

“DUNAREA DE JOS” UNIVERSITY OF GALATI

ELECTRICAL AND ELECTRONICS ENGINEERING FACULTY



ISEEE-2010

**The 3rd International Symposium
on Electrical and Electronics Engineering**

September 16-18, 2010

Galați, Romania

FINAL PROGRAM



ISEEE-2010 – AT A GLANCE

Thursday, 16 September

14:00 – 18:00	Registration	Faculty's Secretariat, <i>Y Building, 1st floor</i>				
18:00 – 20:00	Welcome Meeting	Faculty's Council Room, <i>Y Building, 1st floor, room Y 109</i>				

Friday, 17 September

09:00 – 10:00	Registration	Faculty's Secretariat, <i>Y Building, 1st floor</i>				
10:00 – 10:15	Opening Session	Domneasca - 111, D building, D02 amphitheatre				
10:15 – 11:30	Plenary Session	Domneasca - 111, D building, D02 amphitheatre				
11:30 – 12:00	Coffee break	Stiintei street -2, Y Building, 1 st floor, room Y 104				

Y Building, 1st floor

12:00 – 13:00	MD1	DS 1- Dialogue Session (Poster I), 1 st floor				
---------------	------------	--	--	--	--	--

13:00 – 15:00		Lunch	Room Y 105			
---------------	--	--------------	-------------------	--	--	--

15:00 – 17:30	MD2	Room Y-106	Room Y-305	Room Y-101	Room Y-002	Room Y-102	Room Y-605
		STS 1- Electrical Circuits and Systems	STS 4- Power Converters and Applications	Special Session SS-2 Energy Efficiency of Electric Drive Systems	Special Session SS-4 Integrated Micro CCHP based on Renewable Energy Sources	STS-2 Communications	Special Session SS 1 – Advances in Sonar Systems. New Approaches and Ideas

17:30 – 18:00		Coffee break	Room Y 104			
---------------	--	---------------------	-------------------	--	--	--

18:00 – 19:30	MD3	STS 3 – Signal Processing					
---------------	------------	---------------------------	--	--	--	--	--

	MD3	DS2- Dialogue Session (Poster II), 1 st floor				
--	------------	--	--	--	--	--

20:00 – 22:00		Banquet	Galati Restaurant, Domneasca- 7			
---------------	--	----------------	--	--	--	--

Saturday, 18 September

09:00 – 9:30		Registration	Faculty's Secretariat, <i>Y Building, 1st floor</i>			
--------------	--	--------------	--	--	--	--

09:00 – 9:30		Coffee	Stiintei - 2, Y Building, 1 st floor, room Y 104			
--------------	--	--------	---	--	--	--

9:30 – 11:30	MD4	Special Session SS 3 Advanced Technology in Electronic Assembly					
--------------	------------	---	--	--	--	--	--

12:00 – 14:00		Trips on Danube				
---------------	--	-----------------	--	--	--	--

14:00 – 16:00		Trips on Danube				
---------------	--	-----------------	--	--	--	--

16:00 – 18:00		Formal Farewell, Faculty's Council Room, <i>Y Building, 1st floor</i>				
---------------	--	--	--	--	--	--

INVITED AND SPECIAL SESSIONS

No.	Title	Organizer
SS-1	Advances in Sonar Systems. New Approaches and Ideas.	Dorel AIORDACHIOAIE, <i>Dunarea de Jos University of Galati</i>
SS-2	Energy Efficiency of Electric Drive Systems	Gheorghe MANOLEA, <i>University of Craiova</i>
SS-3	Advanced Technology in Electronic Assembly	Paul Mugur SVASTA, <i>Politehnica University of Bucharest, Center for Technological Electronics and Interconnection Techniques, UPB-CETTI</i>
SS-4	Integrated Micro CCHP based on Renewable Energy Sources	Nicolae BADEA, <i>Dunarea de Jos Galati University</i>

SCIENTIFIC AND TECHNICAL SECTIONS

No.	Title	Chairman
STS - 1	Electronic Circuits and Systems Pattern Recognition and Signal Processing	Florin CONSTANTINESCU, <i>Politehnica University of Bucharest</i>
STS - 2	Communications	Nicolae Dumitru ALEXANDRU, <i>"Gheorghe Asachi" University of Iasi</i>
STS - 3	Signal Processing	Aurel FRATU, <i>Transilvania University of Brasov</i>
STS - 4	Power Converters and Applications	Marian GAICEANU, <i>Dunarea de Jos Galati University</i>

DIALOGUE SESSIONS

No.	Title	Chairman
DS - 1	Electrical Engineering	<i>Emil ROSU, Dunarea de Jos University of Galati</i>
DS - 2	Electronics and Telecommunications	<i>Dinu COLTUC, Valahia University Targoviste, Romania</i>

ORGANIZERS

ORGANIZED BY Ministry of Education and Research of Romania
"Dunărea de Jos" University of Galați, Romania
Faculty of Electrical and Electronics Engineering

In cooperation with: ANCS – National Authority for Scientific Research

Technical Co-Sponsors: IEEE Region8
IEEE UKRI - United Kingdom and Republic of Ireland Section,
Communications Chapter
IEEE Romania Section

Honorary Chairs : Emil CEANGA (*Romania*) Emil ROSU (*Romania*)

General-Chairs: Ion VONCILA (*Romania*) Marian GAICEANU (*Romania*)

Finance Chair: Dorel AIORDACHIOAIE (*Romania*)

Professional & Industry Liaison Chairs: Toader MUNTEANU (*Romania*) Maaruf ALI (UK)

Conference Publication Chair: Marian GAICEANU (*Romania*)

Program Committee

Nicolae Dumitru Alexandru (<i>Romania</i>)	Vasile Lazarescu (<i>Romania</i>)
Maaruf Ali (Secretary of the IEEE UKRI ComSoc. U.K.)	Razvan Magureanu (<i>Romania</i>)
Alexandru Bitoleanu (<i>Romania</i>)	Gheorghe Manolea (<i>Romania</i>)
Frede Blaabjerg (<i>Denmark</i>)	Mihai Mihaita (<i>Romania</i>)
Mircea Bodea (Industrial Relations Coordinator IEEE Romania Section)	Radu Munteanu (<i>Romania</i>)
Ion Bogdan (<i>Romania</i>)	Valeriu Munteanu (<i>Romania</i>)
Ivan Bogdanov (<i>Romania</i>)	Rolf Mueller (<i>China</i>)
Gheorghe Brezeanu (Electron Devices Society IEEE Romania)	Joseph Mutale(UK)
Vasile Buzuloiu (Chair of Signal Processing Society Chapter IEEE Romania)	Wai Pang Ng (Vice-Chair of the IEEE UKRI ComSoc, U.K.)
Dumitru Calueanu (<i>Romania</i>)	Cristian Nichita (<i>France</i>)
Gianfranco Chicco (<i>Italy</i>)	Herbert Peremans (<i>Belgium</i>)
Javier Contreras(Spain)	Ilie Popa (<i>Romania</i>)
Mihai Cretu (<i>Romania</i>)	Wasiu Popoola (U.K.)
Florin Constantinescu (<i>Romania</i>)	Petru Postolache (<i>Romania</i>)
Mircea Covrig (<i>Romania</i>)	Francesco Profumo (<i>Italy</i>)
Brayima Dakyo (<i>France</i>)	Mihai Octavian Popescu (Professional and Technical Activities IEEE Romania Section)
Alexa Dimitrie (<i>Romania</i>)	Juha Röning (<i>Finland</i>)
Radu Dobrescu (Chair of the IEEE Romania Section)	Mario Russo (<i>Italy</i>)
Radu Dogaru (<i>Romania</i>)	Alecsandru Simion (<i>Romania</i>)
Mircea Eremia (Vice-Chair of the IEEE Romania Section)	Emil Sofron (<i>Romania</i>)
Jaafar Elmighani (U.K.)	Paul Svasta (<i>Romania</i>)
Inge Gavtat (<i>Romania</i>)	Florin Teodor Tanasescu (<i>Romania</i>)
Fary Ghassemlooy (Chair of the IEEE UKRI ComSoc, U.K.)	Nicolae Tapus (Past Chair of the IEEE Romania Section)
Nicolae Golovanov(<i>Romania</i>)	Daniela Tarniceriu (<i>Romania</i>)
Liviu Goras (<i>Romania</i>)	Horia-Nicolai Teodorescu (<i>Romania</i>)
John Hallam (<i>Denmark</i>)	Remus Teodorescu (<i>Denmark</i>)
Elena Helerea (<i>Romania</i>)	Alberto Tenconi (<i>Italy</i>)
Peter Hill (U.K.)	Cornel Toader (<i>Romania</i>)
Maria Imecs (<i>Romania</i>)	Iulian Topa (<i>Romania</i>)
Florin Ionescu (<i>Romania</i>)	Viorel Trifa (<i>Romania</i>)
Marian P. Kazmierkowski (IEEE Fellow, Region 8, Poland)	Marcian Cirstea (<i>U.K.</i>)
Ivana Kockar (UK)	Nicolae Vasile (<i>Romania</i>)
Jordan Kolev (<i>Bulgaria</i>)	Yang Yang (U.K.)

Local Organizing Committee

Dorel Aiordachioaie	Laurentiu Frangu
Nicolae Badea	Mircea Iliev
Marian Barbu	Sergiu Ivas
Radu Belea	Nicolae Marasescu
Ion Bivol	Constantin Miholca
Antoneta Bratcu	Viorel Minzu
Sergiu Caraman	Toader Munteanu
Mariana Dumitrescu	Viorel Nicolau
Grigore Fetecau	Rustem Popa
Mihai Culea	Teodor Dumitriu
Anisia Gogu	Adriana Scarlat
Iulian Munteanu	Razvan Buhosu

ISEEE-2010 - Final Program and TIME TABLE

Thursday, September 16

14:00-18:00 – Registration, Faculty's Secretariat, Y Building, 1st floor

18:00–20:00 – Welcome Meeting – Faculty's Council Room, Y Building, 1st floor, room Y 109

Friday, September 17

09:00-10:00 – Registration

Faculty's Secretariat, Y Building, 1st floor

10:00-10:15 -Opening Session – Domneasca -111, D building, D02 amphitheatre.

Speakers:

- *The Chairmen of the Symposium*
- *The Dean of the Electrical and Electronics Engineering Faculty*
- *The Rector of “Dunarea de Jos” Galati University, Romania*

10:15-11:30 – Plenary Session – Domneasca -111, D building, D02 amphitheatre.

Speakers:

- *Mihai Octavian Popescu, , “Politehnica” University of Bucharest*
- *Emil Rosu, “Dunarea de Jos” Galati University .*

11:30 – 12:00 – Coffee break

FIEE, Stiintei Street -2, Y Building, 1st floor, room Y-104.

12:00 – 13:00 – Module 1 – Dialogue Session 1 (Poster I)

FIEE, Stiintei Street -2, Y Building, 1st floor.

13:00 - 15:00 – Lunch (room Y-105)

15:00 – 17:30 - Module 2 – Lecture presentation

FIEE, Stiintei Street -2, Y Building, rooms Y-106, Y-305, Y-101, Y-002, Y-102, Y- 605.

17:30 – 18:00 – Coffee break

Room Y 104

18:00 – 19:30 - Module 3 – Lecture presentation

FIEE - Stiintei Street -2, Y Building, 1st floor, room Y-106.

18:00 – 19:30 - Module 3 – Dialogue Session 2 (Poster II)

FIEE - Stiintei Street -2, Y Building, 1st floor.

20:00 – 22:00 – Banquet (Galati Hotel, Domneasca Street- 12, 10th floor, Panoramic Hall)

Saturday, September 18

09:00 – 09:30 – Registration

Faculty's Secretariat, Y Building, 1st floor

09:00 – 09:30 – Coffee. FIEE - Stiintei Street -2, Y Building, 1st floor, room Y 104.

09:30 - 11:30 – Module 4 – Special Session

FIEE - Stiintei Street -2, Y Building, 1st floor, room Y-106.

12:00 – 14:00 – Social event. Trip on Danube. First group.

14:00 – 16:00 – Social event. Trips on Danube. Second group.

16:00 –18:00 – Formal Farewell, Faculty's Council Room, Y Building, 1st floor

THE PAPERS OF THE 1ST MODULE

Friday, September 17, 12:00 – 13:00

1ST FLOOR

DIALOGUE SESSION (POSTER) - DS1

ELECTRICAL ENGINEERING

Chairman: *Emil Rosu*

Co-chairman: *Marian Gaiceanu*

Co-chairman: *Ion Voncilă*

Secretary: *Traian Munteanu*

1. Experimental Results on the Nonlinear Effects in Power BAW Resonators
Aurelian Florea^{}, Olivier Llopis[†], Miruna NiŃescu^{*}, Florin Constantinescu^{*}*
^{}Politehnica University/Dept. of Electrical Eng, Bucharest, Romania,*
[†]Laboratoire d'Analyse et d'Architecture des Systemes, Toulouse, France
2. Various Electrical Technologies
Ciucur Violeta -Vali
Constanta Maritime University, Romania
3. Comparative analysis of sonar heads drive systems
Ion Voncilă, Răzvan Buhosu, Elena Voncilă
Dunarea de Jos University of Galati, Romania
4. Analysis of the Stability of Synchronous Motor - Generator Unit Used in Propulsion Systems of Autonomous Electric Vehicles
Ion Voncilă, Elena Voncilă, Grigore Fetecău
Dunarea de Jos University of Galati
5. Motion Control of a Single-Beam Gantry Crane Trolley
Marian Gaiceanu, Florin Stan
Dunarea de Jos University of Galati, Romania
6. Linear Control of DC Motor Drive with Field Weakening
Romeo Paduraru, Emil Rosu, Marian Gaiceanu, Traian Munteanu, Teodor Dumitriu,
Cristinel Dache
Dunarea de Jos University of Galati, Romania
7. Finite Element Analysis, Experimental Validation and Optimization of an Electromagnetic Linear Displacement Transducer
Felicia Gheorghe, Virgil FireŃeanu
Politehnica University of Bucharest, Romania
8. Mathematical Modelling of Color Mixing Process and PLC Control Implementation by Using Human Machine Interface
Laurentiu Schiop, Marian Gaiceanu
Dunarea de Jos University of Galati, Romania
9. Control of 4-leg active power filter for reactive power and unbalance compensation
BălănuŃă C., Gurguiatu G., Munteanu Toader, Fetecău G
Dunarea de Jos University of Galati
10. The Features of Generators Parallel Connections Used in Conversion Systems of Wind Energy into Electrical Energy
Madalin Costin, Ion Voncila, Grigore Fetecau
Dunarea de Jos University of Galati, Romania
11. Advantages of common DC busses on ships

*N. Remijn MSc, B. Krijgsman MSc
Alewijnse Marine Technology*

12. Stability analysis for an improved power optimization method applied to a wind energy conversion system
*Adriana Scarlat, Iulian Munteanu, Antoneta I. Bratcu and Emil Ceangă
Dunarea de Jos University of Galati, Romania*
13. Educational Software for the Numerical Correction of Experimental Magnetization Curves
*Valentin Ionita, Emil Cazacu
Politehnica University of Bucharest, Romania*

Friday, September 17, 18:00 - 19:30

1ST FLOOR

DIALOGUE SESSION (POSTER) – DS2

ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING

Chairman: *Dinu Coltuc*

Co-chairman: *Daniela Coltuc*

Co-chairman: *Laurentiu Frangu*

Secretary: *Anisia Gogu*

1. Mass Detection and Classification in Breast Ultrasound Image Using K-means Clustering Algorithm
*Simona Moldovanu, Luminita Moraru
Faculty of Sciences, Galati, Romania*
2. A Study Regarding Spatial Impulse Response of Concave Transducers with Applications on Bats
*Ana-Maria Chiselev, Luminita Moraru
Faculty of Sciences, Galati, Romania*
3. Passcode Based Authentication Protocol (Part I – Solution Evaluation and Software Design)
*Adrian-Viorel Diaconu
Faculty of Military Electronics and Informatics Systems/Information
Technology Security Bucharest, Romania*
4. Improved environmental monitor and control using a wireless intelligent sensor network
*Dragoş Mihai OFRIM, Bogdan Alexandru Ofrim, Dragoş Ioan Săcăleanu
Faculty of Electronics, Telecommunications and Information
Technology, Bucharest, Romania*
5. Supporting Environmental Surveillance by Using Wireless Sensor Networks
*Darie Angela, Mihai Ghenghea, Ion Bogdan
Technical University “Gheorghe Asachi” Iaşi, Romania*
6. Bandwidth Management Methods for QoS Assurance in Wireless Communication Networks
*Felix Diaconu, Luminița Scripcariu
Technical University “Gheorghe Asachi” Iaşi, Romania*
7. Performance Analysis on T-MAC Protocol over a Body Area Network
*Mihai Ghenghea, Angela Alina Darie, Ion Bogdan
Technical University “Gheorghe Asachi” Iaşi, Romania*
8. Model-View-ViewModel for Silverlight 2 Applications
*Paul Valentin-Corneliu, Mihailescu Marius Iulian, Stanescu Octavian Frangu
Titu Maiorescu University, Bucharest, Romania*
9. Wave ICA: a Hybrid Tool for Image Processing
Daniela Coltuc^{}, Iulian Udroi[†], Nicoleta Angelescu[†]*

- *University Politehnica of Bucharest, Romania,*
†Valahia University Targoviste, Romania
10. FPGA Implementation of a Matrix Structure for Integer Division
Bogdan Claudiu Alecsa, Aleodor Daniel Ioan
Technical University "Gheorghe Asachi" Iași, Romania
11. A two agent based structure for hard handover analysis using dynamic channel allocation
Gabriel Sîrbu^{}, Ion Bogdan[†]*
**Dunarea de Jos University of Galati, Romania*
†Technical University "Gheorghe Asachi" Iași, Romania
12. Optimization of the Number of Iterations in the Iterative Weighted Neighborhood Filtering
J. S. Armand Eyebe Fouda^{}, Anisia Gogu[†], Mihai Culea[†], Martin Kom^{**}*
**University of Yaoundé I/Department of Physics, Yaoundé, Cameroon,*
†Dunarea de Jos University of Galati, Romania,
***University of Yaoundé I/ENSP, Yaoundé, Cameroon*
13. Color Stereo Embedding by Reversible Watermarking
Dinu Coltuc, Ion Caciula, Henri Coanda
Valahia University Targoviste, Romania

THE PAPERS OF THE 2ND MODULE

Friday, September 12, 15:00- 17:30

ROOM Y-106

SCIENTIFIC AND TECHNICAL SECTION STS-1

ELECTRICAL CIRCUITS AND SYSTEMS

Chairman: *Florin Constantinescu*
Co-chairman: *Toader Munteanu*
Co-chairman: *Mariana Dumitrescu*
Secretary: *Romeo Paduraru*

1. Circuit Models of Passive One-ports with Resistive and Capacitive Behavior
Florin Constantinescu, Alexandru Gabriel Gheorghe, Miruna Nitescu
University Politehnica of Bucharest, Romania
2. The Influence of Temperature and Electric Field Frequency on the Dielectric Properties of Electrical Machines Insulation Systems
Stefan A. Busoi^{}, Petru V. Notingher^{*}, Laurentiu M. Dumitran^{*} and Gabriel Tanasescu^{**}*
**University Politehnica of Bucharest Romania,*
***SIMTECH INTERNATIONAL Ltd., Bucharest, Romania*
3. New Considerations Regarding Frequency Influence on Soft Magnetic Materials Characteristics
Marius-Daniel Calin, Elena Helerea, Ioan-Danut Oltean
"Transilvania" University of Brasov/Advanced Electrical Systems Department, Brasov
4. Development of a marine current turbine simulator based on hils concept
Caraiman George^{}, Nichita Cristian^{**}, Mînză Viorel^{*}, Dakyo Brayma^{**}, Jo Chul H^{***}*
**Dunarea de Jos University of Galati, Romania,*
***University of Le Havre, France,*
****Inha University, Ocean Engineering Laboratory, Nam-gu Incheon, South Korea*
5. Thermal Study of Induction Machine Using Motor-CAD
Dragoș I. Deaconu, Constantin Ghiță, Aurel I. Chirilă, Valentin Năvrăpescu,

*Mircea Popescu**

**University Politehnica of Bucharest, Romania*

Motor Design Ltd, Shrewsbury, United Kingdom

6. Analysis and Modeling on the Induction Machine Faults

L. Mariut , M. Filip** , E. Helerea* , I. Peter****

**Transilvania University of Brasov, **Mircea Cristea Technical High School, Brasov,*

****Electroprecizia SA, Sacele, Romania*

7. Professional Communication in Engineering Curricula – Steps closer to the Industry Employers

Denisa Rusinaru, Daniela Popescu, Marian Ciontu, Cristian Bratu

University of Craiova, Romania

8. Computer Aided Design of the Earthing Installations for the Substations

Marian I. Duță, Silvia-Maria M. Digă, Denisa Gh. Rușinaru, Maria D. Brojboiu,

Daniela N. Popescu

Faculty of Electrical Engineering of University of Craiova

Friday, September 17, 15:00– 17:30

ROOM Y-305

SCIENTIFIC AND TECHNICAL SECTION STS-4

POWER CONVERTERS AND APPLICATIONS

Chairman: *Marian GAICEANU*

Co-chairman: *Corneliu Botan*

Co-chairman: *Denisa Rusinaru*

Secretary: *Cristinel DACHE*

1. Structure of an Optimal Servo Drive System

Corneliu Botan, Florin Ostafi

Technical University, Iasi, Romania

2. Evaluation of Power Quality Factors on the Boundaries between Networks

Denisa Rusinaru, Silvia Diga*, and Marian Duta***

**University of Craiova, Romania*

***ICMET Craiova, Romania*

3. Optimal Control of Permanent Magnet Synchronous Machines for Cold Rolling Mills

Marian Gaiceanu, Adrian Minzararu

Dunarea de Jos University of Galati, Romania

4. Highly Efficient Variable-Step-Size Maximum Power Point Tracker for PV Systems

Emad M. Ahmed, Masahito Shoyama

Faculty of Information Science & Electrical Engineering

Kyushu University, Fukuoka, Japan

5. Participation in Reactive Power Market Considering Generator Aging

I. Niazy, H. Mortazavi, J. Ebadi, S. Sabzevari, A. Niazy and H.R. Poursoltani

Ferdowsi University of Mashhad, Mashhad, Iran

6. Energy Management in Hybrid Systems for Automotive

Carmen Lungoci

Transilvania University of Brasov, Romania

ROOM Y-101*Friday, September 17, 15:00– 17:30***SPECIAL SESSION SS-2****ENERGY EFFICIENCY OF ELECTRIC DRIVE SYSTEMS***Organized by Gheorghe MANOLEA***Secretary: Razvan Buhosu**

1. Analysis of Energy Efficiency by Replacing the Throttle Valve with Variable Speed Drive Condensate Pump from E.C. Turceni
*Marian Ciontu, Daniela Popescu, Marian Motocu
University of Craiova, Romania*
2. Program for efficiency analyzing for variable speed drive of pumps
*Marian Ciontu, Cristian Bratu
University of Craiova, Romania*
3. Energy efficiency of stand alone photovoltaic systems used in electrical drive for positioning ramps of anti hail missile
*Laurentiu Alboteanu
University of Craiova, Romania*
4. The power factor analysis from the driving systems of the centrifugal fans
*Gheorghe Manolea
University of Craiova, Romania*
5. Local Monitoring System of the Permissible Temperature for the Medium Voltage Metal-Enclosed Switchgear and Control Gear
*Serghie Vlase, Marian Duta, Sebastian Popescu, Cristian Salceanu, Catalin Dobrea,
Laurentiu Stefan
University of Craiova, Romania*

ROOM Y-002*Friday, September 17, 15:00– 17:30***SPECIAL SESSION SS-4****INTEGRATED MICRO CCHP BASED ON RENEWABLE ENERGY SOURCE***Organized by Nicolae BADEA***Secretary: Ciprian VLAD**

1. Analysis by Indicators Performance of the Conceptual Structures mCCHP-SE using Renewable Energy Sources
*Nicolae Badea, Ion Voncila, Marcel Oanca, Ion Paraschiv
Dunarea de Jos University of Galati, Romania*
2. Comparative Study of Energy Performance for two mCCHP Systems Used in Domestic Residence
Nicolae Badea, Ciprian Vlad, Anders Stolan
Dunarea de Jos University of Galati, Romania, *SINTEF Norway*

3. Design Considerations of Permanent Magnet Brushless Generators
*Paul Minciunescu, Mihaela Scortescu, Stelian Marinescu
ICPE Bucuresti, Romania*
4. Energy storage systems for buildings equipped with photovoltaic cells
*Paula ANGHELIȚĂ, Mihaela CHEFNEUX, Relu BALABAN, Loren TROCAN
ICPE Bucuresti, Romania*
5. Design Criteria for mCCHP Electric System
*Viorel Stanciu , Mihaela Chefneux , Maricica Pesteri, Alexandra Valentina Toma
ICPE Bucuresti, Romania*
6. A predictive model for the energetic management of a mCHP-Stirling heating unit
A. Radaschin, V. Apostol*, F. Udrescu*, G. Vladut**
*SC IPA SA Subsidiary Galati, ** SC IPA SA Subsidiary CIFATT Craiova*
7. Behavior analysis of the electrical system from CHP plants in case of changes in mechanical and electrical quantities and topological structures
*Răzvan Buhosu, Ion Voncilă, Ion Paraschiv, Marcel Oancă
Dunarea de Jos University of Galati, Romania*

ROOM Y-102

Friday, September 17, 15:00– 17:30

SCIENTIFIC AND TECHNICAL SECTION STS-2

COMMUNICATIONS

Chairman: *Nicolae Dumitru Alexandru*

Co-chairman: *Viorel Nicolau*

Secretary: *Marius Mazarel*

- 1 A Generalization of Raised Cosine Signals
*Nicolae Dumitru Alexandru
"Gheorghe Asachi" University of Iași,*
- 2 Secure IP Multicast over Satellite
*Daniel Caragata, Emil Sofron, Ion Tutanescu and Safwan El Assad
Ecole Polytechnique of University of Nantes, France*
- 3 Performance of Asymmetric Turbo Codes on Rayleigh Fading Channels for Small Interleaver Length
*Elena Cojocariu, Daniela Tarniceriu, Lucian Trifina, Alexandru Georgian Lazar
Faculty of Electronics, Telecommunications and Information Technology, Iasi,
Romania*
- 4 Designing an Optimal Single Chip FPGA Video Interface for Embedded Systems
*Aleodor Daniel Ioan
Technical University "Gheorghe Asachi" Iași, Romania*
- 5 New Quantum Inspired Genetic Algorithm for Evolvable Hardware
Rustem Popa, Viorel Nicolau, Silviu Epure
- 6 Dictionary Approach in Fault Diagnosis of Analog Circuits
*Constantin Viorel Marin
University Politehnica of Bucharest Romania*

ROOM Y-605*Friday, September 17, 15:00– 17:30***SPECIAL SESSION SS-1****ADVANCES IN SONAR SYSTEMS. NEW APPROACHES AND IDEAS****Chairs:** *Radu Dogaru and Dorel Aiordachioaie***Secretary:** *Gabriel Sirbu and Anisia Gogu*

1. Analysis of the Code Masking Efficiency of Chaotic Clocks in Microcontroller Applications
*Horia-Nicolai L. Teodorescu**, *Emanuel-Florin Iftene[†]*,
**[†] “Gheorghe Asachi” Technical University of Iasi, Romania*
** Institute of Computer Science of the Romanian Academy, Iasi, Romania*
2. Data Processing for Posturography and Gait Analysis
*Marius Hagan**, *Horia-Nicolai Teodorescu***, *Adriana Sîrbu**
** “Gheorghe Asachi” Technical University of Iasi, Romania*
*** Institute of Computer Science of the Romanian Academy, Iasi, Romania*
3. An Efficient Sound Propagation Software Simulator Based on Cellular Automata
Radu Dogaru, Ioana Dogaru
Politehnica University of Bucharest, Romania.
4. Algebraic Normal Form for Rapid Prototyping of Elementary Hybrid Cellular Automata in FPGA
Ioana Dogaru, Radu Dogaru
Politehnica University of Bucharest, Romania
5. On Time Delay Estimation by Evaluation of Three Time Domain Functions
Dorel Aiordachioaie and Viorel Nicolau
“Dunarea de Jos” Galati University, Romania
6. On Modeling of the Air Transmission Channel for Sonar Systems
Dorel Aiordachioaie, Gabriel Sirbu, Anisia Gogu
“Dunarea de Jos” Galati University, Romania
7. The ADBIOSONAR research project – next state
Dorel Aiordachioaie
“Dunarea de Jos” Galati University, Romania

THE PAPERS OF THE 3RD MODULE*Friday, September 17, 18:00 – 19:30***ROOM Y-106****SCIENTIFIC AND TECHNICAL SECTION STS-3****SIGNAL PROCESSING****Chairman:** *Aurel Fratu***Co-chairman:** *Rustem POPA***Secretary:** *Silviu EPURE*

1. Persian Speakers Age Estimation Using Speech Features and Support Vector Machine
*Davood Mahmoodi**, *Hossein Marvi**, *Mehdi Taghizadeh[†]*, *Farbod Razzazi^{††}*,
*Ali Soleimani**

** School of Electrical and Robotic Engineering, Shahrood University of Technology, Shahrood, Iran,*

† Department of Electrical Engineering, Azad University of Kazeroon, Kazeroon, Iran,

†† Department of Electrical Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran

- 2.. Parameter Selection in Periodic Nonuniform Sampling of Multiband Signals
*Moslem Rashidi, Sara Mansouri
Chalmers University of Technology, Goteborg, Sweden*
3. About Classifying Sounds in Protected Environments
*Marius Vasile Ghiurcau, Corneliu Rusu
Technical University of Cluj-Napoca, Romania*
4. Using the Redundant Inverse Kinematics System for Collision Avoidance
Aurel Fratu, Laurent Vermeiren**, Antoine Dequid**
*Transilvania University of Brasov
**University of Valenciennes, Valenciennes, France*

THE PAPERS OF THE 4RD MODULE

Saturday, September 18, 09:30 – 11:30

ROOM Y-106

SPECIAL SESSION SS-3

ADVANCED TECHNOLOGY IN ELECTRONIC ASSEMBLY

Organized by Paul SVASTA and Nicolae MARASESCU

Secretary: Silviu Epure

- 1 VPS Technology and Applications
Paul Svasta, Ioan Plotog**, Gaudentiu Varzaru*
*UPB-CETTI Bucuresti, **CETTI-ITA Bucuresti*
2. Mechanical Test Assessment for Electronic Modules Able to Function in Harsh Conditions
Paul Svasta, Ioan Plotog**, Gaudentiu Varzaru*
*UPB-CETTI Bucuresti, **CETTI-ITA Bucuresti*
3. Assembling Equipments for SMEs and Universities R&D Laboratories
*Stanco Vucovan
ATT Hungary Kft*
- 4 New Materials for Electronic Assembling Technologies
Daniela CORBAN – OGREAN, Attila Orbók**
*SC NEFERPROD IMPEX SRL, **Cookson Electronics Assembly Materials*