

SIELMEN 2011



8th INTERNATIONAL CONFERENCE ON ELECTROMECHANICAL AND POWER SYSTEMS

PROGRAM

October 11 -13, 2011

Craiova, Iași - Romania

October 13-15, 2011

Chișinău – Republic of Moldova



8th INTERNATIONAL CONFERENCE ON ELECTROMECHANICAL AND POWER SYSTEMS

PROGRAM

October 11 -13, 2011

Craiova, Iași - Romania

October 13-15, 2011

Chisinau – Republic of Moldova

CONFERENCE COMMITTEE

Chairs :

- **Prof. Ion Stratan** – Dean - Faculty of Power Engineering - Chişinău
- **Prof. Alexandru Sălceanu** – Dean - Faculty of Electrical Engineering - Iaşi
- **Prof. Sorin Enache**– Dean - Faculty of Electromechanical, Environmental and Industrial Informatics Engineering - Craiova

Honorary members:

- **Prof.dr.H.C.ing. Lorin Cantemir** - Faculty of Electrical Engineering - Iaşi
- **Prof. Tudor Ambros** – Faculty of Power Engineering - Chişinău
- **Prof. Petru Todos** - Faculty of Power Engineering - Chişinău
- **Prof. Aurel Câmpeanu** – Faculty of Electromechanical, Environmental and Industrial Informatics Engineering – Craiova

Program committee:

- Prof. Alexandru Bitoleanu
- Prof. Leszek Czarnecki
- Prof. Radu Munteanu
- Prof.dr.Wilhelm Kappel
- Prof. Mihai Octavian Popescu
- Prof.Claudia Popescu
- Prof.Mihaela Popescu
- Prof. Alecsandru Simion
- Prof. Ion Vlad
- Prof. Gheorghe Manolea
- Prof.Valentin Musteaţă
- Prof.Mihail Chiorsac
- Prof.Valentin Arion
- Prof. Dorin Lucache
- Prof. Cristian Haba

- Assoc.Prof. Mircea Adrian Drighiciu
- Assoc.Prof Constantin Stroe – S.C. DACIA S.A.
- Eng Marian Diaconescu – S.C HIDROCENTRALE, SUC. Vâlcea
- Eng. Dan Boltașu – SC CUMMINS GENERATOR TECHNOLOGIES Craiova

Organizing secretariat:

- Assoc. Prof. Daniel Cristian Cismaru
- Lect. Florin Ravigan
- Lect. Mihăiță Lincă
- Lect. Ghenadie Terteia
- Lect. Marcel Burduniuc

CONFERENCE SECTIONS

ED	Electric Drives
EA - MTEE	Electrical Apparatus & Materials and Technologies Applied in Electrical Engineering
A	Automations
EFEC – EE	Electromagnetic Field and Electrical Circuits & Engineering Education
PE	Power Electronics
EE	Energy and Environment
GTUE	Generation, Transport and Utilizations of Electrical and Thermal Energy
MMS	Metrology and Measurement Systems
EM	Electrical Machines

AGENDA

Thursday – October 13

13:00-14:00 **Registration of participants and distribution
of conference materials**
Rectorat building (Building 1) of the Technical University of
Moldova, Chişinău, Ştefan cel Mare şi Sfânt Bd. N^o 168

14:00-15:00 **Opening Session of SIEMEN 2011 Conference**
Auditorium, Rectorat building (Building 1) of the Technical
University of Moldova, Chişinău, Ştefan cel Mare şi Sfânt
Bd. N^o 168

15:00-16:45 **Plenary Session**

16:45-17:00 **Coffee break**

**Departure to Faculty of Mechanical Engineering and
Transport, Chişinău**

17:00-19:00 **Workshop – Advances in Electrical and Power
Engineering**
Faculty of Mechanical Engineering and Transport, Chişinău

19:30-23:30 **Festive dinner**

Friday – October 14

Paper presentations (Sections)

Faculty of Power Engineering, Chişinău

ED – Room 2-212

EA-MTEE – Room 2-126

A1 – Room 2-239

EFEC – EE1 – Room 2- 229

EE - 1 – Room 2-324

GTUE 1 – Room 2-218

EM 1 - Room 2-117

9:00-10:45

10:45-11:00

Coffee break

Paper presentations (Sections)

Faculty of Power Engineering, Chişinău

A 2 – Room 2-239

PE – Room 2-126

EFEC – EE2 – Room 2- 229

EE - 2 – Room 2-324

GTUE 2 – Room 2-218

MMS – Room 2-212

EM 2 - Room 2-117

11:00-12:30

Workshop - Actual Trends on Electro-Mobility in the South Eastern Europe

Prof. Dorin Dumitru Lucache

Assoc. Prof. Cristian – Győző Haba

Moderators:

*Technical University “Gh.Asachi”, Faculty of
Electrical Engineering – Iaşi*

12:30-13:00

Closing Session of the SIELMEN 2011 Conference

Auditorium, Rectorat building (Building 1) of the Technical

University of Moldova, Chişinău, Stefan cel Mare şi Sfânt

Bd. N^o 168

13:00-14:00

Farewell lunch

14:00-17:30 **Trip to the famous Mileştii Mici wine cellars (optional)**

Saturday – October 15

Social Program

Thursday – October 13

Plenary Session

**Auditorium, Rectorat building (Building 1)
Technical University of Moldova, Chişinău
15:00 – 16:45**

Session chairs :

**Prof.dr.ing. ION STRATAN,
Prof.dr.ing. ALEXANDRU SĂLCEANU,
Prof.dr.ing. SORIN ENACHE**

1. SISTEME DE CONVERSIE A ENERGIILOR REGENERABILE :
EOLIANĂ, HIDRAULICĂ, SOLARĂ - *Acad. Ion BOSTAN,
Dr.hab.prof.univ. Valeriu DULGHERU, Prof.univ. dr. Ion SOBOR,
Conf.univ.dr. Viorel BOSTAN, Conf.univ.dr. Anatol SOCHIREANU –
Universitatea Tehnică a Moldovei, Chişinău*
2. STUDY OF THE STEADY-STATE, TRANSIENT AND DOUBLE
FEEDING REGIMES OF THREE-PHASE INDUCTION MACHINES
USING THE MATHEMATICAL MODEL IN TOTAL FLUXES –
Prof.dr.ing. Alecsndru SIMION – Technical University “Gh. Asachi”, Iaşi
3. HOW CAN BE DEFINED APPARENT POWER UNDER NON-
SINUSOIDAL AND UNBALANCED CONDITIONS? – *Prof.dr.ing.
Alexandru BITOLEANU, Prof.dr.ing. Mihaela POPESCU, University of
Craiova, Romania*

Friday – October 14

ED – Electric Drives

Room 2 – 212 , 09:00 – 10:45

Session chairs : ILIE NUCĂ, DAN MIHAI

1. HARVESTING VIBRATION ENERGY BY ELECTROMAGNETIC INDUCTION - *Robert GHERCĂ, Radu OLARU*
2. MODULAR TRANSVERSAL FLUX TUBULAR MACHINE – PRESENTATION AND PROGRESS ACHIEVEMENTS - *Vasile-Ioan GLIGA, Dan-Cristian POPA, Vasile IANCU*
3. CONTROL STRATEGIES SIMULATION OF A 3 PHASE (6/4) SWITCHED RELUCTANCE MOTOR - *Nicolae-Daniel IRIMIA, Alecsandru SIMION, Leonard LIVADARU, Adrian MUNTEANU, Ovidiu DABIJA, Sorin VLASCEANU*
4. AN AGGREGATE MULTI-LOOP CONTROL FOR A DC SERVODRIVE. THE DESIGN OF THE NEURO-FUZZY CONTROLLER - *Dan MIHAI*
5. A DISO NEURO-FUZZY CONTROL FOR DC SERVODRIVES - *Dan MIHAI*
6. SENSORLESS CONTROL WITH DSP OF A BRUSHED DC MOTOR - *Gheorghe URSANU, Cristina DIACONESCU, Gheorghe BĂLUȚĂ*

Friday – October 14

**EA – MTTE - ELECTRICAL APPARATUS &
MATERIALS AND TECHNOLOGIES APPLIED IN
ELECTRICAL ENGINEERING**

Room 2 - 126, 09:00 – 10:45

Session chairs : VICTOR POGORA, GHEORGHE MANOLEA

1. THE STUDY OF ELECTRICAL PARAMETERS AND THE EXHAUST GAS ANALYSIS FOR A DOUBLE SPARK PLUG - *Dragoş-George ASTANEI, Stéphane PELLERIN, Bogdan HNATIUC, Eugen HNATIUC*
2. DIELECTRIC CHARACTERISTICS OF NOVEL HYBRID MATERIALS CONSISTING OF FUNCTIONAL BLOCK COPOLYMERS AND METAL OXIDE NANOPARTICLES AT TEMPERATURE AND FREQUENCY VARIATION - *Cristina BRATESCU, Ramona BURLACU, Romeo CIOBANU, Theodora KRASIA-HRISTOFOROU, Vasilica Alina NEAMTU*
3. DIELECTRIC PROPERTIES OF PAN (POLYACRYLONITRILE)/ N-METHYL PYRROLE COMPOSITE POLYMER THIN FILMS - *Ramona BURLACU, Vasilica A. NEAMTU, Cristina BRATESCU, Romeo CIOBANU*
4. THE QUALITY AND TRASABILITY OF MEASUREMENTS DEFINED BY INTERCOMPARISON OF METROLOGY LABORATORIES - *Bogdan DRAGOMIR, Brânduşa PANTELIMON*
5. ELASTIC EQUIVALENT SPRING FOR THE ELECTROMECHANICAL CIRCUIT BRAKERS DRIVEN BY ELECTROMAGNETS - *Eugen HNATIUC, Marius URSACHE, Radu BURLICA*
6. EXPERIMENTAL VALIDATION OF NUMERICAL RESULTS FOR CATENARY CONTACT WIRE TEMPERATURE - *Constantin-Florin OCOLEANU, Gheorghe MANOLEA, Ioan POPA*
7. OPTIMAL SOLUTION OF WEAK SPOTS PROBLEM IN A GRID SYSTEM BY MEANS OF FACTS DEVICES - *Tudor RADILOV*
8. MODIFICATIONS IN THE COMPOSITION OF STRUCTURAL ADHESIVES SOLIDIFICATION METHODS - *Vasilica Alina NEAMȚU, Ana-Cristina BRĂTESCU, Ramona BURLACU*

Friday – October 14

A 1 – AUTOMATIONS

Room 2 - 239, 09:00 – 10:45

Session chairs : BARTOLOMEU IZVOREANU, MIHAELA CLEJU

1. CONTROL SYSTEM OF THE WIREDRAWING MACHINE WITH ANNEALING MODULE - *Vadim CAZAC, Ilie NUCA, Petru Todos, Iurie NUCA*
2. JUMP RESONANCE IN NONLINEAR SYSTEMS WITH LIMITATION-
Mihaela CLEJU
3. ON CHAOS CONTROL IN DUFFING OSCILLATORS - *Mihaela CLEJU*
4. ALGORITHM OF TUNING CONTROLLERS IN THE MULTIPLE-LOOP FEEDBACK CONTROL SYSTEM TO THE MODEL OBJECTS WITH INERTIA AND NON MINIMAL PHASE - *Irina COJUHARI*
5. A MODIFIED PETRI NET FRAMEWORK FOR HYBRID SYSTEM MODELING - *Mircea Adrian DRIGHICIU, Anca PETRISOR*
6. SUMO MOBILE ROBOT- *Sergiu HARTOPANU, Marian POBORONIUC, Danut C. IRIMIA*

Friday – October 14

**EFEC – EE 1 – ELECTROMAGNETIC FIELD AND
ELECTRICAL CIRCUITS & ENGINEERING
EDUCATION**

Room 2 - 229, 09:00 – 10:45

Session chairs : MIHAIL CHIORSAC, CĂLIN MUNTEANU

1. USING THE SYMMETRICAL SIX-PHASE COMPONENTS IN THE CALCULATION OF UNSYMMETRICAL SHORT CIRCUITS ON THE DOUBLE-CIRCUIT HIGHER VOLTAGE ELECTRICAL LINE - *Mihail CHIORSAC, Constantin CODREANU, Lilia TURCUMAN*
2. THE CALCULATION OF DEVICES AND EQUIPMENT ELECTRONICS OWN NOISE (BASED ON ACTIVE RC FILTER, SALLEN-KEY'S CIRCUITS)- *Valentin GUȚU*
3. PARASITIC CAPACITANCE CANCELLATION FOR EMI FILTERS WITH AN EMBEDDED GROUND LAYER - *Claudia Alana HEBEDEAN, Calin MUNTEANU, Adina RACASA, Oana ANTONESCU*
4. THERMAL PHENOMENA OF THE VEHICLE WIRES AND HARNESS DUE TO CARRIED ELECTRICAL CURRENT- *Ionel LAZAR, Gabriel–Mihai SIRBU*
5. STUDY ABOUT REPEATABILITY OF DISCHARGING CURRENT GENERATED BY ELECTROSTATIC DISCHARGE GENERATOR - *Oana NEACȘU, Oana BENIUGĂ*
6. “OPEN-ENDED LABORATORY” METHOD APPLIED IN THE CONCEPTION OF A TEST BENCH TO SIMULATE A „DIESEL - ELECTRIC” TRANSMISSION - *Gabriela-Dana PETROPOL-SERB, Ion PETROPOL-SERB, Ioan CAUTIL, Adrian MUNTEANU*

Friday – October 14

EE 1 – ENERGY AND ENVIRONMENT

Room 2 - 324, 09:00 – 10:45

Session chairs : ION SOBOR, VIOREL BOSTAN

1. DEVELOPMENT, MANUFACTURE AND TESTING OF HORIZONTAL AXIS WIND MICROTURBINES WITH POWER OF 10 KW- *Ion BOSTAN, Valeriu DULGHERU, Ion SOBOR, Viorel BOSTAN, Anatol SOCHIREANU*
2. MICRO-HYDROPOWER STATION FOR KINETIC ENERGY CONVERSION OF FLOWING WHATER - *Ion BOSTAN, Valeriu DULGHERU, Viorel BOSTAN, Anatol SOCHIREANU, Oleg CIOBANU, Radu CIOBANU*
3. COMPUTATIONAL ANALYSIS OF HYDRODYNAMIC EFFECTS IN HYDRAULIC FLOW TURBINES (PART 1) – *Viorel Bostan*
4. NUMERICAL MODELLING OF HYDRODYNAMIC BLADES AND FLOATING STABILITY OF MICRO HYDROPOWER STATION (PART 2) - *Viorel Bostan*
5. THE ENERGETIC IMPROVEMENT OF THE COOLING WATER SYSTEM FOR THE LOTRU – CIUNGET HYDROELECTRIC PLANT - *Darie BREBENOIU*
6. COSTUL BIOETANOLULUI PRODUS DIN PORUMB ÎN CONDIȚIILE REPUBLICII MOLDOVA - *Cristina GHERMAN*
7. ENERGY EFFICIENCY IN USE OF VARIABLE SPEED FLUID MOVEMENTS - *Daniela POPESCU, Denisa RUSINARU, Adelaida Mihaela DUINEA*

Friday – October 14

**GTUE 1 – GENERATION, TRANSPORT AND UTILIZATIONS
OF ELECTRICAL AND THERMAL ENERGY**

Room 2 - 218, 09:00 – 10:45

Session chairs : VALENTIN ARION, DORIN DUMITRU LUCACHE

1. OPORTUNITATEA PARTICIPĂRII REPUBLICII MOLDOVA LA REALIZAREA UNITĂȚILOR 3 ȘI 4 ALE CNE CERNAVODA - *Valentin ARION, Cristina GHERMAN, Olga ȘVEȚ*
2. PRODUCEREA ELECTRICITĂȚII LA SCARĂ MICĂ DIN BIOMASA SOLIDĂ PE BAZA MOTORULUI STIRLING - *Valentin ARION, Alexandru URSU, Cristina GHERMAN*
3. THE FLEXIBLE IPC (INTERPHASE POWER CONTROLLER) WITH A CENTERED POWER CHARACTERISTICS - *Lev CALININ, Dmitrii ZAIȚEV, Mihai TÎRȘU*
4. INCREASING ENERGY EFFICIENCY IN INDUSTRY OF THE REPUBLIC OF MOLDOVA *Corina CHELMENCIUC, Valentin MUSTEAȚĂ, Aurel GUȚU*
5. MODELS AND MODELLING THE SUPERCAPACITORS FOR A DEFINED APPLICATION *Elena DĂNILĂ, Dorin Dumitru LUCACHE, Gheorghe LIVINȚ*
6. ASPECTS OF SIMULATION OF THE DRUM TO THE STEAM GENERATOR WITH NATURAL CIRCULATION IN DYNAMIC REGIME - *Adelaida Mihaela DUINEA*

Friday – October 14

EM – 1 ELECTRICAL MACHINES

Room 2 - 117, 09:00 – 10:45

Session chairs : TUDOR AMBROS, AUREL CAMPEANU

1. FLUXES AND DISPERSION REACTANCES OF THE ASYNCHRONOUS MACHINE - *Tudor AMBROS, Marcel BURDUNIUC, Nicolai URSATII*
2. DIAGNOSIS OF INTER-TURN SHORT CIRCUIT FAULT IN INDUCTION MACHINE - *Andrian CEBAN Remus PUSCA, Raphael ROMARY, Jean-Philippe LECOINTE*
3. THE ANALYTICAL DETERMINATION OF MAIN GEOMETRICAL DIMENSIONS OF DOUBLE AIR GAP INDUCTION MACHINES - *Mădălin COSTIN, Ion VONCILĂ, Grigore FETECĂU*
4. ASPECTS REGARDING DETERMINATION OF THE INDUCTION MACHINES PARAMETERS - *Sorin ENACHE, Aurel CAMPEANU, Ion VLAD*
5. POSSIBILITY FOR STUDY OF THE RELUCTANCE SYNCHRONOUS MOTORS DYNAMIC REGIMES - *Monica-Adela ENACHE, Ioan CAUTIL*
6. A PRESENTATION METHOD OF THE UNSIMETRIC SHORT-CIRCUITS REGIMES OF SYNCHRONOUS MACHINE IN THE D-Q AXES - *Ilie MACOVEI, Ion STRATAN, Victor GROPA, Marin PRIPA*

Friday – October 14

A – 2 AUTOMATIONS

Room 2 - 239, 11:00 – 12:30

Session chairs : BARTOLOMEU IZVOREANU, NICULAE BOTEANU

1. THE ITERATIVE ALGORITHM OF TUNING CONTROLLERS TO THE MODELS OBJECT WITH INERTIA, TIME DELAY AND NONMINIMAL PHASE - *Bartolomeu IZVOREANU*
2. ETHERNET INTERFACE FOR A SYSTEM OF AUTOMATION WITH MICROCONTROLLER- *Florin RAVIGAN, Niculae BOTEANU, Adrian Mircea DRIGHICIU*
3. IMPLEMENTATION OF THE VECTOR CONTROL SYSTEM FOR TRACTION ASYNCHRONOUS MOTORS - *Iurie RÎMBU, Vitalie EȘANU, Vitalie MIHALACHI, Andrei RÎNCĂU, Ilie NUCA, Sergiu IVANOV*
4. EXPERIMENTAL DETERMINATION OF PARAMETERS DESCRIPTIVE OF MAGNETO-RHEOLOGICAL VALVE - *Ileana VLADU. Ionel Cristian VLADU*
5. ROBUST ADAPTIV CONTROL OF AN ELECTRONIC THROTTLE SYSTEM VIA LOGIC BASED SWITCHED CONTROL - *Mihaela Doina ZAMFIR*
6. NEURAL CONTROL OF AN ELECTRONIC THROTTLE SYSTEM - *Mihaela Doina ZAMFIR*

Friday – October 14

PE – POWER ELECTRONICS

Room 2 - 126, 11:00 – 12:30

Session chairs : MIHAELA POPESCU, VIRGIL MAIER

1. AUTONOMOUS MICRO-GRID BASED ON RES - *Luminita BAROTE, Corneliu MARINESCU*
2. ENERGETICAL PERFORMANCES OF SINUSOIDAL PWM STRATEGY FOR THE INDUCTION MOTOR AND VOLTAGE INVERTER SYSTEM: SIMULATION AND EXPERIMENTAL APPROACH - *Mihăiță LINCA, Ileana-Anamaria MITRAN*
3. DIFFERENTIATE DEFINITION OF HARMONICS INDICATORS FOR THE A.C. AND D.C. WAVES - *Virgil MAIER, Sorin Gheorghe PAVEL, Iulian BIROU*
4. INDUCTION MOTOR AND PWM VOLTAGE SYSTEM SIMULATION FOR ENERGETIC PERFORMANCE ANALYSIS - *Ileana – Anamaria MITRAN, Mihăiță LINCA*
5. COMPARATIVE ACTIVE CURRENT CALCULATION BY p-q AND CPC THEORIES - *Alexandra PATRASCU, Mihaela POPESCU*
6. TIME-DOMAIN BASED ACTIVE COMPENSATION STRATEGIES UNDER NONSINUSOIDAL CONDITIONS IN THREE-PHASE THREE-WIRE SYSTEMS - *Mihaela POPESCU, Alexandru BITOLEANU, Vlad SURU*
7. DESIGN AND PERFORMANCES OF COUPLING PASSIVE FILTERS IN THREE-PHASE SHUNT ACTIVE POWER FILTERS - *Constantin Vlad SURU, Alexandru BITOLEANU*

Friday – October 14

**EFEC – EE 2 – ELECTROMAGNETIC FIELD AND
ELECTRICAL CIRCUITS & ENGINEERING
EDUCATION**

Room 2 - 229, 11:00 – 12:30

Session chairs : MIHAIL CHIORSAC, ION POPA

1. PERFORMANCE STUDY OF A MOBILE COMMUNICATION SYSTEM (DS – CDMA) IN RAYLEIGH ENVIRONMENTAL - *Ion POPA*
2. PERFORMANCE STUDY OF A MOBILE COMMUNICATION SYSTEM (DS – CDMA) IN AWGN ENVIRONMENTAL - *Ion POPA*
3. COMPUTER BASED ANALYSIS OF POWER QUALITY - INTEGRATED DIDACTIC SOFTWARE PACKAGE - *Denisa RUSINARU, Cristian BRATU, Diana ENACHE, Daniela POPESCU, Silvia DIGA*
4. ITERATION METHOD FOR ANALYSING NONLINEAR OF THREE-PHASE ELECTRICAL - *Ghenadie TERTEA, Arhip POTÂNG, Mihail CHIORSAC*

Friday – October 14

EE 2 – ENERGY AND ENVIRONMENT

Room 2 - 324, 11:00 – 12:30

Session chairs : ION SOBOR, ALEXANDRU BITOLEANU

1. ELECTROMAGNETIC SHIELDING - NUMERICAL APPROACH AND SOME COMPLEMENTARY APPLICATIONS FOR INCREASE THE ENERGY EFFICIENCY OF BUILDINGS - *Stefan URSACHE, Mihaela ARADOAEI(MOSNEAGU), Andrei NIAGU, Vlad SCARLATACHE*
2. ENERGY AND ENVIRONMENT.METHODS TO CALCULATE GREENHOUSE GASES EMISSION - *Diana OPREA*
3. EXPERIMENTAL RESEARCHES OF THE ECOLOGICAL SYSTEM FOR COOLING OF MILK WITH LOW ENERGY CONSUMPTION - *Liviu VOLCONOVICI, Victor CRETU, Augustin VOLCONOVICI, Vitalie ZVONKII, Mihai CUȘNIR*
4. MATHEMATICAL MODEL OF THE ECOLOGICAL SYSTEM WITH ELECTRICITY CONSUMPTION FOR MILK COOLING IN THE REPUBLIC OF MOLDOVA - *Liviu VOLCONOVICI, Victor CRETU, Augustin VOLCONOVICI, Vitalie ZVONKII, Mihai CUȘNIR*
5. MONITORING SYSTEM FOR THE LOCAL LAUNCH POINTS OF THE ANTI-HAIL UNITS - *Gheorghe MANOLEA, Constantin ȘULEA, Laurențiu Ionel ALBOTEANU*
6. CALCULUL FACTORILOR DE EMISII GES CORESPUNZĂTORI TREPTELOR SISTEMULUI ELECTROENERGETIC - *Sergiu UNGUREANU*

Friday – October 14

**GTUE 2 – GENERATION, TRANSPORT AND UTILIZATIONS
OF ELECTRICAL AND THERMAL ENERGY**

Room 2 - 218, 11:00 – 12:30

Session chairs : VALENTIN ARION, RADU PENTIUC

1. EFFECTS OF MULTIPLE STRESSES ON POWER CABLES AND ENERGY STORAGE DEVICES-A COMPARATIVE STUDY - *Larisa MARIUT, Carmen LUNGOCI, Elena HELEREA*
2. GEOMETRY OPTIMIZATION OF SMES COIL - *Florian ȘTEFĂNESCU*
3. SIMULATOR FOR TRAINING – IZOLATIA – *Dan ȘUMOVȘCHI, Radu PENTIUC, Vasile CRĂCIUNESCU, Alina-Ionela ȘUMOVȘCHI*
4. INCREASING THE SELECTIVITY AND THE SENSITIVITY OF HOMOPOLAR PROTECTION IN INDUSTRIAL MEDIUM VOLTAGE NETWORKS WITH AN ISOLATED NEUTRAL BY USING RELAYS WORKING BASED ON THE DIRECTIONAL CRITERION - *Romeo ORMENIȘAN*
5. ASPECTS CONCERNING THE FUNCTIONING OF HOMOPOLAR POWER PROTECTION IN INDUSTRIAL ELECTRICAL - *Romeo ORMENIȘAN*

Friday – October 14

MMS – METROLOGY AND MEASUREMENT SYSTEMS

Room 2 - 212, 11:00 – 12:30

Session chairs : VALENTIN GUȚU, CONSTANTIN DANIEL OANCEA

1. MEASURING SYSTEM OF HEMODYNAMIC PARAMETERS USING ELECTRICAL IMPEDANCE *Călin CORCIOVĂ, Dan ZAHARIA, Marius TURNEA, Alexandru SĂLCEANU*
2. POWER FACTOR AUTOMATIC COMPENSATION WITHIN 20/6KV ELECTRICAL TRANSFORMATION STATIONS - *Mircea DOBRICEANU, Gheorghe Eugen SUBȚIRELU, Octavian Dan DOBRICEANU*
3. THE MEASUREMENT OF ELECTRONIC NOISE (BASED ON ACTIVE RC FILTER, SALLEN-KEY'S CIRCUITS) - *Valentin GUȚU*
4. SOFTWARE AND SYSTEM FOR MONITORING SOLUTION WITH PLCS OF POWER TRANSFORMERS - *Paul Mihai MIRCEA, Denisa RUSINARU, Mircea BORUZ, Cristian BRATU*
5. PROGRAMMABLE REFERENCE ELEMENTS FOR IMPEDANCEMETERS IN CARTESIAN COORDINATES - *Pavel NIKOLAEV, Vitalie NASTAS*
6. PARAMETERS MONITORING OF PHOTOVOLTAIC PANELS - *Constantin-Daniel OANCEA*
7. CONSIDERATIONS ON NEW BIOSENSOR TECHNOLOGY - *Olga PLOPA, Ramona BURLACU, Cristina SCHREINER*
8. THE REGIONAL ASPECTS OF MEASUREMENTS IN THE CONFORMITY ASSESSMENT PROCEDURES - *Alexandru TARLAJANU*

Friday – October 14

EM – 2 ELECTRICAL MACHINES

Room 2 - 117, 11:00 – 12:30

Session chairs : TUDOR AMBROS, ION VONCILĂ

1. L'ETUDE DES PRIORITES DU MOTEUR ASYNCHRONE HEXAPHASE ASYMETRIQUE - *Iurie RATA, Ilie NUCA, Daniela DIMOV*
2. CONCERNING THE CONVERSION EFFICIENCY INCREASE OF THE AVAILABLE WIND POTENTIAL - *Ion SOBOR, Andrei CHICIUC, Rodion CIUPERCĂ, Vasile RACHIER*
3. STATIC CHARACTERISTICS PREDETERMINED 300 kVA SYNCHRONOUS GENERATOR OPERATING IN AUTONOMOUS REGIME - *Elisabeta SPUNEI (ERINA), Ion PIROI*
4. PREDETERMINED DYNAMIC CHARACTERISTICS OF THE 300 KVA SYNCHRONOUS GENERATOR OPERATING IN AUTONOMOUS REGIME - *Elisabeta SPUNEI (ERINA), Ion PIROI*
5. ESTABLISHMENT OF THE OPTIMAL CONSTRUCTIVE DIMENSIONS FOR THE SYNCHRONOUS MOTORS WITH ROTOR IN CAGE - *Ion VLAD, Aurel CAMPEANU, Sorin ENACHE, Gabriela PETROPOL*
6. INTEGRATED SYSTEM OF PRODUCTION AND ADJUSTMENT OF AC ELECTRIC ENERGY PARAMETERS FOR LOW POWER ISOLATED SITES THAT USE WIND ENERGY AS PRIMARY ENERGY - *Ion VONCILĂ, Mădălin COSTIN*

Notes

Notes

Notes

Conference sponsors:

Autoritatea Națională pentru Cercetare Științifică - Romania



Cummins Generator Technologies – Craiova - Romania



Sponsors of the Republic of Moldova :

- **ÎCS „RED Union Fenosa” S.A.**
- **ÎS „Molelectrica”**
- **S.A. „Termocom”**
- **S.A. „RED – Nord”**
- **S.A. „CET – Nord”**
- **ICPT „Energoproiect”**
- **S.A. „Energocom”**
- **Asociația „Enecom Internațional”**
- **SRL „Energ Rotor”**
- **SRL „TehElectro - SV”**
- **SRL „Informbusiness”**
- **SRL „Volta”**

8th International Conference on Electromechanical and Power Systems

SIELMEN - 2011

October 11 – 13, 2011 - Craiova, Iași – Romania

October 13 – 15, 2011 - Chișinău – Republic of Moldova

GENERAL AGENDA

Thursday, October 13 - Chișinău

- 13:00 – 14:00 Registration of participants – Rectorat Building 1
- 14:00 – 15:00 Opening Session of SIELMEN 2011– Rectorat Building 1
- 15:00 –16:45 Plenary Session – Rectorat Building 1
- 16:45 – 17:00 Coffee Break
- 17:00 – 19:00 Workshop – Advances in Electrical and Power Engineering -
Faculty of Mechanical Engineering and Transport, Chișinău
- 19:30 – 23:30 Festive dinner

Friday, October 14 - Chișinău

- 09:00 – 10:45 Paper presentations – Faculty of power Engineering, Chișinău
- 10:45 – 11:00 Coffee Break
- 11:00 – 12:30 Paper presentations – Faculty of power Engineering, Chișinău
Workshop – Actual Trends on Electro-Mobility in the South
Eastern Europe
- 12:30 – 13:00 Closing Session of the SIELMEN 2011 Conference
Rectorat Building 1
- 13:00 – 14:00 Farewell lunch
- 14:00 – 17:30 Trip to the famous Mileștii Mici wine cellars (optional)

Saturday, October 15 - Chișinău

Social program