

## Sunday, July 11

14:00-19:00 Registration

19:00-22:00 Welcome Reception

**Plenary Session**

*Banquet Hall*

09:00 Opening and Greetings

*Large Hall*

09:40 Applications of information theory to analysis of efficiency and capacity of computers and similar devices, *Boris Ryabko*

*Small Hall*

09:40 Progress in the transistor inverter technologies for motor drives, *Tsuneo Kume*

**Telecommunications and networks I**

*Large Hall*

10:40 Using UML to specify general communication systems, *Emil Šećerov, Živko Bojović, Vlado Delić and Vojin Šenk*

11:00 Maximizing the profit of telecom operators by a novel traffic scheduling policy, *Živko Bojović, Emil Šećerov and Vojin Šenk*

11:20 **Coffee-break**

11:40 A subband equalizer with the flexible structure of the analysis/synthesis subsystem, *Vladimir V. Vityazev and Alexander Y. Linovich*

12:00 Pulse emitter identification by the use of higher order statistics, *Andrzej Pieniezny, Adam Kawalec and Jacek Fornalik*

12:20 Integral measurement process of incoming traffic for measurement-based admission control, *Mihails Kulikovs, Ernests Petersons and Sergey Sharkovsky*

12:40 Compact AO filter with beam expanders built by photonic crystal row of holes, *A. V. Tsarev*

**Industrial applications I***Small Hall*

- 10:40 Finite element method application for HVDC electrical insulation strength problems solution,  
*Maxym V. Ostrenko, Bogdan Y. Andriienko and Vitalii N. Ryzhyi*
- 11:00 Power transformers and reactors stray losses and temperatures calculation using coupled IEM and FEM technique,  
*Maxym V. Ostrenko, Olexandr L. Tarchutkin and Bogdan Y. Andriienko*
- 11:20 **Coffee-break**
- 11:40 Autonomous mini-UAV for indoor flight with embedded on-board vision processing as navigation system, *Swee King Phang , Jun Jie Ong , Ronald T. C. Yeo , Ben M. Chen and Tong H. Lee*
- 12:00 Multimedia services on top of M3 smart spaces,  
*Sergey Balandin, Ian Oliver, Sergey Boldyrev, Alexander Smirnov, Nikolay Shilov and Alexey Kashevnik*
- 12:20 Internet based remote customer services,  
*Hsin C. Fu, Hsiao T. Pao and C. L. Tseng*
- 12:40 Monitoring system development using simulation,  
*Victor Okolnishnikov, Sergey Rudometov and Sergey Zhuravlev*

**Information theory I***Hall A*

- 10:40 Uniform hypothesis testing for ergodic time series distributions,  
*Daniil Ryabko*
- 11:00 Discovery of patterns in LZ-78 text discrimination,  
*Mikhail Malyutov and Gabriel Cunningham*
- 11:20 **Coffee-break**
- 11:40 New results on DNA codes for additive stem similarity,  
*A. D'yachkov, A. Voronina, A. Alekseev and D. Sharonov*
- 12:00 New algorithm for message restoring with errors detection and correction using binary LDPC-codes and network coding,  
*Sergey Vladimirov*

- 12:20 Idle time reduction in TDMP implementation of LDPC decoder,  
*Wojciech Sutek*
- 12:40 On redundancy of strong isometries of binary codes,  
*Sergey V. Avgustinovich and Evgeny V. Gorkunov*

**Development and control of energy systems**

*Hall B*

- 10:40 RESTful access to power system state variables,  
*Imre Lendak, Ervin Varga, Aleksandar Erdeljan and Milan Gavrić*
- 11:00 Development of new generation automated and automatic control systems for power industry, *Osak A. B. and Buzina E. Y.*
- 11:20 **Coffee-break**
- 11:40 Fault detection and diagnosis of an induction motor using fuzzy logic, *Mini.V. P., Setty Sivakotaiah and S. Ushakumari*
- 12:00 Maximum lightning overvoltage location and reliability indices in power system with combined transmission line,  
*Javad Sadeh and Yaser Damchi*
- 12:20 Forecasting power system state variables on the basis of dynamic state estimation and artificial neural networks, *A. M. Glazunova*
- 12:40 Control tool development for energy consumption of private and industrial consumption on district level, *Antons Patlins, Nadezhda Kunicina, Alina Galkina, Yelena Chaiko and Leonids Ribickis*

13:00–14:20 **Lunch**

**Invited talk***Large hall*

- 14:20 Experience and vision of open innovations in Russia and Baltic region: the FRUCT program, *Sergey Balandin*

**Education and e-learning I***Large Hall*

- 15:00 Modern approaches to engineering education,  
*Boris Krouk, Olga Zhuravleva and Natalia Chupakhina*
- 15:20 Training teachers for engineering subjects for teaching at Austrian VET schools, *Eleonore Lickl*
- 15:40 Encouraging students to study theory through interdisciplinary projects, teamwork and e-learning, *Anna Friesel*
- 16:00 **Coffee-break**
- 16:20 Method for quality evaluation of distance learning,  
*B. I. Krouk, O. B. Zhuravleva and N. A. Chupakhina*
- 16:40 Electric vehicle battery limiter und monitoring system implementation in educational process,  
*Helmut Jakob Weiss and Helmut Weiss*
- 17:00 VIDEO FARM: an integrated multi-model platform for e-learning,  
*Hsin C. Fu, Hsiao T. Pao and Yeong Y. Xu*
- 17:20 Wrapper tool – learning and application of digital system testability to SoC cores,  
*Marcel Baláž, Jana Bečková and Elena Gramatová*
- 17:40 EMA-4-Moodle: the European project of studying foreign languages with the help of Moodle,  
*B. Krouk, K. Lomakin and N. Chupakhina*

**Power electronics I***Small Hall*

- 14:20 The design features of the converters for synchronous motors vector-pulsed launch control, *A. A. Radionov, O. S. Malakhov, S. N. Baskov, A. S. Konkov and M. S. Davydkin*
- 14:40 Complete traction electric equipment sets of electro-mechanical drive trains for tractors, *Stanislav Florentsev, Dmitry Izosimov, Lev Makarov, Sergey Baida and Alexander Belousov*
- 15:00 Fault detection of voltage-source inverter using pattern recognition of the 3D current trajectory, *V. Fernão Pires, Tito G. Amaral, Duarte Sousa and G. D. Marques*
- 15:20 Complete traction electric equipment sets for hybrid buses, *Stanislav Florentsev, Dmitry Izosimov, Sergey Baida, Alexander Belousov, Andrey Sibirtsev and Sergei Zhuravljov*
- 15:40 Use of snappy recovery diodes is a new way to increase efficiency and reliability of power conversion devices, *Yuriy I. Krasnikov and Vladimir P. Popov*
- 16:00 **Coffee-break**
- 16:20 Quad-inverter configuration for multi-phase multi-level AC motor drives, *G. Grandi, P. Sanjeevikumar, D. Ostojic and C. Rossi*
- 16:40 A new approach for current calculation in a single-phase three-level NPC converter with space vector PWM, *Sergey Brovanov, Sergey Kharitonov, Maxim Dybko and Evgeney Grishanov*
- 17:00 Local hybrid energetic complexes – the base of the power infrastructure of the Russian Federation northern territories, *Evgeny Preobrazhensky*
- 17:20 High-voltage rectifiers for new systems of electrosupply of railways, *Alexander G. Volkov, Gennadiy S. Zinoviev and Alexey P. Kosarev*
- 17:40 Matrix converter based AC/DC rectifier, *Senad Huseinbegovic and Omer Tanovic*

**Cryptography and data security***Hall A*

- 15:00 Privacy-preserving data acquisition protocol,  
*Zbigniew Kwecka, William J Buchanan and Duncan Spiers*
- 15:20 Stegosystem construction on the basis of raster images by  
permutations, *Catherine Eltysheva and Andrey Fionov*
- 15:40 Modified GPT cryptosystem in noisy channels, *Anton Senyuta*
- 16:00 **Coffee-break**
- 16:20 Bent functions on the minimal distance,  
*Nikolay Kolomeec, Andrey Pavlov*
- 16:40 Differential power analysis attack using the upper tailed T-test  
distinguisher, *Hala A. Farouk and Ahmed Farouk Abdel Moneim*
- 17:00 Securing GSM voice through scrambling, *Iftikhar Ali Naeem,  
Usman Rauf, Syed Faraz Ahmad and Syed Noor ul Hassan Shirazi*
- 17:20 Secure messaging and real time media streaming using enterprise  
PKI and ECC based certificates, *SanaUllah, Syed Noor-Ul-Hassan  
Shirazi, Muhammad Ashraf Nadeem and Nassar Ikram*

**Development and control of energy systems***Hall B*

- 14:20 Adaptive relaying to balance protection dependability with power  
system security, *Sergio Bruno, Michele De Benedictis,  
Massimo La Scala, Silvia Lamonaca, Giuseppe Rotondo and Ugo Stecchi*
- 14:40 Statistics of voltage drop in radial distribution circuits: a dynamic  
programming approach, *Konstantin S. Turitsyn*
- 15:00 Clustering governor signal of distributed generation for islanding  
detection, *Ali. Moeini, Ahmad. Darabi and Mohsen. Karimi*
- 15:20 Planning, optimizing and analyzing of safety and maintenance for  
the critical role of emergency power plant in saudi healthcare  
facilities, *Mohammed S. BenSaleh and Ali S. Hennache*
- 15:40 A novel power flow solution methodology for radial distribution  
systems, *P. Ravi Babu, M. P. V. V. R. Kumar, V. Sai Hemachandra  
and M. P. R. Vanamali*

**Plenary Sessions***Large Hall*

09:00 Recovery of sparse active inputs in general systems: a review,  
*Mikhail Malyutov*

*Small Hall*

09:00 Artificial neural networks in fault diagnosis of dynamical systems,  
*Jozef Korbicz*

**Wireless communications I***Large Hall*

10:00 Wireless systems of threats monitoring, *Katulski Ryszard J.,  
Stefański Jacek, Sadowski Jarostaw and Ambroziak Sławomir J.*

10:20 Comparative analysis of mobile telecommunication technologies  
for intelligent transport systems, *Vladimir Kharaev*

10:40 Healthcare, medical support and consultancy applications and  
services for mobile devices, *Alexandra Reyss and Sergey Balandin*

11:00 A wireless system of data acquisition,  
*Ivan A. Efremov and Sergey G. Mosin*

**11:20 Coffee-break**

11:40 Comparison of atmospheric losses in 850 nm and 1550 nm optical  
windows, *Ales Prokes, Otakar Wilfert and Jiri Petrzela*

12:00 Combinatorial evolution of ZigBee protocol, *Mark Sh. Levin,  
Aliaksei Andrushevichy, Rolf Kistlery and Alexander Klapproth*

12:20 DVB-T mobile diversity reception, *Miloš Pavlović,  
Aleksnadar Nešković and Mladen Koprivica*

12:40 Localized detection of bottleneck nodes and quantification of  
criticality in a wireless sensor networks, *Rajiv Kr Tripathi,  
Rajeev Shakya, Nischal Kr Verma and Yatindra Nath Singh*

**Industrial applications II***Small Hall*

- 10:00 DGA-based diagnosis of power transformers – IEC standard versus k-nearest neighbours, *P. S. Szczepaniak and M. Kłosiński*
- 10:20 Properties of gliding arc (GA) reactors energized from AC/DC/AC power converters, *H. D. Stryczewska and G. K. Komarzyniec*
- 10:40 High frequency chaos converters, *Jiri Petrzela and Jiri Drinovsky*
- 11:00 Busbar protection – a review, *S. Moni Mohan and Saibal Chatterjee*
- 11:20 **Coffee-break**
- 11:40 Development of a model for the simulation of a clean-coal pressurized oxy-combustion plant, *Sergio Bittanti, Lorenzo Calloni, Antonio De Marco, Valter Prandoni and Fulvio Zamponi*
- 12:00 Dynamics of 3D polygonal rendering, *Gabriyel Wong and Jianliang Wang*
- 12:20 Efficient energy management for electrical scooters, *Chi-Tong Huang, Chun-Liang Lin and Chia-Sung Lee*
- 12:40 A comparative study on performance of metaheuristics optimization methods for optimal Var sizing and allocation, *Reza Keypour and Hosein Sharifzadeh*

**Information theory II***Hall A*

- 10:00 Intersections of perfect binary codes, *Olof Heden, Faina I. Solov'eva and Ivan Yu. Mogilnykh*
- 10:20 One error control scheme for ATM header, *Peter Farkaš, Martin Rakús and Tomáš Páleník*
- 10:40 Another derivation of Wu list decoding algorithm and interpolation in rational curve fitting, *Peter Trifonov*
- 11:00 Fast interpolation in algebraic soft decision decoding of Reed-Solomon codes, *Vera Miloslavskaya and Peter Trifonov*
- 11:20 **Coffee-break**
- 11:40 Rank codes using weak self-orthogonal bases, *Igor Y. Sysoev and Ernst M. Gabidulin*

**Information systems and image processing***Hall A*

- 12:00 Logical analysis of information in tabular form,  
*Hahanov Vladimir, Chumachenko Svetlana and Litvinova Eugenia*
- 12:20 SOC verification infrastructure,  
*Hahanov Vladimir, Litvinova Eugenia and Pobezhenko Irina*
- 12:40 Computational technology in seismic monitoring system,  
*M. Khairetdinov and S. Avrorov*

**Microwave theory and techniques I***Hall B*

- 10:00 Doped GaSe crystals for optical frequency conversion in infrared and terahertz spectral ranges, *V. V. Atuchin, Yu. M. Andreev, Chih Wei Luo, T. A. Gavrilova, S. A. Ku and S. Yu. Sarkisov*
- 10:20 Effect of RF discharge structure on etching rate in plasma-chemical reactor, *Yurii Grigoryev and Aleksey Gorobchuk*
- 10:40 Obtaining signal with constant amplitude and desired spectrum, *Belorutsky R., Kiselev A. and Tyrykin S.*
- 11:00 Resonant section for Ku-band high-power bandpass filter, *Anatoly Bunin, Vladimir Gevorkyan, Yury Kazantsev, Sergey Mikhailin and Sergey Vishnyakov*
- 11:20 **Coffee-break**
- 11:40 Design of a low-power voltage regulator for RFID applications, *Juergen Heidrich, Daniel Brenk, Jochen Essel, Matthias Heinrich, Melanie Jung, Guenter Hofer, Gerald Holweg, Robert Weigel and Georg Fischer*
- 12:00 Multidimensional signal processing for an adaptive FEM mesh refinement, *Sergey Vishnyakov*
- 12:20 Frequency response model for thermal converter, *A. G. Kozlov*
- 12:40 Enhanced RF steerable beamforming networks based on Butler matrix and Rotman lens for ITS applications, *Ardavan Rahimian and Ashkan Rahimian*

13:00–17:00 **Lunch and social programs**

**Education and e-learning II***Large Hall*

- 17:00 Choosing the right geometry for electrodynamics, *Frank Schadt*
- 17:20 Student project administration at a research laboratory, *Sunil Kumar Kopparapu, Akhilesh Srivastava and P. V. S. Rao*
- 17:40 On the new challenge in the teaching/learning process: an interactive educational tutorial for the industrial electronics engineering bachelor, *F. D. Trujillo, F. J. Sánchez-Pacheco, P. J. Sotorrío, A. Pozo, M. O. Martín-Graciani and M. Escolar*
- 18:00 USB-based terminals system for ubiquitous learning, *Ji-Hyoung Ryu, Hee-Sun Kim and Chnag-Goo Lee*
- 18:20 **Coffee-break**
- 18:40 A physical laboratory for energy efficiency education, *J. Luis Sousa and V. Fernão Pires*
- 19:00 E-learning in signals, systems and signal processing through Matlab/Simulink, *P. Meena and K. Uma Rao*
- 19:20 A top-down design and test of an industry sponsored FSM project, *Arcadie Cracan and Nicolae Cojan*
- 19:40 E-learning: virtual classrooms as an added learning platform, *Michael Nyarko and Neco Ventura*

**Antennas and transmission systems I***Small Hall*

- 17:00 A modified broad-band planar quasi-Yagi antenna, *Anatoly P. Gorbachev, Oleg O. Kibirev and Vadim S. Churkin*
- 17:20 The reentrant wideband bandpass/bandstop elliptic filters, *Anatoly P. Gorbachev, Dmitry A. Malinko and Artem A. Vasilenko*
- 17:40 Comparative analysis of the techniques for reducing PAPR in OFDM, *Smriti Bhatnagar, Shivali Beakta and Rashmi Manchanda*
- 18:00 Iterative frequency offset estimation in MIMO-OFDM systems, *Elnaz Ershadi and Hamidreza Bakhshi*
- 18:20 **Coffee-break**

- 18:40 A six-sector switchable antenna for frequency band 1.5-1.8 Ghz,  
*Yuri B. Nechaev, Evgeny S. Makarov, Igor V. Popov,  
Evgeny A. Tarlykov and Michail V. Saprykin*
- 19:00 PAPR and amplitude distribution in MC-CDMA system,  
*Zbynek Fedra and Jiri Blumenstein*
- 19:20 Circular patch UWB antenna with time domain analysis,  
*Manimaran Nagalingam*
- 19:40 VLSI signal processing system employing six phase codes for  
spread spectrum applications, *N. Balaji and K. Subba Rao*

### Information systems and image processing

#### Hall A

- 17:00 Design and construction of a module for the dynamic excitation  
and vibrational analysis of structures, *Avid Román González*
- 17:20 The object-oriented nursing management system, *Jiun-Hung Lin,  
Kuo-Feng Chou, Yu-Hsiang Kuan and Shih-Tsang Tang*
- 17:40 Software architecture for real-time steganography in auditive  
media, *Marcus Nutzinger and Rainer Poisel*
- 18:00 Study on relationship between personality and individual  
characteristic of EEG for personalized BCI, *Shin-ichi Ito, Yasue  
Mitsukuray, Katsuya Sato, Shoichiro Fujisawa and Minoru Fukumi*
- 18:20 **Coffee-break**
- 18:40 Metal cutting motion optimization for NCprograms design using  
ant colony approach, *Vladimir Frolovsky and Natalie Ganelina*
- 19:00 An image based approach to detect retinopathy of prematurity,  
*Prabakar S, Porkumaran K and Guna Sundari J*
- 19:20 A novel response dependent image compression algorithm to  
reduce the nonlinear effects in color images using JPEG,  
*Shaik Mahaboob Basha and Dr. B. C. Jinaga*
- 19:40 Gaussian diffusion based image denoising technique using  
combination of wavelet and fractal transforms,  
*B. Chinna Rao and Dr. M. Madhavi Latha*

**Microwave theory and techniques I***Hall B*

- 17:00 Amplifier on basis of superconducting layered structure,  
*Mariya Golovkina*
- 17:20 The construction of numerical algorithms for the ballistic diode  
problem, *Alexander M. Blokhin, Boris V. Semisalov*
- 17:40 Construction of difference schemes for the moment equations of  
charge transport in semiconductors,  
*Alexander Blokhin and Stanislav Boyarskiy*
- 18:00 S-doped GaSe for sub-microwave generation, *C. W. Luo, S. A. Ku,  
W. C. Chu, Yu. M. Andreev, V. V. Atuchin, N. F. Beizel, G. V. Lanskii,  
A. N. Morozov and V. V. Zuev*
- 18:20 **Coffee-break**

**Industrial applications II***Hall B*

- 18:40 Properties of a double-sided kinoform on the surface of quartz  
plates, *Eugeniy A. Kolosovsky*
- 19:00 Water treatment plant intelligent monitoring in large gas refinery,  
*Amir Firoozshahi and Seyeon Kim*
- 19:20 Selecting the best alternative SOA service nus for C4I systems  
using multi-criteria decision making technique,  
*Abdullah S Alghamdi, Iftikhar Ahmad and Muhammad Nasir*
- 19:40 A balanced differential CMOS oscillator with simulated inductor  
and negative resistance,  
*Nicolae Cojan, Arcadie Cracan and Radu Cojan*

## Plenary Session

*Large Hall*

09:00 LTE – the new mobile system, *Jean-Gabriel Rémy*

## Telecommunications and communication networks II

*Large Hall*

10:00 Investigation of new wide strip and grating loaded quasi-single-mode waveguide on SOI, *A. V. Tsarev*

10:20 CMOS compatible widely tunable multiplexers on SOI technology, *A. V. Tsarev*

10:40 Efficient FIR interpolation circuit using supplementary filter, *Jae-Kyung Lee, Chang-Ha Jeon, Yong-Eun Kim, Jin-Gyun Chung and Chul-Dong Lee*

11:00 Fuzzy approach for QoS aware application driven traffic control in GMPLS networks, *Jans Jeļinskis and Gunārs Lauks*

11:20 **Coffee-break**

11:40 Towards communication network development (structural systems issues, combinatorial models), *Mark Sh. Levin*

12:00 IP-multimedia subsystem (IMS) performance evaluation and benchmarking, *Wagdy A. Aziz, Salwa H. EL-Ramly and Magdy M. Ibrahim*

12:20 Application layer network performance evaluation of VoIP traffic on a test-bed with IPv4 and IPv6 LAN infrastructure, *Shaneel Narayan and Yhi Shi*

12:40 Simple approximation for Erlang B formula, *Vladimir Shakhov*

## Motors and drives

### Small Hall

- 10:00 Simulation and verification of an eccentric press system actuated by hydraulic-clutch-brake-combination controlled by a linear drive, *Christian Junge, Jochen Gallep, Ralf Wegener and, Stefan Soter*
- 10:20 Forced dynamics position control of the drive with linear PMSM and flexible coupling, *Jan Vittek, Vladimir Vavruš, Peter Minarech and Jan Faber*
- 10:40 Aspects of modeling an electric boat propulsion system, *Tiago Freire, Duarte M. Sousa and Paulo J. Costa Branco*
- 11:00 A DFIG sensorless method for direct estimation of slip position, *G. D. Marques and Duarte M. Sousa*
- 11:20 **Coffee-break**
- 11:40 A system on chip (SOC) high performance power drive applications - SVPWM based voltage source inverter, *C. Bharatiraja, S. Jeevananthan and Rahul Guha*
- 12:00 Optimal design of tubular permanent magnet linear motor for electric power steering system, *Hamidreza Akhondi, Jafar Milimonfared and Hasan Rastegar*

## Energy conversion and renewable energy II

### Hall A

- 10:00 Modeling aspects for power conversion locomotive transformers, *Joseph El Hayek*
- 10:20 Electronic structure of  $h$ -WO<sub>3</sub> and CuWO<sub>4</sub> nanocrystals, prospective materials for renewable energy production and functional devices, *V. V. Atuchin, O. Yu. Khyzhun, I. B. Troitskaia, V. L. Bekenev and Yu. M. Solonin*
- 10:40 Chemical bonding in photocatalytic niobates and tantalates, *V. V. Atuchin, N. V. Pervukhina and Zhaoming Zhang*
- 11:00 Decentralized supply system with renewable energy based on quasi-eight-level inverter, *Helmut Weiss and Kayhan Ince*
- 11:20 **Coffee-break**

- 11:40 Smart grid for the small regions,  
*Kharitonov Sergey, Riabchitsky Maxim and Vorobiova Svetlana*
- 12:00 Probabilistic voltage stability constrained optimal power flow  
considering wind farms,  
*Reza Keypour, Ali Akbar Rashidi and Mostafa Jazaeri*

## Microwave theory and techniques II

### Hall B

- 10:00 Physical properties of electrooptical GaSe:Al,  
*S. A. Ku, C. W. Luo, W. C. Chu, Yu. M. Andreev, V. V. Atuchin,  
G. V. Lanskii, A. N. Morozov, A. V. Shaiduko and V. V. Zuev*
- 10:20 Doping profile influence on characteristics of ion-implanted GaAs  
field effect transistor with the Schottky barrier,  
*Alexander K. Shestakov, Konstantin S. Zhuravlev,  
Vadim S. Arykov and Valery A. Kagadei*
- 10:40 Microwave opto-electronic oscillator research,  
*Mikhail E. Belkin and Leonid Belkin*
- 11:00 Modeling of microstrip and PCB traces to enhance crosstalk  
reduction, *Kachout Mnaouer, Bel Hadj Tahar Jamel and Choubani Fethi*
- 11:20 **Coffee-break**
- 11:40 Time-domain macromodel for nonuniform interconnect analysis,  
*Jacek Izydorczyk*
- 12:00 12.5GHz-13GHz QPSK modulator direct at carrier with improved  
parameters for space applications,  
*Sajid Hussain, A. Maalik and Noor M. Sheikh*
- 12:20 Comparative study of buried insulator materials in LDMOSFETs,  
*Hamid Amini Moghadam, Ali A. Orouji and A. Dideban*

13:00–14:40      **Lunch**

**Invited talk**

*Large Hall*

14:40    Internet governance: from the history, via modern days to the future (is it doable?), *Algirdas Pakštas*

19:00–22:00      **Gala Dinner**

**Industrial control systems***Large Hall*

- 10:00 Pulse-width modulated control of magnetic levitation system via singular perturbation technique, *Valery D. Yurkevich*
- 10:20 Experimental results on sliding mode control of hoisting crane subject to state constraints, *A. Nowacka-Leverson, D. Pazderskiy, M. Michałeky and A. Bartoszewicz*
- 10:40 Fuzzy logic and genetic algorithm technique for non-linear system of overhead crane, *Yury N. Petrenko and Seyyed Enayatollah Alawi*
- 11:00 Adaptive control and one-line identification of sensorless permanent magnet DC motor,  
*Mona F. Moussa, Mostafa Saad and Yasser G. Dessouky*
- 11:20 **Coffee-break**
- 11:40 Development of a distributed elevator control system based on the microcontroller PIC 18F458, *S. Huseinbegovic, S. Kreso and O. Tanovic*
- 12:00 Sliding-mode dead-beat control of perishable inventory systems with positive lead-time and uncertain demand,  
*Przemysław Ignaciuk and Andrzej Bartoszewicz*

**Wireless communications II***Small Hall*

- 10:00 Monte-Carlo technique estimation of a probability of intermodulation interference in a cellular wireless communication network, *Nyah C. Temaneh*
- 10:20 Modeling VHF air-to-ground multipath propagation channel and analyzing channel characteristics and BER performance,  
*Mohammad Asif Zaman, Sayed Ashraf Mamun, Md. Gaffar, Md. Mushfiqul Alam and Md. Imran Momtaz*
- 10:40 Modified ATP for lossy links in mobile adhoc network,  
*Buddha Singh, Adwitiya Sinha and Silky Makker*
- 11:00 Performance analysis of the enhanced mesh MAC protocol of mobile WiMAX standard, *Alexander Markhasin and Vera Drozdova*
- 11:20 **Coffee-break**

- 11:40 Selection of effective routing protocol for real time video transmission over mobile ad-hoc networks,  
*M. Lalitha, M. Ramakrishnan and S. Shanmugavel*

## Antennas and transmission systems II

### Small Hall

- 12:00 Optimal power reduction on wireless OFDM receiver,  
*Mohd Shamian Zainal, Shingo Yoshizawa and Yoshikazu Miyanaga*
- 12:20 Memory reduction of IFFT using CIM (combined integer mapping) for OFDM transmitters, *Dong-Hyun Seo, In-Gul Jang, Jin-Gyun Chung and Chul-Dong Lee*
- 12:40 PAPR Reduction in OFDM & MC-CDMA system using nonlinear companding techniques, *R. Manjith, and S. C. Ramesh*

## Power electronics II

### Hall B

- 10:00 Carrier based modulation technique for three phase matrix converters – state of the art progress, *Narayanaswamy P. R. Iyer*
- 10:20 DSP/FPGA implementation of a phase locked loop for digital power electronics, *Y. Srinivasa Rao and Shivkumar Iyer*
- 10:40 Estimation of optimized power quality in micro controller based cascaded multilevel inverter, *P. Maruthu Pandi, N. Devarajan*
- 11:00 Single-phase PWM rectifier parameters optimized by using the intelligent method, *Farhad Jafari, Ali Dastfan, Reza Tahmasebi and Mustafa Rahideh*
- 11:20 **Coffee-break**
- 11:40 Tank gauging control system monitoring based on innovative DCS, *Amir Firoozshahi and Li Mengyang*
- 12:00 Improvement of dynamic response of SDM based PFC converter using digital controller, *Iman Salabeigi, Jafar Milimonfared, G. B. Gharehpetian, Mehdi Daryabak and Masoud Davari*

- 12:20 Multilevel shunt active filter based on sinusoidal subtraction methods under different load conditions,  
*K. Sebasthi Rani and K. Porkumaran*
- 12:40 Novel performance improvement of space vector pulse width based variable structure direct torque control for sensorless induction machine drives, *C. Bharatiraja, S. Jeevananthan and Pratik*

13:00–14:40 **Lunch**

## Antennas and transmission systems II

### *Small Hall*

- 14:40 Non-linearity between frequency bands and segmentations of meander antennas, *Apoorva Sharma and Azeemuddin Syed*
- 15:00 A dual-band microstrip-fed antenna for WLAN applications, *Ali Reza Hazeri and Farzad Azizkhani*

## Power electronics II

### *Hall B*

- 14:40 PFC preregulator controller with fast dynamic response and low input current THD, *M. Daryabak, J. Milimonfared, G. B. Gharehpetian and I. Salabeigi*
- 15:00 Novel C++ program for selecting FACTS devices for power flow studies, *G. P. Sai Pranith and T. Gowri Manohar*

## Plenary Session

### *Large Hall*

- 15:30 Closing of the conference, *Józef Modelski, IEEE Region 8 Director*
- 16:00 Social programs

The End