Jevtić, S. Dedić-Nešić, L. Grubišić,
I. Reljin, B. Reljin
University of Belgrade, Serbia

BMC.7 A Characterization to Evaluate Graphical User Interface Frameworks for Television Receivers
M. Bjelica, N. Teslić, I. Papp, M. Savić
University of Novi Sad, Serbia

11:00

End of session



Thursday, October 8

Room B
11:00

COMPUTER SYSTEMS AND
INTERNET TECHNOLOGIES

Chairmen

V. Milutinović

University of Belgrade, Serbia

M. Stojčev

University of Niš, Serbia

B. Radenković

*Faculty of Organizational Sciences, Belgrade,
Serbia*

Invited papers:

CIT.1 ProSense Research Activities in Belgrade

Z. Babović, A. Crnjen, G. Rakočević, M. Stanković,
S. Stanković, Z. Perić, I. Ćirković, I. Damjanović,
V. Milutinović

University of Belgrade, Serbia

**CIT.2 Remote Patient Monitoring: Information
Reliability Challenges**

M. Petković

*Philips Electronics / Eindhoven University of
Technology, The Netherlands*

Regular papers:

CIT.3 Address Generators for Linear Processor Array

M. Stojčev, I. Milovanović, E. Milovanović,
T. Nikolić

University of Niš, Serbia

CIT.4 Custom Made Medical Data Reporting Tool

P. Rajković, D. Janković

University of Niš, Serbia

**CIT.5 The Role of ICT Technology in the Knowledge
Society**

Lj. Luić, D. Glumac

b4n d.o.o, Croatia

**CIT.6 Web Information System for Transport
Telematics and Fleet Management**

D. Stojanović, B. Predić, I. Antolović,

S. Đorđević-Kajan

University of Niš, Serbia

CIT.7 GPSS for e-learning Environment

M. Despotović, B. Radenković, D. Barać

University of Belgrade, Serbia

**CIT.8 Representing Time and Location using Web
Mashups**

M. Marković, C. Kloos

Universidad Carlos III de Madrid, Spain

13:00

End of session



Friday, October 9

Room A
09:00

COMPUTATIONAL ELECTROMAGNETICS

Chairmen

P. Russer
University of Munich, Germany

N. Dončov
University of Niš, Serbia

V. Petrović
University of Belgrade, Serbia

Invited papers:

CEM.1 Network Methods Applied to Computational Electromagnetics

P. Russer
Technical University of Munich, Germany

Regular papers:

CEM.2 EM Field Monitoring in Circular Cavity using Wire Compact Model Implemented in Cylindrical TLM Mesh

B. Milovanović, N. Dončov, J. Joković,
T. Dimitrijević
University of Niš, Serbia

CEM.3 Strong FEM Solution for the Square Coaxial Line

Ž. Mančić, V. Petrović*
University of Niš, Serbia
**University of Belgrade, Serbia*

CEM.4 TEM Analysis of Coupled Strip Lines with Anisotropic Substrate

S. Ilić, N. Raičević
University of Niš, Serbia

CEM.5 Square-shaped Electrode as Pillar Grounding System

P. Rančić, N. Cvetković
University of Niš, Serbia

CEM.6 Hand Implications on the Coupling between Human Head and Different Cellular Phones

S. Al-Mously, A. Abdalla
The Higher Institute of Electronics, Libya

CEM.7 Neural Network-Based Characterization of Microwave Applicator Loaded with Multilayer Dielectric

Z. Stanković, B. Milovanović, N. Dončov,
A. Marinčić*
University of Niš, Serbia
Serbian Academy of Science and Art, Serbia

11:00 End of session



Friday, October 9

Room A
11:00

ANTENNAS
AND PROPAGATION

Chairmen

- U. Buch**
Government Polytechnic, India
- A. Nešić**
IMTEL Communications, Serbia
- D. Filipović**
University of Colorado, USA

Invited papers:

- AP.1 Multi-beam Adaptive Beam Forming for SAR Application Modeling and its DSP Implementation on T-SHARC**
U. Buch
Government Polytechnic, India

Regular papers:

- AP.2 Analysis of Mutual Coupling in Adaptive Antennas and Techniques used for Compensation**
U. Buch
Government Polytechnic, India
- AP.3 Wideband Analog and Digital Beamforming**
P. Kasemir, N. Sutton, M. Radway, B. Jeong, T. Brown, D. Filipović
University of Colorado, USA
- AP.4 High Side Lobe Suppression Millimeter Wave Antenna with a Cylindrical-Parabolic Reflector**
A. Nešić, I. Radnović
IMTEL Communications, Belgrade, Serbia
- AP.5 New Type of Turnstile Antenna**
I. Radnović, A. Nešić
IMTEL Communications, Belgrade, Serbia
- AP.6 Efficient Model of Slotted Patch Antenna based on Neural Networks**
M. Milijić, Z. Stanković, B. Milovanović
University of Niš, Serbia
- AP.7 Consideration on Radio Propagation in Cavities**
A. Badescu, O. Fratu, S. Halunga, I. Marcu
University Politehnica of Bucharest, Romania

13:00

End of session



Friday, October 9

Room B
09:00

CODING AND
MODULATION TECHNIQUES

Chairmen

R. Petrović

Verance, USA

B. Vasić

University of Arizona, USA

S. V. Halunga

University Politehnica of Bucharest, Romania

Invited papers:

CMT.1 Audio Watermarking in Compressed Domain

R. Petrović, D. T. Yang*

Verance, San Diego, USA

**Qualcomm, San Diego, USA*

Regular papers:

CMT.2 Multidimensional Turbo Product and Generalized LDPC Codes with Component RS Codes Suitable for use in Beyond 100 Gb/s Optical Transmission

I. Đorđević, L. Xu*, T. Wang*

University of Arizona, USA

**NEC Laboratories America, Princeton, USA*

CMT.3 Error and Erasure Rates for Two-Dimensional Magnetic Recording Systems

R. Radhakrishnan, A. Raman Krishnan, B. Vasić

University of Arizona, USA

CMT.4 MAP Decoding of MTR Codes in LDPC-MTR Encoded Magnetic Recording System

N. Đurić

University of Novi Sad, Serbia

CMT.5 Conventional and Optimal Multiuser Performance Increase by using Turbo Encoding

S. Halunga, I. Marcu, O. Fratu, A. Badescu

University Politehnica of Bucharest, Romania

CMT.6 Adaptive Modulation and Coding for Generalized Fading Channels

I. Đorđević, G. T. Đorđević*

University of Arizona, USA

**University of Niš, Serbia*

CMT.7 Algorithm for Automatic Modulation Classification in Multipath Channel based on Sixth-Order Cumulants

V. Orlić, M. Dukić*

IMTEL Communications, Serbia

**University of Belgrade, Serbia*

CMT.8 Performance of Hybrid Pulse Shape Amplitude Modulation for UWB Communications Systems over Multipath Channels

M. Herceg, T. Matic, T. Švedek

Faculty of Electrical Engineering, Osijek, Croatia

11:00

End of session



Wednesday, October 7

Room D
17:00

Poster session - PO1-
**MICROWAVES, ANTENNAS
AND COMPUTATIONAL
ELECTROMAGNETICS**

Chairmen

D. Kolonić

University of Banja Luka, Bosnia and Herzegovina

M. Banciu

University Politehnica of Bucharest, Romania

Regular papers:

PO1.1 Microwave Investigations on Some Microstrip Left- Handed Structures

M. Banciu, I. Mihai, N. Militaru, G. Lojewski,
T. Petrescu

University Politehnica of Bucharest, Romania

PO1.2 The Scattering of Electromagnetic Waves on Plane Lattice of Dielectric Resonators

A. Trubin

The National Technical University of Ukraine (KPI), Ukraine

PO1.3 Design and Physical Realization of Coupled Stripline Filter

P. Međedović, Đ. Kolonić*

Ministry for Economic Relations and Regional Cooperation, Bosnia and Herzegovina

**University of Banja Luka, Bosnia and Herzegovina*

PO1.4 UHF RFID Antenna: A Printed Dipol Antenna with CPS Matching Circuit and Inductively Coupled Feed

N. Popović, P. Manojlović

IMTEL Communications, Serbia

PO1.5 Numerical Simulation of the Power Electrical Cables using Coupled Models

D. Cârstea, I. Cârstea*, A. Cârstea*

High-School Group of Railways, Craiova, Romania

**University of Craiova, Romania*

PO1.6 Vehicle to Infrastructure Communications – Technologies and EMC Problems in Public Transport Management System

M. Minea, S. Dumitrescu*

University Politehnica of Bucharest, Romania

**Romatsa S.A, Romania*

PO1.7 Application of RBF Neural Network and ANFIS for Electromagnetic Field Prediction around the Power Lines

J. Radulović, V. Ranković

University of Kragujevac, Serbia

19:00

End of session



Room D
17:00

Wednesday, October 7

Poster session – PO2 –
DIGITAL SIGNAL PROCESSING,
COMPUTER SYSTEMS AND
INTERNET TECHNOLOGIES

Chairmen

N. Gospić
University of Belgrade, Serbia

D. Janković
University of Niš, Serbia

Regular papers:

PO2.1 A Solution for Efficient Reduction of Intersymbol Interference in Digital Microwave Radio

V. Orlić, M. Lutovac*
IMTEL Communications, Serbia
**University of Belgrade, Serbia*

PO2.2 Realization of Signal Processing for 200Mbit/S Millimeter Wave Link at 60GHz.

M. Perić, D. Perić, V. Orlić, D. Obradović,
N. Mitrović
IMTEL Communications, Serbia

PO2.3 Exam Stress Influences on Vowel Characteristics Determined with ADS v2.0 Application

V. Vučković, M. Nešić
University of Niš, Serbia

PO2.4 Some Advances in Fundamental Frequency Analyzing by Digital Speech Processing Application ADS v2.1

V. Vučković
University of Niš, Serbia

PO2.5 Scene Cut Detection in Video by using Combination of Spatio-temporal Video Characteristic

J. Joković, D. Đorđević
University of Niš, Serbia

PO2.6 Communication Paradigms In Distributed Systems Infrastructure

M. Salem Elshebani
The Higher Institute of Electronics Libya

PO2.7 Resolving Database Replication Conflicts in the Health Care Information System Project Early Phase

T. Stanković, D. Janković, S. Pešić*
University of Niš, Serbia
**Health Care Center Niš, Serbia*

PO2.8 **Scaling and Convergence Speed of EIGRPv4 and OSPFv2 Dynamic Routing Protocols in Hub and Spoke Network**
N. Poprzen, N. Gospić*
University of Banja Luka, Bosnia and Herzegovina
**University of Belgrade, Serbia*

PO2.9 **Military Academy Department's Information Support**
I. Tot
Military Academy, Serbia

PO2.10 **Model Driven Runtime for the Startegic Based Computer Games**
N. Pavlović, S. Cvetanović, D. Domazet
University of Belgrade, Serbia

19:00 End of session



Wednesday, October 7

Room D
17:00

Poster session – PO3 –
CONTROL SYSTEMS AND
MEASUREMENTS

Chairmen

M. Stojić
University of Belgrade, Serbia

B. Danković
University of Niš, Serbia

Regular papers:

PO3.1 Design of the Disturbance-Invariant Speed-Controlled Drive with Induction Motor

Đ. Stojić, M. Stojić*
Institut of Electrical Engineering, Serbia
**University of Belgrade, Serbia*

PO3.2 Systems Modelling based on Orthogonal Filters

B. Danković, D. Antić, M. Milojković, S. Stankov
University of Niš, Serbia

PO3.3 Modelling of Imperfect System based on Almost Orthogonal Polynomials

B. Danković, Z. Jovanović, S. Nikolić, D. Mitić
University of Niš, Serbia

PO3.4 Microcontroller Based Solar Tracking System

A. Stjepanović, S. Stjepanović*, F. Softić**,
Z. Bundalo**
Univ. of East Sarajevo, Bosnia and Herzegovina
**Telekom Srpske, Bosnia and Herzegovina*
***Univ. of Banja Luka, Bosnia and Herzegovina*

PO3.5 Virtual Laboratory Architecture and Application for Remote Access

J. Đorđević-Kozarov, M. Arsić
University of Niš, Serbia

PO3.6 Highly Pure Signal Generators

V. Papez, S. Papezova
Czech Technical University in Prague, Czech Republic

19:00

End of session



Thursday, October 8

Room D
17:00

Poster session – PO4 –
TELECOMMUNICATION
NETWORKS AND
DISTRIBUTION SYSTEMS

Chairmen

T. Janevski

Univ. "Ss. Cyril & Methodius, Skopje, Macedonia

T. Palade

Technical University of Cluj-Napoca, Romania

Regular papers:

PO4.1 NGN Functional Architecture for Resource Allocation and Admission Control

H. Yeganeh, A. H. Darvishan, M. Shakiba

Iran Telecommunication Research Center, Iran

PO4.2 On-demand Multicast Routing Protocols in Dynamic Ad Hoc Networks

D. Galatchi, R. Zoican

University Politehnica of Bucharest, Romania

PO4.3 Performance Analysis of ertPS Traffic in IEEE 802.16e Standard

K. Jakimovski, T. Janevski

Univ. "Ss. Cyril & Methodius", Skopje, Macedonia

PO4.4 Performance Analysis of Contention-Based Channel Access Mechanisms of 802.11 DCF and 802.11e EDCA

E. Puschita, T. Palade

Technical University of Cluj-Napoca, Romania

PO4.5 Testing of Multimedia Content Transmission in Wireless 802.11n Network

J. Kljujić, M. Radivojević

Union University, Serbia

PO4.6 Design, Implementation and Simulation of WirelessHart Network

M. Kostadinović, M. Stojčev*, Z. Bundalo**,

D. Bundalo***

Univ. of East Sarajevo, Bosnia and Herzegovina

**University of Niš, Serbia*

***Univ. of Banja Luka, Bosnia and Herzegovina*

****UniCredit Bank, Bosnia and Herzegovina*

PO4.7 Routing Schemes for Bluetooth Scatternet Applicable to Mobile Ad-hoc Networks

A.-A. Sh. Alkhrabash, M. Salem Elshebani*

Al-Zawia High Center of Computer Technology, Libya

**The Higher Institute of Electronics, Libya*

PO4.8 Traffic Engineering for Voip Network based on PSTN Statistical Models

Z. Stojanović, Đ. Babić*
Telekom Srpske, Bosnia and Herzegovina
**Slobomir P University, Bosnia and Herzegovina*

PO4.9 Remote Monitoring of the Microwave Repeater Systems with Solar and Wind Power Supply

D. Obradović, Z. Živanović, N. Mitrović
IMTEL Communications, Serbia

PO4.10 Accurate Modeling of SMATV Networks through "S" Parameters

C. Cortés, M. A. Del Casar, C. Briso
Technical University of Madrid, Spain

PO4.11 Method for Computing Return Losses Requirements of Devices from System Specifications

C. Cortés, M. A. Del Casar, C. Briso, A. Martín
Technical University of Madrid, Spain

19:00 End of session



Room D
17:00

Thursday, October 8

Poster session – PO5 –
NEW TELECOMMUNICATION
TECHNOLOGIES AND
SERVICES

Chairmen

Z. Perić
University of Niš, Serbia

B. Todorović
IMTEL Communications, Serbia

Regular papers:

PO5.1 An Application of Direct Sequence Spread Spectrum to Unmanned Aerial Vehicle PPM Control Signal Protection
B. Todorović, V. Orlić
IMTEL Communications, Serbia

PO5.2 Effects of Imperfect Reference Signal Recovery on SSC Receiver over Generalized Fading Channels
B. Nikolić, Z. Mitrović*, G. T. Đorđević
University of Niš, Serbia
**HE Djerdap, Serbia*

PO5.3 Design of Piecewise Uniform Scalar Quantizer for the Backward Adaptive Algorithm
Z. Perić, J. Nikolić, A. Jovanović, L. Velimirović
University of Niš, Serbia

PO5.4 Triple-Channel Macro- and Micro-Diversity over Shadowed Fading Channels using Compound Model
Z. Popović, Č. Stefanović*, D. S. Krstić*,
S. Milosavljević**, M. Stefanović*
University of Kragujevac, Serbia
**University of Niš, Serbia*
***University of Priština, Serbia*

PO5.5 Performance Analysis of Generalized Selection Combiner in the Presence of Hoyt Fading
D. S. Krstić, P. Nikolić*, G. Stamenović,
D. Stefanović
University of Niš, Serbia
**Tigar Tyres Company, Serbia*

PO5.6 Effects of Rician Fading, Branch Correlation and Interference Number on SC System Performance
A. Panajotović, M. Stefanović, D. Drača, D. Milović,
N. Sekulović
University of Niš, Serbia

PO5.7 Channel Capacity of Maximal Ratio Combining Schemes over Correlated Nakagami-M Fading Channels

M. Stefanović, D. S. Krstić, B. Milošević,
J. Anastasov, S. Panić
University of Niš, Serbia

PO5.8 Quality of Service Based Charging using Parlay X

E. Pencheva, I. Atanasov
Technical University of Sofia, Bulgaria

19:00 End of session



Wednesday, October 7

Room A
17:15

WORKSHOP

Chairmen

Prof. A. Marinčić

Serbian Academy of Science and Art, Serbia

Prof. C. Capsalis

National Technical University of Athens, Greece

Topic:

Trends in Multimedia Communications

Speakers:

Prof. Dr. Kamisetty R. Rao, Fellow IEEE
Full professor of Electrical Engineering *University of Texas at Arlington, USA*

Prof. Dr. Zoran Bojković, Senior member IEEE Full
Professor of Electrical Engineering *University of Belgrade, Serbia*

Dragorad Milovanović
PhD student in Electrical Engineering
University of Belgrade, Serbia

Abstract:

The Workshop reflects the latest work in multimedia communications, providing both underlying theory and today's best design techniques, by systematically addressing aspects of recent trends and standardization activities, as well as covering the layered structure of multimedia communication systems: applications, middleware and networking.

The Workshop consists of two selected lectures:

- **Middleware Layer – Video Encoders Performance:** digital media compression techniques, ITU/MPEG H.264 AVC video coding standard.
- **Networking Layer – Convergence, QoS and Security:** QoS cross-layer optimization in H.264 AVC video transmission over wireless networks, evolution toward 4G wireless networks (heterogeneous systems and services integration) and the framework for security in 4G networks.

19:00

End of session



Wednesday, October 7

Room C
15:00

ROUND TABLE I

Topic:

**Scientific and Technological Development
Strategy of the Republic of Serbia 2009-
2014**

Round table will be held in Serbian.

Moderators:

Dr. Radosav Cerović, assistant minister
*Serbian Ministry of Science and Technological
Development*

Prof. Dr. Gradimir Milovanović
President of National Council for Scientific and
Technological Development
Megatrend University Belgrade, Serbia

Prof. Dr. Dragan Antić
Dean of Faculty of Electronic Engineering
University of Niš, Serbia

Prof. Dr. Bratislav Milovanović
University of Niš, Serbia

Prof. Dr. Miloljub Smiljanić
IHTM Institute, Serbia

17:00

End of session



Thursday, October 8

Room C
13:00

ROUND TABLE II

Topic:

The Accreditation of Higher Education

Round table will be held in Serbian.

Introductory speakers:

Prof. Vera Dondur
Member of Commission on accreditation and quality evaluation

Prof. Srđan Stanković
President of National Council for higher education

Prof. Dušan Teodorović
Member of Commission on accreditation and quality evaluation

Prof. Milan Aleksić
Member of Commission on accreditation and quality evaluation

Prof. Vera Vujčić
Member of Commission on accreditation and quality evaluation

Moderators:

Prof. Dr. Bratislav Milovanović
Member of Commission on accreditation and quality evaluation

Prof. Vera Dondur
Member of Commission on accreditation and quality evaluation

Prof. Srđan Stanković
President of National Council for higher education

Prof. Vera Vujčić
Member of Commission on accreditation and quality evaluation

15:00

End of session