

**ICEST 2008  
CONFERENCE  
PROGRAM**

## CONFERENCE PROGRAM



Lecture  
Hall  
11:00

**Wednesday, September 26**

### **OPENING SESSION**

Chairmen

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

Prof. **Dimitar Dimitrov**,  
*Technical University of Sofia, Bulgaria*

Prof. **Cvetko Mitrovski**,  
*University "St. Kliment Ohridski"-Bitola,  
Macedonia*

Prof. **Dragan Antić**,  
*University of Niš, Serbia*

### **WELCOME TO ICEST 2008**

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

Prof. **Dimitar Dimitrov**  
*Technical University of Sofia, Bulgaria*

Prof. **Cvetko Mitrovski**  
*University "St. Kliment Ohridski"-Bitola,  
Macedonia*

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

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

Prof. **Radoslav Bubanj**  
*Rector of the University of Niš, Serbia*

### **OPENING ADDRESS**

Prof. **Aleksandra Smiljanić**  
*Serbian Ministry of Telecommunications  
and Information Society, Serbia*

**12:15** End of session



Lecture  
Hall  
12:15

**Wednesday, June 25**

**PLENARY  
SESSION**

Chairmen

**D. Dimitrov,**  
*Technical University of Sofia, Bulgaria*

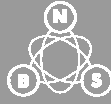
**C. Mitrovski,**  
*University "St. Kliment Ohridski"-Bitola,  
Macedonia*

**PL.1 Efficient Field Computation Based on N-Port  
Methods**

F. Schlagenhauer  
*The University of Western Australia, Australia*

12:45

End of session



**Wednesday, June 25**

**Room A**  
**15:00**

**TELECOMMUNICATION  
SYSTEMS**

**Chairmen**

**Z. Bojković,**  
*University of Belgrade, Serbia*

**N. Gospić,**  
*University of Belgrade, Serbia*

**Invited paper:**

**TS.1 IPTV Systems: Benefits, Challenges, and Future Trends**  
Z. Bojković, B. Bakmaz, M. Bakmaz  
*The Faculty of Traffic and Transport Engineering, Serbia*

**Regular papers:**

**TS.2 Selection of Appropriate Technologies for Universal Service**  
B. Bakmaz, N. Gospić, D. Bogojević, M. Davidović  
*The Faculty of Traffic and Transport Engineering, Serbia*

**TS.3 Impact of Cross Phase Modulation on WDM Optical Systems**  
G. Georgiev, T. Levchev, N. Stoyanov  
*Ministry of Interior, Bulgaria*

**TS.4 Limitations in the Design of CATV Fiber-Optic Links**  
L. Jordanova, D. Dobrev  
*Technical University of Sofia, Bulgaria*

**TS.5 Improvement of the Optical Channel Noise Characteristics Using Distributed Raman Amplifiers**  
L. Jordanova, V. Topchiev  
*Technical University of Sofia, Bulgaria*

**TS.6 Method for Securing Pay TV Channels**  
O. Panagiev  
*Technical University of Sofia, Bulgaria*

**17:00** End of session



**Wednesday, June 25**

**Room A**  
**17:00**

**TELECOMMUNICATION  
NETWORKS**

**Chairmen**

**V. Aćimović-Raspopović,**  
*University of Belgrade, Serbia*

**A. Tzenov,**  
*Technical University of Sofia, Bulgaria*

**TN.1 The Optical WDM Network Link Failure Recovery Based on Bee Colony Optimization**

G. Marković, V. Aćimović-Raspopović,  
D. Teodorović  
*University of Belgrade, Serbia*

**TN.2 SLA Monitoring System of QoS Parameters to Network Performance Metrics Mapping**

A. Tsenov, T. Georgiev\*  
*Technical University of Sofia, Bulgaria*  
*\*TELELINK EAD, Sofia, Bulgaria*

**TN.3 End-to-End Delay Analyses in IP Networks**

R. Goleva, D. Atamian  
*Technical University of Sofia, Bulgaria*

**TN.4 Analysis on Technologies Supporting Resource Management in Next Generation Networks**

P. Koleva, I. Atanasov, E. Pencheva  
*Technical University of Sofia, Bulgaria*

**TN.5 Third Party Control in SIP Conferencing**

I. Atanasov, P. Koleva, E. Pencheva  
*Technical University of Sofia, Bulgaria*

**TN.6 SIP Conference Policy Formalisms**

I. Atanasov, P. Koleva, E. Pencheva  
*Technical University of Sofia, Bulgaria*

**TN.7 An Approach to Flow Control Based on Combined Adaptive Algorithm in Communication Networks**

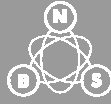
G. Hristov, T. Iliev  
*University of Rousse, Bulgaria*

**TN.8 A Model for Network Performance Analysis in a Case of Transfer a Large Image Files**

V. Aleksieva, P. Antonov  
*Technical University of Varna, Bulgaria*

**19:00**

**End of session**



**Wednesday, June 25**

**Room B**  
**15:00**

**SIGNAL**  
**PROCESSING**

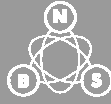
**Chairmen**

**R. Kountchev,**  
*Technical University of Sofia, Bulgaria*  
**I. Reljin,**  
*University of Belgrade, Serbia*  
**G. Iliev,**  
*Technical University of Sofia, Bulgaria*

- SP.1 Investigation of the FIR Filters in the Subtraction Method for Filtration of Power-line Interference in Case of Even Sampling**  
G. Mihov, V. Manoev  
*Technical University of Sofia, Bulgaria*
- SP.2 Application of Hausdorff's Window Fuction by Fir Filters Synhtesis**  
P. Apostolov  
*Institute for Special Technical Equipment-MI, Sofia, Bulgaria*
- SP.3 A New Method of Design of Variable Fractional Delay Digital Allpass Filters**  
K. Nikolova, G. Stoyanov  
*Technical University of Sofia, Bulgaria*
- SP.4 Multifractal Analysis of Outgoing Signal from the Statistical Multiplexer with Neural Network Control**  
M. Zajeganović-Ivančić, I. Reljin\*, B. Reljin\*  
*ICT College, Belgrade, Serbia*  
*\*University of Belgrade, Serbia*
- SP.5 Document Decomposition Based on Recursive Radon Transform**  
I. Draganov, R. Kountchev  
*Technical University of Sofia, Bulgaria*
- SP.6 Enhanced Sound Capture System for Small Devices**  
S. Mihov, T. Gleghorn\*, I. Tashev\*  
*Technical University of Sofia, Bulgaria*  
*\*Microsoft Corporation, USA*
- SP.7 The Application of Support Vector Machines for Classification of Audio Signals**  
N. Reljin, D. Pokrajac  
*Delaware State University, USA*
- SP.8 Investigation and Implementation of a Method Extracting and Recognizing of the Digitalized Voice Sequence**  
V. Vučković, M. Stanković  
*University of Niš, Serbia*

**17:00**

End of session



**Wednesday, June 25**

**Room B**  
**17:00**

**IMAGE**  
**PROCESSING**

**Chairmen**

**C. Mitrovski,**  
*University "St. Kliment Ohridski"-Bitola,  
Macedonia*

**B. Reljin,**  
*University of Belgrade, Serbia*

**A. Popova,**  
*Technical University of Sofia, Bulgaria*

**IP.1 Adaptive Processing of Latent Fingerprints**

R. Kountchev, V. Todorov\*, R. Kountcheva\*  
*Technical University of Sofia, Bulgaria*  
*\*T&K Engineering, Bulgaria*

**IP.2 Multiscale Orientation Field Estimation**

B. Popović, M. Bandjur\*, V. Stojanović\*\*  
*Police Academy, Belgrade, Serbia*  
*\*Faculty of Technical Sciences, Kosovska  
Mitrovica, Serbia*  
*\*\*University of Niš, Serbia*

**IP.3 Optimal Thresholds Selection for Adaptive Image Interpolation**

R. Mironov, R. Kountchev  
*Technical University of Sofia, Bulgaria*

**IP.4 Non-uniform Threshold as an Alternative to Uniform Threshold in Denoising in Wavelet Domain**

M. Kostov, C. Mitrovski, M. Bogdanov\*  
*University "St. Kliment Ohridski"-Bitola, Macedonia*  
*\*SS. Cyril and Methodius University, Skopje,  
Macedonia*

**IP.5 Statistical Analysis of Feature Vector Relevance in CBIR System**

G. Zajić, N. Kojić, N. Reljin, B. Reljin\*  
*ICT College, Belgrade, Serbia*  
*\*University of Belgrade, Serbia*

**IP.6 Retrieving Images Using Content-Based Search and Progressive Wavelet Correlation**

I. Stojanović, S. Bogdanova\*, M. Bogdanov\*  
*University Goce Delcev, Macedonia*  
*\* SS. Cyril and Methodius University, Skopje,  
Macedonia*

**IP.7 Flickering Reduction Algorithm in Anaglyph Stereoscopic Images**

A. Krupev, A. Popova  
*Technical University of Sofia, Bulgaria*

**IP.8 Application of Geometrical Models for Face Detection**

D. Vasileva  
*Technical University of Sofia, Bulgaria*

**19:00** End of session



**Thursday, June 26**

**Room A**  
**09:00**

**DIGITAL**  
**TELECOMMUNICATIONS**

**Chairmen**

**T. Iliev,**  
*University of Rousse, Bulgaria*

**M. Stefanović,**  
*University of Niš, Serbia*

**DT.1 Influence of Fading Parameter on Performance of SC System over Rician Fading in the Presence of Interference**

M. Stefanović, D. Drača, A. Panajotović, D. Milović,  
N. Sekulović  
*University of Niš, Serbia*

**DT.2 Influence of Imperfect Carrier Signal Recovery on Detection of QPSK Signal Using SC Technique in Rician Fading Channel**

Z. Mitrović, B. Nikolić\*, G. Đorđević\*  
*PD "HE Đerdap" d.o.o Kladovo, Serbia*  
*\*University of Niš, Serbia*

**DT.3 Analysis of EGC Diversity with Partially Coherent Weibull Fading Signals**

G. Đorđević, A. Cvetković, M. Stefanović  
*University of Niš, Serbia*

**DT.4 Outage Probability of Dual-Hop Non-regenerative Relaying System over Weibull Fading Channels**

A. Cvetković, D. Milić, J. Anastasov  
*University of Niš, Serbia*

**DT.5 Level Crossing Rate of Phase Process and FM Noise in Nakagami-q Fading Channel Influenced by Interference**

M. Stefanović, M. Petković  
*University of Niš, Serbia*

**DT.6 Performance of Convolutional/Single Parity Check Turbo Codes Over a Rician Fading Channel**

S. Yordanova, N. Velikov\*, G. Marinova  
*Technical University of Varna, Bulgaria*  
*\*Naval Academy "N. Vapzarov" of Varna, Bulgaria*

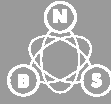
**DT.7 An Analysis of the Channel Coding Performance in DVB-RCS Systems**

T. Iliev  
*University of Rousse, Bulgaria*

**DT.8 Analysis and Obtaining the Bit Error Rates (BER) in Turbo Code Decoder Algorithm**

B. Stefanov  
*University of Rousse, Bulgaria*

**11:00** End of session



**Thursday, June 26**

**Room A**  
**11:00**

**WIRELESS  
COMMUNICATIONS**

**Chairmen**

- B. Tzankov,**  
*Technical University of Sofia, Bulgaria*
- E. Pencheva,**  
*Technical University of Sofia, Bulgaria*

- WC.1** **Complex Baseband Model of Wireless OFDM Digital Communication System**  
M. Ovtcharov, V. Poulkov, G. Iliev  
*Technical University of Sofia, Bulgaria*
- WC.2** **Call-level Performance Modeling of Voice over IEEE 802.16 Systems**  
B. Tsankov, P. Koleva, K. Kassev, V. Poulkov  
*Technical University of Sofia, Bulgaria*
- WC.3** **Investigation of Bandwidth Request Mechanisms in 802.16 Networks**  
V. Hrisov  
*SouthWest University, Bulgaria*
- WC.4** **Localization System using RSSI Measurement of Wireless Sensor Network based on Zigbee Standard**  
M. Srbinovska, C. Gavrovski, V. Dimčev  
*SS. Cyril and Methodius University, Skopje, Macedonia*
- WC.5** **Wireless Sensor Networks: Performance Analysis in Indoor Scenarios**  
M. Srbinovska, V. Dimčev, C. Gavrovski  
*SS. Cyril and Methodius University, Skopje, Macedonia*
- WC.6** **One Easy-to-Implement Method for BER Performance Testing of Uncoded Ultrahigh Capacity (Gbit/s) Radio Link**  
M. Perić, D. Obradović, D. Perić, V. Orlić  
*IMTEL "Komunikacije" AD, Serbia*
- WC.7** **Exploring and Improving the Performance of Radio-Relay System Under Frequency-Selective Fading Channel**  
V. Orlić, M. Perić, M. Zečević  
*IMTEL "Komunikacije" AD, Serbia*

**13:00** End of session



**Thursday, June 26**

**ELECTRONIC COMPONENTS,  
SYSTEMS AND  
TECHNOLOGIES**

**Chairmen**

**A. Andonova,**  
*Technical University of Sofia, Bulgaria*

**V. Valchev,**  
*Technical University of Varna, Bulgaria*

**EL.1 Application of Statistical Simulation Using SPICE to Parameter Extraction of RF Transistor Models**

E. Gadjeva, V. Durev  
*Technical University of Sofia, Bulgaria*

**EL.2 Radio Frequency Power Bipolar Transistor Modeling and Simulation**

I. Nemingenchev, P. Petrova,  
B. Karapenev  
*Technical University of Gabrovo, Bulgaria*

**EL.3 Equivalentents of Optocouplers with a Photodynistor Photodetector**

E. Koleva, I. Kolev  
*Technical University of Gabrovo, Bulgaria*

**EL.4 Reducing Switching Losses trough MOSFET – IGBT Combination**

V. Valchev, A. Van den Bossche\*, A. Marinov  
*Technical University of Varna, Bulgaria*  
*\*Ghent University, Belgium*

**EL.5 Comparison of Nanocrystalline Magnetic Materials and Ferrites Used for Power Electronics Transformers**

V. Valchev, G. Nikolov  
*Technical University of Varna, Bulgaria*

**EL.6 Development and Spice Simulation of Multiphase Full Bridge Transistor DC-DC Converter with Current Mode Control System**

G. Kunov, E. Gadjeva, M. Popov, N. Todorov  
*Technical University of Sofia, Bulgaria*

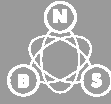
**EL.7 Modern Technology Application in Electro Industry Parts Production**

S. Nusev, I. Andreevski, D. Temeljkovski\*  
*University "St. Kliment Ohridski"-Bitola, Macedonia*  
*\*University of Niš, Serbia*

**EL.8 Research of Joint Operation of Hall Elements With Orthogonal Magnetic Sensitivity**

N. Draganov, A. Aleksandrov  
*Technical University of Gabrovo, Bulgaria*

**19:00** End of session



Room B  
09:00

**Thursday, June 26**

**CONTROL SYSTEMS I**

Chairmen

**D. Antić,**  
*University of Niš, Serbia*

**R. Arnaudov,**  
*Technical University of Sofia, Bulgaria*

**CSI.1 Designing a Compound Chaotic System Based on the Hide's Model**

D. Chantov  
*Technical University of Gabrovo, Bulgaria*

**CSI.2 Synchronization of Hyperchaotic Systems with Impermanent One-Variable Coupling**

D. Chantov  
*Technical University of Gabrovo, Bulgaria*

**CSI.3 Probability Stability and Monte Carlo Method**

B. Danković, B. Zlatković, B. Samardžić  
*University of Niš, Serbia*

**CSI.4 An Experimental Setup for Studying Sampling and Signal Reconstruction Process**

M. Naumović, B. Petrović  
*University of Niš, Serbia*

**CSI.5 Hardware Implementation of a Space Vector PWM Technique Using SystemC and VHDL Autocoding**

Ž. Mihajlović, M. Adžić\*, E. Adžić  
*Faculty of Technical Sciences, Novi Sad, Serbia*  
*\*Technical Faculty in Subotica, Serbia*

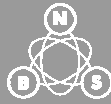
**CSI.6 IR Thermographic Survey to Control-points Determination**

V. Videkov, A. Andonova, V. Manoev  
*Technical University of Sofia, Bulgaria*

**CSI.7 Thermocontrol System for Refrigeration Camera**

V. Videkov, V. Manoev, S. Tabakov, M. Manoeva,  
C. Lazarov  
*Technical University of Sofia, Bulgaria*

**11:00** End of session



**Thursday, June 26**

**Room B**  
**11:00**

## **CONTROL SYSTEMS II**

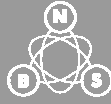
### **Chairmen**

- V. Manevska,**  
*University "St. Kliment Ohridski"-Bitola, Macedonia*
- R. Miletiev,**  
*Technical University of Sofia, Bulgaria*
- B. Danković,**  
*University of Niš, Serbia*

- CSII.1 Stepping Motor Drive for Precise Positioning Applications**  
M. Mikhov, P. Nakov  
*Technical University of Sofia, Bulgaria*
- CSII.2 Robust Position Control of Induction Motor Using Discrete-Time Sliding Mode Control**  
B. Veselić, B. Peruničić-Draženić\*,  
Č. Milosavljević  
*University of Niš, Serbia*  
*\*University of Sarajevo, Bosnia and Herzegovina*
- CSII.3 Education System for TV Monitors Adjustment with I2C Serial Bus Interface**  
A. Bekiarski, A. Andreev  
*Technical University of Sofia, Bulgaria*
- CSII.4 Fuzzy Logic Trajectory Control of Pneumatic Actuators for Rehabilitation Robot System**  
N. Koceska, S. Koceski  
*University of L'Aquila, Italy*
- CSII.5 Vision-Based Guidance of a Six-Legged Robot**  
A. Bekiarski, M. Milushev, P. Petrov  
*Technical University of Sofia, Bulgaria*
- CSII.6 Camera Control for Active Surveillance from a Six-Leg Walking Machine**  
M. Milushev, P. Petrov, O. Boumbarov,  
V. Georgieva  
*Technical University of Sofia, Bulgaria*
- CSII.7 Dimension Computing of Rigid Group of Organism in Unknown Environment and Robot's Perception of the Physical World Structure**  
B. Ristevski, V. Manevska, E. Vlahu-Georgievska,  
N. Rendevski  
*University "St. Kliment Ohridski"-Bitola, Macedonia*
- CSII.8 Curiosity – A Base for Robots Learning and Development**  
E. Vlahu-Georgievska, N. Rendevski, B. Ristevski  
*University "St. Kliment Ohridski"-Bitola, Macedonia*

**13:00**

End of session



**Thursday, June 26**

**Room B**  
**17:00**

**POWER TRANSMISSION  
AND DISTRIBUTION SYSTEMS**

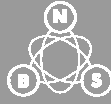
**Chairmen**

**Lj. Trpezanovski,**  
*University "St. Kliment Ohridski"-Bitola,  
Macedonia*

**D. Stojanović,**  
*University of Niš, Serbia*

- PS.1** **New Bare Conductor for Transmission and Distribution Overhead Lines of the Future**  
Lj. Trpezanovski, A. Markoski  
*University "St. Kliment Ohridski"-Bitola, Macedonia*
- PS.2** **Transferred Potential from Substation HV/MV by MV Cable Line**  
D. Tasić, M. Stojanović  
*University of Niš, Serbia*
- PS.3** **Investigation of the Noise Influence over Algorithms for Identification of the Air Power Line Parameters**  
M. Todorova  
*Technical University of Varna, Bulgaria*
- PS.4** **Assessment of the Safety Conditions from High Touch and Step Voltages in the Grounding Systems of the mines**  
N. Acevski  
*University "St. Kliment Ohridski"-Bitola, Macedonia*
- PS.5** **Marginal Loss Coefficients and Nodal Factor Method for Loss Allocation in Distribution Systems with DG**  
M. Atanasovski, V. Borozan\*  
*University "St. Kliment Ohridski"-Bitola, Macedonia*  
\*SS. Cyril and Methodius University, Skopje, Macedonia
- PS.6** **Comparison of Production on a Cascade-Connected Hydro Power Plant, with Daily and Monthly Reference**  
M. Spirovski, A. Arsenov\*, N. Acevski  
*University "St. Kliment Ohridski"-Bitola, Macedonia*  
\* SS. Cyril and Methodius University, Skopje, Macedonia
- PS.7** **Dynamic Load Modelling of Some Low Voltage Devices**  
L. Korunović, D. Stojanović  
*University of Niš, Serbia*
- PS.8** **The Analysis of Load Unbalance in Low Voltage Distribution Network of Niš**  
D. Stojanović, L. Korunović  
*University of Niš, Serbia*

**19:00** End of session



**Thursday, June 26**

**Room C  
09:00**

**ELECTROMAGNETISM  
IN MEDICINE**

**Chairmen**

**D. Dimitrov,**  
*Technical University of Sofia, Bulgaria*

**Y. Velchev,**  
*Technical University of Sofia, Bulgaria*

**EMM.1 Application of Apparatus for Magnetotherapy together with Amplipuls in Medicine**

D. Dimitrov, B. Bonchev, A. Dimitrov  
*Technical University of Sofia, Bulgaria*

**EMM.2 Application of Apparatus for Magnetotherapy together with Apparatus for Permanent Electrical Field in Medicine**

D. Dimitrov, B. Bonchev, A. Dimitrov  
*Technical University of Sofia, Bulgaria*

**EMM.3 Wavelet Transform Based ECG QRS Detector**

Y. Velchev, O. Boumbarov  
*Technical University of Sofia, Bulgaria*

**EMM.4 Synthesis of Signals for Cranial Electrotherapy Stimulation**

N. Ralev  
*Technical University of Sofia, Bulgaria*

**EMM.5 Microcontroller Based Device for Cranial Electrotherapy Stimulation**

N. Ralev  
*Technical University of Sofia, Bulgaria*

**11:00**

End of session



**Friday, June 27**

**Room A**  
**09:00**

**MICROWAVE TECHNIQUE**

**Chairmen**

**B. Milovanović,**  
*University of Niš, Serbia*  
**A. Nešić,**  
*IMTEL "Komunikacije" AD, Serbia*  
**V. Marković,**  
*University of Niš, Serbia*

**MT.1 Modeling of Step Discontinuity in Microstrip Structures by using Wave Digital Approach**

B. Stošić, M. Gmitrović\*  
*University of Niš, Serbia*  
*\*IMTEL "Komunikacije" AD, Serbia*

**MT.2 Modeling of Strip Conductors Centered between Ground Planes**

S. Musa, M. Sadiku  
*Prairie View A&M University, USA*

**MT.4 Balanced Amplifier Using Reduced Size Hybrids**

M. Nedelchev, I. Iliev  
*Technical University of Sofia, Bulgaria*

**MT.5 Hybrid PKI Temperature Dependent Small-Signal Models of Microwave Transistors**

Z. Marinković, V. Marković  
*University of Niš, Serbia*

**MT.6 Two Realizations of Active Transmitting Station at 13 GHz Frequency Range**

P. Manojlović, S. Jovanović, N. Popović,  
S. Tasić, M. Perić  
*IMTEL "Komunikacije" AD, Serbia*

**MT.7 Direct IQ Modulator for 36GHz Frequency Range**

S. Jovanović, A. Nešić, V. Orlić  
*IMTEL "Komunikacije" AD, Serbia*

**11:00**

End of session



**Friday, June 27**

**Room A  
11:00**

**ANTENNAS  
AND PROPAGATION**

**Chairmen**

**N. Dodov,**  
*Technical University of Sofia, Bulgaria*  
**N. Dončov,**  
*University of Niš, Serbia*  
**Z. Stanković,**  
*University of Niš, Serbia*

- AP.1** **Bandwidth Improvement of a Foursquare Microstrip Antenna**  
S. Baev, N. Dodov  
*Technical University of Sofia, Bulgaria*
- AP.2** **Method for Measuring Parasitic Electromagnetic Emissions with Automated System for Measurement Management**  
T. Levtchev, N. Stoyanov, G. Georgiev  
*Ministry of Interior, Bulgaria*
- AP.3** **Microstrip Antennas with EBG Structures**  
N. Stoyanov, C. Levtchev, G. Georgiev  
*Ministry of Interior, Bulgaria*
- AP.4** **Analysis of Smart Antennas with URA Based on Halfwavelength Dipoles - Simple DOA and ABF Methods**  
V. Vassileva, S. Savov, M. Doneva  
*Technical University of Varna, Bulgaria*
- AP.5** **Hybrid empirical-neural model of the influence of foliage areas on EM propagation in urban environment**  
Z. Stanković, M. Milijić, B. Milovanović  
*University of Niš, Serbia*

**13:00** End of session



**Friday, June 27**

**Room B**  
**09:00**

**COMPUTER SYSTEMS**

**Chairmen**

**M. Stojčev,**  
*University of Niš, Serbia*

**M. Temerinac,**  
*Faculty of Technical Sciences, Novi Sad, Serbia*

**COS.1 CDMA coded wrapper-based SoC interconnect**  
T. Nikolić, M. Stojčev  
*University of Niš, Serbia*

**COS.2 Design of leading ones or zeros counting circuit**  
N. Milenković, V. Stanković  
*University of Niš, Serbia*

**COS.3 Evaluation of CELL IBM platform regarding development of advanced real-time video algorithms**  
N. Lukić, I. Papp, Z. Marčeta, D. Ačanski\*,  
M. Temerinac  
*Faculty of Technical Sciences, Novi Sad, Serbia*  
*\*MicronasNIT, Novi Sad, Serbia*

**COS.4 Performing OLAP operations in data cube with dimensions having irregular hierarchical relationships**  
A. Rozeva  
*University of Forestry, Bulgaria*

**COS.5 Platform Independant-Information System Dependant Database Replication**  
T. Stanković, M. Stanković\*, D. Janković  
*University of Niš, Serbia*  
*POWERSOFT d.o.o. Niš, Serbia*

**COS.6 Human performance measurement in interaction with computer**  
N. Đorđević, D. Rančić  
*University of Niš, Serbia*

**11:00** End of session



**Friday, June 27**

**Room B  
11:00**

**COMPUTER SYSTEMS AND  
INTERNET TECHNOLOGIES**

**Chairmen**

**M. Stanković,**  
*University of Niš*

**M. Lazarova,**  
*Technical University of Sofia, Bulgaria*

**CIT.1 Responsive Pricing Model with Fixed Bandwidth Usage for the Next Generation Internet**

V. Radonjić, V. Aćimović-Raspopović  
*The Faculty of Traffic and Transport Engineering, Serbia*

**CIT.2 A Common Framework for Inter-Provider IP Quality of Service Specification**

S. Bosjančić, V. Timčenko, M. Stojanović  
*Mihajlo Pupin Institute, Serbia*

**CIT.3 A Quickened Genetic Nonlinear Reconstruction Algorithm for EIT**

V. Guliashki  
*Institute of Information Technologies – BAS, Bulgaria*

**CIT.4 Performance Comparison of Parallel Genetic Algorithms for Combinatorial Optimization Problems**

M. Lazarova, P. Borovska, S. Mabgar  
*Technical University of Sofia, Bulgaria*

**CIT.5 Efficiency of Parallel Computations for Error Backpropagation Neural Network Training**

M. Lazarova  
*Technical University of Sofia, Bulgaria*

**CIT.6 Time Histograms with Select and Zoom for Creating Visual Representation of Data Set for Managers**

S. Savovska, S. Loskovska\*, V. Blazeski  
*TUT KOM Prilep, Macedonia*  
*Nepoznata institucija, Macedonia*

**13:00** End of session



Room D  
17:00

**Thursday, June 26**

**Poster session – PO1**  
**TELECOMMUNICATIONS**  
**SYSTEMS AND TECHNOLOGY**

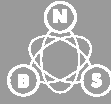
Chairmen

**Z. Nikolić,**  
*University of Niš, Serbia*  
**L. Jordanova,**  
*Technical University of Sofia, Bulgaria*  
**Z. Perić,**  
*University of Niš, Serbia*

- PO1.1 Pilot signals processing module**  
O. Panagiev  
*Technical University of Sofia, Bulgaria*
- PO1.2 Comparative analysis of VoIP protocols used in CATV networks**  
L. Jordanova, J. Nenkov  
*Technical University of Sofia, Bulgaria*
- PO1.3 Location Based Services: Architecture, Mapping, Transportation GIS**  
A. Samčović, Z. Bojković  
*The Faculty of Traffic and Transport Engineering, Serbia*
- PO1.4 Characteristics of Low-Voltage Installations as Transport Medium in Office Buildings**  
J. Mandić-Lukić, D. Pokorni, N. Simić\*  
*Energoprojekt – Entel, Serbia*  
*\*University of Belgrade, Serbia*
- PO1.5 Initial direction of arrival estimation for Direction Lock Loop in DS/CDMA**  
N. Denić, N. Milošević\*, Z. Nikolić\*  
*Serbian Armed Forces, Serbia*  
*\*University of Niš, Serbia*
- PO1.6 A Priority Traffic Models in Wideband Mobile Networks**  
S. Mirchev, G. Balabanov  
*Technical University of Sofia, Bulgaria*
- PO1.7 Application of wireless sensor networks in environmental monitoring and agriculture**  
N. Rendevski, V. Manevska, E. Vlahu-Georgievskva, B. Ristevski  
*University "St. Kliment Ohridski"-Bitola, Macedonia*
- PO1.8 Evaluation of Frequency Hopping Spread Spectrum Signals Stability Against Impulse Disturbances**  
G. Cherneva, A. Andonov  
*Higher School of Transport "T.Kableshkov", Bulgaria*
- PO1.9 A Method of Generating Non-Uniform Square QAM by Using Non-Linear Amplification**  
D. Bojchev, D. Dobrev  
*Technical University of Sofia, Bulgaria*

- PO1.10 Analysis of the opportunities for reduction of Inter-carrier Interference in OFDM**  
S. Kolev  
*Technical University of Sofia, Bulgaria*
- PO1.11 Analysis of triple SC over constant correlated Rayleigh signal and interference based on signal to interference ratio**  
M. Stefanović, S. Panić, A. Mosić, S. Jovković  
*University of Niš, Serbia*
- PO1.12 Analysis of the SISO decoding algorithms**  
G. Hristov  
*University of Rousse, Bulgaria*
- PO1.13 Analysis of model of switched nonuniform scalar quantization model of Laplacean source in a dynamic range of power**  
Z. Perić, S. Panić, A. Mosić  
*University of Niš, Serbia*
- PO1.14 Reduction of correction in Barrett's algorithm**  
P. Stojanov, R. Dimova  
*Technical University of Sofia, Bulgaria*
- PO1.15 Level Crossing Rate of the SSC Combiner Output Signal in the Presence of Log-normal Fading**  
D. Krstić, P. Nikolić\*, D. Stefanović, I. Temelkovski  
*University of Niš, Serbia*  
*\*Tigar Tyres, Serbia*
- PO1.16 Outage Probability of SIR-Based Dual EGC Diversity Over Correlated Rayleigh Fading Channel**  
J. Anastasov, A. Cvetković, D. Stefanović  
*University of Niš, Serbia*
- PO1.17 Recovering Optical Image Transferred Through Atmospheric Turbulence. Wavelength analysis**  
K. Dimitrov  
*Technical University of Sofia, Bulgaria*
- PO1.18 The Research Results of Capacity Converter with Voltage Negative Impedance Converter**  
V. Draganov, Z. Stanchev, I. Tanchev  
*Technical University of Varna, Bulgaria*
- PO1.19 Investigation into Non-Recursive Digital Filter in Correlated Jamming Environment**  
B. Najdenov  
*Technical University of Varna, Bulgaria*
- PO1.20 Noise Modeling and Simulation for BJTS at Low Frequencies**  
P. Petrova, D. Petrov  
*Technical University of Gabrovo, Bulgaria*
- PO1.21 Computation of Capacitance of Circular Conductors**  
S. Musa, M. Sadiku  
*Prairie View A&M University, USA*

**19:00** End of session



**Thursday, June 26**

**Room D**  
**17:00**

**Poster session – PO2**  
**SIGNAL PROCESSING**

**Chairmen**

**G. Iliev,**  
*Technical University of Sofia, Bulgaria*  
**D. Kukolj,**  
*Faculty of Engineering, Novi Sad, Serbia*  
**G. Balabanov,**  
*Technical University of Sofia, Bulgaria*

**PO2.1 Evaluation of the industry standard sampling rates**  
P. Petrov  
*Microengineering, Sofia, Bulgaria*

**PO2.2 Sampling the simplest mathematical functions**  
P. Petrov  
*Microengineering, Sofia, Bulgaria*

**PO2.3 Multiplication Products Quantization Noise Analysis for Orthogonal Complex IIR Digital Filters**  
Z. Nikolova, D. Romanska  
*Technical University of Sofia, Bulgaria*

**PO2.4 Investigation of the phase-voltage responses of digital phase detectors**  
A. Yordanov, G. Kachakov, G. Mihov  
*Technical University of Sofia, Bulgaria*

**PO2.5 Optimization of the parameters of a subwoofer with phase-inverter**  
D. Damyanov, Y. Parvanova  
*Technical University of Sofia, Bulgaria*

**PO2.6 LR-n Models for Voice Coil of the Loudspeaker Part I: Small Signal Analysis**  
E. Sirakov  
*Technical University of Varna, Bulgaria*

**PO2.7 Joint source-channel CELP coding**  
S. Pleshova-Bekiarska  
*Technical University of Sofia, Bulgaria*

**PO2.8 MRI Enhancement on the Base of Morphological Processing**  
V. Georgieva, A. Genova  
*Technical University of Sofia, Bulgaria*

**PO2.9 Camera Calibration for Mechatronic Measurement**  
A. Micić, B. Đorđević  
*University of Niš, Serbia*

**PO2.10 Description of the basic algorithm for glass thickness measurement by laser scanning**  
G. Cmiljanović, D. Kukolj\*, Z. Krajačević\*  
*RT-RK Computer Based Systems LLC, Serbia*  
*\*Faculty of Engineering, Novi Sad, Serbia*

**19:00** End of session



**Wednesday, June 25**

**Poster session – PO3  
COMPUTER SYSTEMS AND  
INTERNET TECHNOLOGIES**

**Chairmen**

**M. Karova,**  
*Technical University of Varna, Bulgaria*

**P. Andreeva,**  
*Bulgarian Academy of Sciences, Bulgaria*

**PO3.1 The octagon™ embedded PCs and their applications for industrial purposes**  
G. Marinova, N. Kostov, S. Yordanova  
*Technical University of Varna, Bulgaria*

**PO3.2 One Solution of Portable Pulse Generator Design**  
B. Radin, P. Savković, B. Atagić, D. Majstorović  
*Faculty of Technical Sciences, Novi Sad, Serbia*

**PO3.3 Improved Architectural Support for Analysis and Design of Data Models**  
P. Andreeva, S. Vassileva, V. Stoyanov  
*Bulgarian Academy of Sciences, Bulgaria*

**PO3.4 Catalogue System for Electronic Documents Management and Control**  
M. Karova, P. Grigorova  
*Technical University of Varna, Bulgaria*

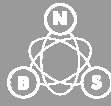
**PO3.5 Application of Genetic Algorithms for Effective Choice of Information**  
H. Toshev, S. Koynov, C. Korsemov  
*Bulgarian Academy of Sciences, Bulgaria*

**PO3.6 Smart Interface Design and Web 2.0 application in the intelligent e-Learning Systems**  
D. Nedev  
*Jacobs University Bremen, Germany*

**PO3.7 Trends and Technologies for Web 2.0 Application Design**  
M. Ivanova  
*Technical University of Sofia, Bulgaria*

**PO3.8 Regpod v2.0 – Remote Data Access in Registry Base**  
M. Marinović, N. Micaković  
*ProCredit bank A.D., Serbia*

**19:00** End of session



**Wednesday, June 25**

**Room D**  
**17:00**

**Poster session – PO4**  
**ELECTRONIC COMPONENTS,**  
**SYSTEMS AND TECHNOLOGIES**

**Chairmen**

**A. Andonova,**  
*Technical University of Sofia, Bulgaria*

**R. Mironov,**  
*Technical University of Sofia, Bulgaria*

**PO4.1 Photovoltaic Optocouplers**  
E. Koleva  
*Technical University of Gabrovo, Bulgaria*

**PO4.2 Germanium Photo Detectors**  
P. Rahnev, S. Letskovska  
*Burgas Free University, Bulgaria*

**PO4.3 A Simple FPGA/PLL Based Protocol Converter for Serial Data Transmission**  
B. Radin, P. Savković, D. Majstorović, B. Atlagić, S. Vukosavljev  
*Faculty of Technical Sciences, Novi Sad, Serbia*

**PO4.4 GPS/INS Vehicle Event Data Recorder**  
R. Miletič, E. Iontchev\*, R. Arnaudov  
*Technical University of Sofia, Bulgaria*  
*\*Higher School of Transport "T. Kableskov", Bulgaria*

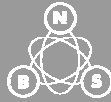
**PO4.5 Low Frequency Measurement and Control of the Load Impedance**  
P. Angelov  
*Burgas Free University, Bulgaria*

**PO4.6 Intelligent visualization of total harmonic distortion in frequency up to 10kHz**  
P. Angelov, M. Momchedgikov\*  
*Burgas Free University, Bulgaria*  
*\* Technical University of Sofia, Bulgaria*

**PO4.7 Effect of Electrodes Geometry on Self-Organization of Microdischarges in Dielectric Barrier Discharge**  
P. Dineff, D. Gospodinova, M. Shopov  
*Technical University of Sofia, Bulgaria*

**PO4.8 Effect of Electrodes Geometry on Technological Behavior of Dielectric Barrier Discharge**  
P. Dineff, D. Gospodinova, M. Shopov  
*Technical University of Sofia, Bulgaria*

**19:00** End of session



**Wednesday, June 25**

**Room D**  
**17:00**

**Poster session – PO5**  
**CONTROL SYSTEMS**

**Chairmen**

**B. Dimitrijević,**  
*University of Niš, Serbia*

**R. Miletić,**  
*Technical University of Sofia, Bulgaria*

**PO5.1 Virtual Instrumentation Software Applied to Calibration Procedure for Power Quality Meters**

M. Simić, B. Dimitrijević  
*University of Niš, Serbia*

**PO5.2 Design of Two-channel Oscilloscope in LabView**

R. Miletić, P. Balzhiev  
*Technical University of Sofia, Bulgaria*

**PO5.3 Synthesis of Optimal Modal Controllers for DC Electric Drives**

T. Georgiev, M. Mikhov\*  
*Technical University of Varna, Bulgaria*  
*\*Technical University of Sofia, Bulgaria*

**PO5.4 Television image filtering in ship model analysis. Reduction of noise factors**

M. Stefanova  
*Technical University of Varna, Bulgaria*

**PO5.5 Lighting System for SMD Optical Control**

A. Stratev, V. Videkov  
*Technical University of Sofia, Bulgaria*

**19:00**

End of session



**Wednesday, June 25**  
**Poster session – P06**  
**POWER TRANSMISSION,**  
**DISTRIBUTION SYSTEMS AND**  
**ELECTRICAL MACHINES**

Chairmen

**M. Popović,**  
*Faculty of Technical Sciences, Novi Sad, Serbia*

**R. Tzeneva,**  
*Technical University of Sofia, Bulgaria*

**PO6.1 Using the Analytic Hierarchy Process in Load Growth Forecast**

B. Stevanoski, A. Arsenov\*  
*University "St. Kliment Ohreidski"-Bitola, Macedonia*  
\* *SS. Cyril and Methodius University, Skopje, Macedonia*

**PO6.2 Investigation of power line regime parameters in case of switching over whit switch gears in electrical networks 20 kv**

M. Vasileva, M. Hamza, A. Filipov  
*Technical University of Varna, Bulgaria*

**PO6.3 Using of Matlab Simulink for Education in High Voltage Technics and Electrical Safety**

M. Vasileva, M. Yordanova  
*Technical University of Varna, Bulgaria*

**PO6.4 Influence of the loss of voltage onto the quality of road lighting**

Z. Ivanov  
*Technical University of Sofia, Bulgaria*

**PO6.5 Application of Neural Networks for Analysis in Bolted Busbar Connections of New Design**

S. Yordanova, R. Tzeneva  
*Technical University of Sofia, Bulgaria*

**PO6.6 Implementation of TASE.2, MMS and APLI Protocols**

N. Savić, M. Popović, B. Atlagić, M. Temerinac  
*Faculty of Technical Sciences, Novi Sad, Serbia*

**PO6.7 Self-excitation of an Induction Generator – Mathematical Model and Experimental Verification**

M. Radić, Z. Stajić  
*University of Niš, Serbia*

**19:00** End of session



**Wednesday, June 25**

**Room D**  
**17:00**

**Poster session – P07**  
**EDUCATION QUALITY**

**Chairmen**

**B. Pankov,**  
*Technical University of Sofia, Bulgaria*

**R. Goleva,**  
*Technical University of Sofia, Bulgaria*

**PO7.1 Application of digital circuits' simulation in academic exercise classes-methodology issues and results**

G. Marinova, N. Kostov, S. Yordanova  
*Technical University of Varna, Bulgaria*

**PO7.2 Analysis of Matched Filters in MATLAB Environment**

V. Georgieva, M. Neykova  
*Technical University of Sofia, Bulgaria*

**PO7.3 Education in Microelectronics Design Using a Web Environment**

R. Radonov  
*Technical University of Sofia, Bulgaria*

**PO7.4 Computers optic microscopy for education electronics**

S. Letskovska, P. Rahnev  
*Burgas Free University, Bulgaria*

**19:00**

End of session



**Thursday, September 26**

**Room C  
11:00**

**ROUND TABLE**

**Topic:**

**Road to European University Educational Space**

**Moderators:**

Prof. Dr. Srđan Stanković, *University of Belgrade, Serbia*  
President of National Council for higher education

Prof. Dr. Bratislav Milovanović, *University of Niš, Serbia*  
Member of Commission on accreditation and quality evaluation

Prof. Dr. Dimitar Dimitrov,  
*Technical University of Sofia, Bulgaria*

Prof. Dr. Cvetko Mitrovski,  
*University "St. Kliment Ohridski"-Bitola, Macedonia*

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

**Round Table Goal:**

Exchange of experiences and forthcoming activities regarding reformation of university education in Macedonia, Bulgaria and Serbia with tendency that all educational spaces integrate in one European educational space

**13:00**

End of session