



# **TCSET'2008**

## **CONFERENCE PROGRAMME**

THE IX<sup>th</sup> International Conference

**“MODERN PROBLEMS OF RADIO  
ENGINEERING, TELECOMMUNICATIONS  
AND COMPUTER SCIENCE”**

**Lviv-Slavsko, Ukraine  
February 19- 23, 2008**

***Dear Colleagues!***

In this year we celebrate 16 years from the International Conference «Modern Problems of Radio Engineering, Telecommunications and Computer Science» **TCSET** foundation.

For today conference achieved high scientific and organizational level, there is a productive cooperation between International Scientific Institutions including IEEE. Thanks to the Conference activity the many fundamental and applied investigations in radioelectronics, telecommunications and computer engineering, specialists training and teaching processes improvement were developed.

Program committee selects over 260 papers which will be discussed at **TCSET-2008** conference. They cover problems of nets, signals and circuits mathematic modeling, describe approaches and means for information receiving, information and image processing in radio and communication nets, using and building of radio and communication devices, biomedical devices and technologies, discuss modern information technologies and problems in specialists training. In conference work will take part scientists and specialists from POLAND, FRANCE, SERBIA & MONTENEGRO, RUSSIA, UKRAINE.

Organization committee thanks to everybody who will share own experience and results of investigations, and wish them creative discussions, mutual understanding, nice rest and well humor.

**Sincerely Your,**

**Yuriy Bobalo Chief of Organizing Committee**

Rector , Lviv Polytechnic National University



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## CONFERENCE ORGANIZING COMMITTEE

### CHAIRMAN

Prof. Yuriy Bobalo, Rector , Lviv Polytechnic National University

### DEPUTY CO-CHAIRMANS

Prof. Volodymyr Pavlysh, first vice-rector, Lviv Polytechnic National University

Prof. Ivan Prudyus, Director of Institute of Telecommunications,  
Radioelectronics and Electronic Devices, Lviv Polytechnic National University

### CONFERENCE SECRETARY

Dr. Oxana Lazko, Assoc.Prof., Lviv Polytechnic National University,

email: [tcset2008@polynet.lviv.ua](mailto:tcset2008@polynet.lviv.ua)

### MEMBERS :

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Klymash M.	Assoc.Prof., Lviv Polytechnic National University
Kryshchuk V.	Prof., ZNTU, Zaporizhya, Ukraine
Lobur M.	Prof., Lviv Polytechnic National University
Loik V.	Director of Lviv Direction UKRTELECOM
Lukyanchuk .	Prof. , SevNTU, Sevastopol, Ukraine
Modelski J	Prof., Warsaw, Poland
Pravda V.	Prof., , NTU "KPI", Ukraine
Rozanski G.	Prof., Warsaw, Poland
Shokalo V.	Prof., KhNURE, Kharkiv
Smirnov V.	Prof., State Institute of info-communication technologies, Kyiv
Stachiv P.	Prof., Lviv Polytechnic National University
Vaskiv G.	Assoc.Prof., Lviv Polytechnic National University
Vikun A.	Deputy director, "KyivStar" GSM branch in Lviv
Yashchyshyn E.	Prof., Warsaw, Poland
Zarebski J.	Prof., Gdynia, Poland

**PROGRAMME COMMITTEE****HEAD**

Bogdan Mandziy, Prof., Lviv Polytechnic National University

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Osowski S., Prof., (Warsaw, Poland)  
Rusyn B., Prof., (Lviv, Ukraine)  
Shokalo V., Prof., (Kharkiv, Ukraine)  
Stachiv P., Prof., (Lviv, Ukraine)  
Sunduchkov ., Prof., (Kyiv, Ukraine)  
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Yanenko O., Prof., (Kyiv, Ukraine)  
Zelensky O., Prof., (Kharkiv, Ukraine)  
Zubkov A., Prof., (Lviv, Ukraine)

## CONFERENCE SECTIONS

<b>S1</b>	<b>Mathematical modeling in radioelectronics and telecommunications</b>
<b>S2</b>	<b>Antennas. Radio-electronic devices</b>
<b>S3</b>	<b>Information processing</b>
<b>S4</b>	<b>Infocommunication systems and nets</b>
<b>S5</b>	<b>Quality, reliability and diagnostics of electronic and telecommunication systems and devices</b>
<b>S6</b>	<b>Infocommunication systems dataware and software</b>
<b>S7</b>	<b>Economic and organization problems of training specialists in the field of radioelectronics, telecommunications and computer technology due to Bologna process</b>

## CONFERENCE TIMETABLE

<b>Tuesday February, 19</b>	<b>Wednesday February, 20</b>	<b>Thursday February,21</b>	<b>Friday February, 22</b>	<b>Saturday February, 23</b>
10.00-13.00 <b>Registration</b>	10.00-13.00 <b>S1, S3</b> Section Sessions			
15.00-19.00 Conference opening <b>Plenary Session</b>	15.00-19.00 <b>S2, S4</b> Section Sessions	<b>Excursion</b>	15.00-19.00 <b>S5, S6</b> Section Sessions	<b>Departure</b>
20.00-22.00 <b>Plenary Session</b>	20.00-22.00 <b>S7</b> Section Sessions		20.00-21.00 <b>Final Session</b>	

Paper presentation at the regular session – 10 min

Discussion, questions – 5 min

## PLENARY SESSION

Tuesday, February, 19

15.00 – 19.00

**CONFERENCE OPENING****Co-Chairs:**Prof., DSc **Bogdan Mandziy**, Lviv Polytechnic National UniversityProf., DSc **Adam Kawalec**, Military University of Technology

1.	<b>Scientific researches results of wired specialized digital information transmission systems creation (DITS)</b> Shokalo V. ., Tsopa O.I., Maslyi V.V. Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
2.	<b>Some Results of Radar Signal Processing in Time Microscale</b> Adam Kawalec, Andrzej Pieni  ny Military University of Technology, Warsaw, POLAND
3.	<b>Microwave Imaging Systems. Achievements and Improvement Prospects</b> Anatoliy Zubkov Lviv Radio Engineering Research Institute, Lviv, UKRAINE
4.	<b>Influence of Cooling Conditions on DC Characteristics of the Power MOS Transistor IRF840</b> Janusz Zar  bski, Krzysztof Górecki Gdynia Maritime University, Gdynia, POLAND
5.	<b>Optical Transport Systems: Efficiency Increasing and Stream Management Methods</b> Mykhailo Klymash <b>Lviv Polytechnic National University, Lviv, UKRAINE</b>
6.	<b>Superwide Band Low-Noise Induction Sensors in Magnetic Field Measurements</b> Vitalij Nichoga <sup>1</sup> , Eugeniusz Grudzi  ski <sup>2</sup> , Petro Dub <sup>1</sup> , Vira Pronenko <sup>3</sup> 1 - Physico-Mechanical Institute of the NASU, Lviv, UKRAINE 2 - Technical University of Wroclaw, Wroclaw, POLAND 3 - Lviv Centre of Institute of Space Research of the NASU and NSA, Lviv, Ukraine

**SECTION 1**  
**MATHEMATICAL MODELING IN RADIOELECTRONICS AND**  
**TELECOMMUNICATIONS**

**Wednesday, February 20**

**10.00 – 13.00**

**Co-Chairs:**

Prof., DSc **Petro Stakhiv**, Lviv Polytechnic National University  
 Prof., DSc **Sergiy Ubizskii**, Lviv Polytechnic National University

1.	<b>Comparison of Recurrent Methods of Parameter Estimation in Macromodeling Problems</b> V. Stepashko, S. Yefimenko International Research and Training Centre of Information Technologies and Systems of NAS and MES of Ukraine, Kyiv, UKRAINE
2.	<b>Tolerance Estimation Of Parameters Set Of Models Created On Experimental Data</b> Mykola Dyvak, Andriy Pukas, Olexandra Kozak Ternopil National Economic University, Ternopil, UKRAINE
3.	<b>Modeling Of Cognitive Processes For Bio-Technical Systems</b> Roman Pasichnyk, Andriy Melnyk Lviv Polytechnic National University, Lviv, UKRAINE
4.	<b>The Mathematical Model Of Rod Piezoceramic Deflector Of Laser Beam</b> Oleksandr Bogdan Research Institute "Applied Electronics", Kyiv, UKRAINE
5.	<b>The Fluxgate Transducer Wide-Band Response Detection Using Correlation Processing</b> Sergii Ubizskii, Lyubomyr. Pavlyk Lviv Polytechnic National University, Lviv, UKRAINE
6.	<b>Mathematical Model Of Transistor Equivalent Of Electrical Controlled Capacity</b> Alexandr Osadchuk, Kostyantun Koval, Andriy Semenov, Maxim Prutyla Vinnytsya National Technical University, Vinnytsya, UKRAINE
7.	<b>Calculation of Constants of Model ITU IEEE 812.16 under Condition of Equality of Path Loss to Real Attenuation</b> Oleksandr Yaschuk, Borys Shelkovnykov NTUU "KPI", Kyiv, UKRAINE
8.	<b>The Application Of Topological Methods During Symbol Analysis Of Linear Parametric Circles</b> Yuriy Shapovalov, Spartak Mankovskyy Lviv Polytechnic National University, Lviv, UKRAINE
9.	<b>Noises And Nonstationary Time Error In The Measuring Chanals</b> Vasiliy Kichak, Vadym Rudyk, Sergey Gonchar Vinnytsya National Technical University, Vinnytsya, UKRAINE
10.	<b>Prognostication of Conduct of the Dynamic Systems with the</b>

	<b>use of Autonomous Discrete Models</b> Petro Stakhiv, Bohdan Melnyk <sup>1</sup> , Jurij Kozak Lviv Polytechnic National University, Lviv, UKRAINE 1- University of Arts and Sciences in Kielce, Kielce, POLAND
11.	<b>Test a Hypothesis of a Polynomial Model Order in Design of an Experiment Tasks</b> Alexey Fedorov, Anatoly Omelchenko Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
12.	<b>Nice To Be A Chimera: A Hybrid Algorithm For The Longest Common Transposition-Invariant Subsequence Problem</b> Szymon Grabowski, Sebastian Deorowicz Technical University of Lodz, Lodz, POLAND
13.	<b>The Expert System of Search the Forecasting Method with Using of Neural Network in Volatility Conditions of Initial Data</b> Andrey Odeychuk, Olesya Morozova, Anastasiya Gud Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
14.	<b>Paralepiped-Plane Optimizing Algorithm For Finding The Trajectory Of Cutting Instrument In Full Perpendicular Processing Of Three-Dimensional Component Through The Information Obtained From The STL-File</b> Volodymyr Seheda Lviv Polytechnic National University, Lviv, UKRAINE
15.	<b>On Difference Approximation of Biharmonic Operator on a Regular Triangular Grid</b> Mariya Howykwycz, Roman Filc Lviv Polytechnic National University, Lviv, UKRAINE

**POSTER SECTION**

16.	<b>Genetic Algorithms Operators' Adjustings Optimumness Research</b> Valeriy Dubrovin, vgeniy Fedorchenko, Igor Zhylenko Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
17.	<b>Research Of Possibilities Of Indemnification Of Passive Hindrances By Single-Channel (Correlational) Compensator</b> Ivan Prudyus, Markiyan Sumyk Lviv Polytechnic National University, Lviv, UKRAINE
18.	<b>Flow Based Mathematical Models At Multipath Routing</b> Maryna Gogolieva, Oksana Yevsyeyeva Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
19.	<b>Developing Problem - Oriented Ontology for Bio-Technical Modeling</b> Roman Pasichnyk Ternopil National Economic University, Ternopil, UKRAINE
20.	<b>Type of Migrations of Individuals in Parallel Genetic Algorithms</b> M.Lobur, S. Tkatchenko, A. Kernytskyy, R. Kryvyy Lviv Polytechnic National University, Lviv, UKRAINE
21.	<b>The Dispute's Solution Problem in Multiagent Systems</b>

	Andrii Smoliarov Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
22.	<b>A design of processes of excitation and concentration of vibrations is in the transformers of acoustic energy</b> Valentin Abakumov, Kirill Trapezon National Technical University of Ukraine "Kyiv Polytechnic University", Kyiv, UKRAINE
23.	<b>Strategy Of Load Planning For Beowulf-Cluster</b> Tetiana Diachuk Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
24.	<b>Strength Examinations Of The Connecting Materials Of The Wing Skeletal Prosthesis</b> Marek Kuchta, Krzysztof Kwiatos Military University of Technology, Warsaw, POLAND
25.	<b>The Problem Of Grammar Choice For Verification Of Harmonisation Process In Tonal Harmony</b> Wojciech Zabierowski, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
26.	<b>Design Of Multilayer Interference Thin-Film Filters</b> I.Ya. Yaremchuk, V.M. Fitio, Ya.V. Bobitski Lviv Polytechnic National University, Lviv, UKRAINE
27.	<b>Definition of the Mechanical Stress Value in the IC Pin Leads</b> Volodymyr Pavlysh, Dmytro Dyachok Lviv Polytechnic National University, Lviv, UKRAINE
28.	<b>Identifying Of Condition Of The Corporative Ecological System (Ces)</b> T. V. Kozulia, N. V. Sharonova National Technical University "Kharkiv Polytechnic Institute", Kharkiv, UKRAINE
29.	<b>An Analysis and Modelling of the Residual Value of Hardware Product</b> Volodymyr Klymenko Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
30.	<b>Intellectual Control Systems Fuzzy Knowledgebase-Building Technique</b> Maksym Ternovoy National Technical University of Ukraine "Kyiv Polytechnic University", Kyiv, UKRAINE
31.	<b>The rapid algorithm of the files comparison with the hash functions usage</b> Taras Dyvak Ternopil National Economy University, Ternopil, UKRAINE
32.	<b>Prototyping Tool Development</b> L.S. Globa, T. Kot, V.Olenyuk National Technical University of Ukraine "Kyiv Polytechnic University", Kyiv, UKRAINE

33.	<b>Modelling of Resilient Deformation Influence on Cohesion of Film Surface Coatings</b> Myhaylo Matviyiv, Alina Stashko Lviv Polytechnic National University, Lviv, UKRAINE
34.	<b>An Algorithm for Minimization of Detrimental Outputs in Low-temperature Thermal-controlled Processes</b> Yuriy Pigovsky Ternopil National Economy University, Ternopil, UKRAINE
35.	<b>Approach To Mathematic Modeling Of Elimination Of Emergency Situations Aftermath</b> Sergiy Yukhymchuk, Pavlo Korzhyk Vinnytsya National Technical University, Vinnytsya, UKRAINE
36.	<b>Calculation Of Mass Of Dioxide Of Carbon In Cistern By Indirect Methods</b> Olha Hrishchenko Vinnytsya National Technical University, Vinnytsya, UKRAINE
37.	<b>Model Of Estimation Of Risk With Correction Of Error Of Prognosis Of Volotilnost</b> Boris Shamsha, Vitaly Ayvazov, Nick Kuklin Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
38.	<b>The Multi Objective Evolutionary Feature Selection</b> Sergey Subbotin, Andrey Oleynik Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
39.	<b>Ant Colony Optimization for Feature Selection Based on Operations with Crisp Sets</b> Sergey Subbotin, Alexey Oleynik Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
40.	<b>Liquid Crystal Analog Discrete Indicator</b> Ivan Lopatinsky, Zoja Dutchak, Galyna Pavlova, Larisa Rakobovchuk, Bogdan Yavorsky Lviv Polytechnic National University, Lviv, UKRAINE
41.	<b>Band Structure Calculation Of Wide Bandgap P-Type Semiconductor Material BaCuTeF</b> Andriy Zakutayev Oregon State University, USA
42.	<b>Analysis of Resilient Deformation Influence on Cohesion of Surface Coatings</b> Alina Stashko Lviv Polytechnic National University, Lviv, UKRAINE
43.	<b>Decision-Making In Risk-Controlling Of Company's Financial Activities</b> Valeriy Dubrovin, Valeriy Lyovkin Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
44.	<b>Detection Characteristics Computation of Nonstationarity Heart Rate Variability by Neyman - Pearson Criterion</b> Yury Leschyshyn, Olexander Semchyshyn, Vasyl Dozorsky

	Ternopil Ivan Pul'uj State Technical University, Ternopil, UKRAINE
45.	<b>Design of Cyclic Periodic Processes of Bakery Products Realization Based on the Non-Autonomous Interval Model</b> Mykola Dyvak, Petro Stakhiv <sup>1</sup> , Yevheniya Martsenyuk, Lyudmyla Honchar Ternopil National Economy University, Ternopil, UKRAINE 1 - Lviv Polytechnic National University, Lviv, UKRAINE
46.	<b>Stabilizing of integrated antennas-oscillators frequency</b> Vasyl Golynskyy, Volodymyr Storozh, Andriy Kuzyk, Oleg Kruk Lviv Polytechnic National University, Lviv, UKRAINE
47.	<b>The Goalkeepers Reaction Control By Using 3D Accelerometer</b> A. Fechan, Y. Okup, O. Sushynsky, O. Blavt, M. Shymchyshyn Lviv Polytechnic National University, Lviv, UKRAINE
48.	<b>The Optical Self-contained Generator Based On the Liquid-crystal Cell</b> Z. Mykytyuk, A. Fechan, V. Dmytrah, O. Yasynovska Lviv Polytechnic National University, Lviv, UKRAINE
49.	<b>Test set problem for multilevel systems</b> Sergiy Zelensky National Taras Shevchenko University of Kyiv
50.	<b>Experimental research of functional decomposition algorithm using the method of q-partition conjuncterms</b> Bohdan Rytsar, Adrian Shvaj Lviv Polytechnic National University, Lviv, UKRAINE
51.	<b>Research of penetration radiation photomedically LED actuator into biological cloths</b> Olexander Kozhuhar, Andriy Zazulyak Lviv Polytechnic National University, Lviv, UKRAINE

## SECTION 2 ANTENNAS. RADIO-ELECTRONIC DEVICES

Wednesday, February 20

15.00 – 19.00

### Co-Chairs:

Prof., DSc **Vitaliy Nichoga**, Lviv Polytechnic National University

Prof., DSc **Tadeusz D browski**, Military University of Technology

1.	<b>Diagnosing of human-technical systems in potential-effective specification</b> Tadeusz D browski, Lesław B dkowski, Krzysztof Fokow Military University of Technology, Warsaw, POLAND
2.	<b>Multilevel Integration of Radio and Optical Channels for the Earth Surface Monitoring</b> Anatoliy Zubkov <sup>1</sup> , Ivan Prudyus, Leonid Lazko, Sergiy Semenov Lviv Polytechnic National University, Lviv, UKRAINE

	1- Lviv Radio Engineering Research Institute, Lviv, UKRAINE
3.	<b>Functional Possibilities of Integrated SHF Antennas-Oscillators</b> Ivan Prudyus, Eugeniusz Grudzinski, Vasyl Golynskyy Lviv Polytechnic National University, Lviv, UKRAINE
4.	<b>Analysis and choice of methods of monitoring technical condition of the heating systems</b> Ivan Prudyus, Volodymyr Shkliarskiy, Gennadiy Turkinov, Volodymyr Storozh, Yaroslav Kril Lviv Polytechnic National University, Lviv, UKRAINE
5.	<b>Antenna Systems with Reconfigurable Aperture. Concept, Analysis and Investigation.</b> Yevhen Yashchyshyn Warsaw University of Technology, Warsaw, POLAND
6.	<b>Lossy Compression of Multichannel ECG Based on 2-D DCT and Pre-processing</b> Vladimir Lukin <sup>1</sup> , Mikhail Zriakhov <sup>1</sup> , Alexander A. Zelensky <sup>1</sup> , Karen Egiazarian <sup>2</sup> , Alpo Varri <sup>2</sup> 1-National Aerospace University, Kharkiv, UKRAINE 2- Tampere University of Technology, Tampere, Finland
7.	<b>Investigations of Usefulness of Average Models for Calculations Characteristics of the Boost Converter at the Steady State</b> Krzysztof Górecki, Janusz Zarębski, Rafał Zarębski Gdynia Maritime University, Gdynia, POLAND
8.	<b>Calculating Characteristics of the Flyback Converter with the Use of Averaged Models</b> Krzysztof Górecki, Janusz Zarębski Gdynia Maritime University, Gdynia, POLAND
9.	<b>Experimental Investigation of Former of SHF Short Pulses with Heightened Power</b> Grigoriy Lukyanchuk Sevastopol National Technical University, Sevastopol, UKRAINE
10.	<b>Silicon Power Schottky Diodes Model Implemented in SPICE</b> Jacek Dębrowski, Janusz Zarębski Gdynia Maritime University, Gdynia, POLAND
11.	<b>The adaptive filtering of mirror Reflections in the passive system with mode TDOA</b> Volodymyr Antonyuk Lviv Radio Engineering Research Institute, Lviv, UKRAINE
12.	<b>Combination of Analytical and Numerical Approaches for Determination of the Microstrip Structures Impedance Matrix</b> Mykhaylo Andriychuk <sup>1</sup> , Simon Hemour <sup>2</sup> 1- Institute of Applied Problems of Mechanics and Mathematics, NASU, Lviv, UKRAINE 2 - Institut National Polytechnique de Grenoble, Grenoble, FRANCE
13.	<b>Realizability Conditions of Digital Phase Shifters Based on the Symmetric Four-Pole Circuits</b>

	Valeriy Oborzhytskyy Lviv Polytechnic National University, Lviv, UKRAINE
14.	<b>Formation of sites with the lowered sensitivity a zone of revealing of the microwave sensors</b> Ivan Prudyus, Vasyl Golynskyy, Volodymyr Storozh Lviv Polytechnic National University, Lviv, UKRAINE
15.	<b>The New Method Of Electronic Scanning</b> Vladimir Paslyon, Pavel Stephanenko, Anna Khludneva Donetsk Technical University, Donetsk, Ukraine
16.	<b>Adjustable Output Voltage-Range Trapezoidal Waveform Generator with Harmonics-Reduction Functionality</b> Mariusz Jankowski Technical University of Lodz, Lodz, POLAND
17.	<b>Filters For Reduction Sidelobe Level Of A Correlation Function</b> V. Pravda, V. Bychkov National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, UKRAINE
18.	<b>Technical Parameters Of Microwave Surveillance Radar Array Input Device</b> A. Semenyuk Lviv Radio Engineering Research Institute, Lviv, UKRAINE
19.	<b>Features of MM-Wave Antenna Radom Design</b> Sergei Kashin Lviv Radio Engineering Research Institute, Lviv, UKRAINE

#### POSTER SECTION

20.	<b>The semi-conductor generator of a meter range for the slab laser power supply</b> Vladimir Shelyagin, Taras Nabok
21.	<b>Designing Of Asynchronous Induction Machines For Adjustable Speed Asynchronous Electric Drive Systems</b> V. Petrushin, N.Petrushina,B.Kalenik Odesa State Politechnic University, Odesa, UKRAINE
22.	<b>Research Of Existing Systems Of Radiomanagement Mobile Objects</b> I. Alexeyev, V. Voronin, Y. Matvienko Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
23.	<b>The electromagnetic converter for work in a constant and variable magnetic field</b> V. Miroshnikov, T.Pobeda, E.Kostyukova East Ukrainian National University, Lugansk, UKRAINE
24.	<b>Measurements of transient thermal impedance of MESFETs</b> Damian Bisewski, Janusz Zarbski Gdynia Maritime University, Gdynia, POLAND
25.	<b>Multichannel tensometric Si, Six-Ge1-x based system</b> A. Druzhinin, A. Vuitsyk, Yu. Khoverko Lviv Polytechnic National University, Lviv, UKRAINE

26.	<b>Caculation Algorithm for Scattering Matrix Coefficients of Coaxial Line/Waveguide Junction</b> Yosyp Zakharia, Oksana Kobylyanska Lviv Polytechnic National University, Lviv, UKRAINE
27.	<b>H10 Wave Diffraction in a Rectangular Waveguide with an Impedance Narrow Wall, Partially Filled with Dielectric</b> Sergiy Kutsak, Lyudmyla Logachova Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
28.	<b>Automation of measuring process of materials refractive indexes in the millimeter waves range by interferometric-turning method</b> Anatoliy Andrushchak, Oleg Syrotynskiy, Nazariy Andruschak Lviv Polytechnic National University, Lviv, UKRAINE
29.	<b>Flicker-noise as measure of reliability of radio electronic devices</b> Zenoviy Kolodiy Lviv Polytechnic National University, Lviv, UKRAINE
30.	<b>Adaptation of Antenna Array with Deviated Parameters and Failed Elements by Parallel Genetic Algorithms</b> Volodumur Krischuk, Bogdan Artyushenko Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
31.	<b>Research of possibility to use the flicker-noise for diagnostics of internal structure of radioelectronic elements</b> Petro Depko Lviv Polytechnic National University, Lviv, UKRAINE
32.	<b>Research of influencing of DC magnetic bias process of core of inductive elements of converters on the radiofrequency interferences of equipments</b> Alexandr Dovzhenko, Yulia Yanovskaya, Volodymyr Pilinsky, Volodymyr Shvaichenko National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, UKRAINE
33.	<b>Peculiarities of magnetic nano-composites based on perfect SiO<sub>2</sub> nano-spheres packing in SHF-range</b> Mikhail Samoylovich, Anatoliy Rinkevich, Alexey Belyanin Central Research Technological Institute «TECHNOMASH», Moscow, Russia
34.	<b>Surface Impedance Calculation Method for Microstrip Structures Modeling</b> Leonid Karpukov, Roman Korolkov, Sergey Romanenko Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE
35.	<b>Modelling LDO Voltage Regulator REG 104-5V</b> Krzysztof Górecki, Witold J. Stepowicz Gdynia Maritime University, Gdynia, POLAND
36.	<b>Measurement of the Microobject Velocity in the Microscope Frame Mode</b>

	Volodymyr Shkliarskyi, Yuriy Matiieshyn Lviv Polytechnic National University, Lviv, UKRAINE
37.	<b>Thermovision Camera with Discrete Reversal Scanning of PEMET Vidicon Target</b> Valentina Bozhenko, Petro Kondratov, Volodimir Shkljarskij Lviv Polytechnic National University, Lviv, UKRAINE
38.	<b>Errors of Measurement of Microobject Velocity in the Microscope Frame Mode</b> Yuriy Matiieshyn Lviv Polytechnic National University, Lviv, UKRAINE
39.	<b>Scanning Optical Microscope on Base CR with a Ultraviolet Luminescence of the Screen</b> Yuriy Balanjuk, Anatoliy Pedan, Ivan Prudyus, Volodymyr Shkliarskyi Lviv Polytechnic National University, Lviv, UKRAINE
40.	<b>Luminescent Scanning Optical Microscope with Lowered Doze Irradiation of Preparation</b> Bogdana Lubinecka, Anatoliy Pedan Lviv Polytechnic National University, Lviv, UKRAINE
41.	<b>Dual gate FET based active microwave filters</b> Nikolay Filinyuk, Andriy Shvedyuk, Lyudmila Lischinskaya, Igor Buliga Vinnitsya National Technical University Vinnitsya , UKRAINE
42.	<b>Telemetric Automated System Of Diagnostics Functional State Of Man</b> W. Bojko, A.Nelga, J. Reijderman Dniprodcerzinskij state technical university, Dneprodcerzinsk, UKRAINE
43.	<b>Synthesis of adaptive Wald's detectors on the basis of lattice filters</b> B.Averochkin, P.Baranov, E. Krotyukov Odessa National Polytechnic University, Odessa, UKRAINE
44.	<b>Digital robust control of multichannel systems</b> Tatyana Nikitina National Technical University "Kharkiv Polytechnic Institute", Kharkiv, UKRAINE
45.	<b>Design of Moore FSM with encoding of compatible microoperations fields</b> Alexander Barkalov, Larysa Titarenko, Alexander Barkalov, Jr. University of Zielona Góra, Zielona Góra, POLAND
46.	<b>Design of control unit with modified operational linear chains</b> Alexander A. Barkalov, Larysa Titarenko, Jacek Bieganowski University of Zielona Góra, Zielona Góra, POLAND
47.	<b>Transistor converters of direct-voltage with resonant contours</b> Anatoly Andreev Odessa National Academy of Communication named after A.S. Popov, Odessa, UKRAINE

48.	<b>3D passive TDOA system with short baseline</b> Volodymyr Antonyuk, Ivan Prudyus, Mykhailo Lobur Lviv Radio Engineering Research Institute, Lviv, UKRAINE
49.	<b>Fuzzy-system of clock synchronization at random changes of the phase of input action</b> Vladimir Gostev, Natalya unakh, Kamilla Storchak State University Information and Communication Technologies, Kyiv, UKRAINE
50.	<b>Hierarchical Genetic Algorithm of Test Generation for Digital Circuits</b> Yuriy Skobtsov, Vadim Skobtsov Donetsk Technical University, Donetsk, Ukraine
51.	<b>About Two-aperture Reflector Antenna Analysis Peculiarity</b> Yosyp Zakharia, Dmytro Mymrikov Lviv Polytechnic National University, Lviv, UKRAINE
52.	<b>Information model of the written-voice communication</b> Myron Nykolyshyn Lviv Polytechnic National University, Lviv, UKRAINE

**SECTION 3  
INFORMATION PROCESSING**

**Wednesday, February 20**

**10.00 – 13.00**

**Co-Chairs:**

Prof., DSc **Anatoliy Zubkov**, Lviv Radio Engineering Research Institute  
Prof., DSc **Janusz Zarbski**, Gdynia Maritime University

1.	<b>Time-frequency Analysis of the Non-stationary Multi-frequency Signals by Using Parametrical Short-time Bispectral Density Estimation</b> Pavel Molchanov, Alexander Totsky National Aerospace University, Kharkiv, UKRAINE
2.	<b>Image Contour Segmentation in the Space of Coefficients of Signal Semantic Wavelet Transform</b> Marina Polyakova, Victor Krylov Odesa National Polytechnic University, Odesa, UKRAINE
3.	<b>Analysis of the modulation instability model</b> E. Belkin, V. Kuklin Kharkiv State University, Kharkiv, UKRAINE
4.	<b>Estimation of expedience of application of the distributed calculations at manipulation of audiovisual information</b> Dmytro Titkov, Volodymyr Shvaichenko, Olena Shvaichenko National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, UKRAINE
5.	<b>Algorithms of Signals Processing in Radio Acoustic Systems</b>

	Vladimir Kartashov Kharkiv State University, Kharkiv, UKRAINE
6.	<b>Segmentation Data Exploration Methods In Modern Real-time Data Warehouse</b> Jakub Chłapi ski, Marek Kami ski, Bartosz Sakowicz Technical University of Lodz, Lodz, Poland
7.	<b>Clustering of visual pattern keys by cascading decomposition</b> Roman Melnyk, Ruslan Tushnytskyy Lviv Polytechnic National University, Lviv, UKRAINE
8.	<b>Noise-Robust Data Fusion Based on Local Correlation</b> Serhiy Semenov Lviv Polytechnic National University, Lviv, UKRAINE
9.	<b>Image database retrieval using SQL/MM Still Image function implementation</b> Marta Chodyka, Volodymyr Mosorov Technical University of Lodz, Lodz, Poland
10.	<b>Knowledge-based Signal Processing for Radar Identification</b> Jan Matuszewski, Adam Kawalec Military University of Technology, Warsaw, Poland
11.	<b>Intrapulse Analysis of Radar Signal by the Use of Hough Transform</b> Andrzej Pieni ny Military University of Technology, Warsaw, Poland
12.	<b>Gamma Tomography with Limited Number of Gamma Beams</b> Volodymyr Mosorov, Dominik Sankowski, Sławomir Lewandowski Technical University of Lodz, Lodz, Poland
13.	<b>Induced Interference Modelling</b> V. Kuklin, A. Petrenko Kharkiv State University, Kharkiv, UKRAINE
14.	<b>Optimization of Moore FSM on System-on-Chip using PAL technology</b> Alexander Barkalov, Larysa Titarenko, Sławomir Chmielewski University of Zielona Góra, Zielona Góra, POLAND
15.	<b>Some Features of Signal Model for Fire Reconnaissance Radar</b> Tymchuk Volodymyr Lviv Military Institute, Lviv Polytechnic National University, Lviv, UKRAINE
16.	<b>Receiving of information of remote sensing of Earth from low-orbital space vehicles</b> M. Palamar Ternopil State Technical University, Ternopil, Ukraine
17.	<b>Dynamic Coding of Transforms of the Images in Two-Level Polyadic Space</b> Vladimir Barannik, Irina Hahanova, Natalya Kulbakova Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
18.	<b>Face Detection Using Haar-like Features Cascade and</b>

	<b>Convolutional Neural Network</b> Ihor Paliy Ternopil National Economic University, Ternopil, UKRAINE
<b>POSTER SECTION</b>	
19.	<b>Application of theory of stationary stochastic process for modeling of chemiluminescent signal</b> Andriy Lyapandra Ternopil National Economy University, Ternopil, Ukraine
20.	<b>Application Of Wavelet-Transformation To The Analysis Of Detection Signals Of Railway Way</b> Victor Ivanchuk Lviv Polytechnic National University, Lviv, UKRAINE
21.	<b>Random Sequences Generation Based On Coding At Contiguous Classes</b> Viktor Horitsky <sup>1</sup> , Olexander Snezhok <sup>2</sup> 1 - Ukrainian institute for designing communications facilities and installations "Diprozviazok", Kyiv, Ukraine 2 - National technical University of Ukraine Kyiv Polytechnic Institute, Kyiv, Ukraine
22.	<b>Study of Radiation of Radial Slot</b> Grigoriy Khlopov, Oleg Vojtovich Usikov Institute for Radiophysics and Electronics, Kharkiv, UKRAINE
23.	<b>Sparse antenna array geometry synthesis for the image formation purposes</b> Ivan Prudyus, Leonid Lazko Lviv Polytechnic National University, Lviv, UKRAINE
24.	<b>The energetic properties of the I-UWB signals</b> Sergii Bunin, Dmytro Valikov Institute of Telecommunication systems, Kyiv, UKRAINE
25.	<b>Ultrawideband radar detection of soundings signals using wavelet-transform</b> Ivan Tyshyk Lviv Polytechnic National University, Lviv, UKRAINE
26.	<b>Deconvolution by criteria of the form of impulse response characteristic at processing of image in natural coordinates</b> Sergiy Natalenko National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, UKRAINE
27.	<b>SQL/MM Still Image Methods for image processing</b> Marta Chodyka, Volodymyr Mosorov Technical University of Lodz, Lodz, Poland
28.	<b>Visual Pattern Structure Investigation By Clustering Package</b> Roman Melnyk, Yuriy Roman Lviv Polytechnic National University, Lviv, UKRAINE
29.	<b>Method of Analysis of Irregularly Spaced 3D Point Set</b> Yarema Varetskyy

	Karpenko Phisico-Mechanical Institute of National Academy of Science of Ukraine, Lviv, UKRAINE
30.	<b>Application Of Wawelet-Transformation In To The System Of Speech Recognition</b> Bohdan Rusyn, Andriy Chorniy Lviv Polytechnic National University, Lviv, UKRAINE
31.	<b>Trajectory Measuring Data Processing, Which Have Spatial And Time Redundancy</b> Vladimir Paslyon, Maxim Mihailov Donetsk Technical University, Donetsk, UKRAINE
32.	<b>A Dense stereo matching by iterated dynamic programming with using Gabor filters</b> Yuri Lysak, Oleg Kapshiy Karpenko Phisico-Mechanical Institute of National Academy of Science of Ukraine, Lviv, UKRAINE
33.	<b>The estimation of rotation and shift between images with the logarithmic-energy form of Radon transform</b> M. Kobasyar, B. Rusyn Karpenko Phisico-Mechanical Institute of National Academy of Science of Ukraine, Lviv, UKRAINE
34.	<b>Combinatorial approach to information class coverage estimation influence on the recognition rate</b> Vitaliy Tayanov Karpenko Phisico-Mechanical Institute of National Academy of Science of Ukraine, Lviv, UKRAINE
35.	<b>Methods of 3-D Surface Reconstruction for Definition Geometrical Characteristics of Pittings</b> A. Pokhmurskyy, B. Rusyn Karpenko Phisico-Mechanical Institute of National Academy of Science of Ukraine, Lviv, UKRAINE
36.	<b>Surface Feature Extraction Based On Shape And Texture Analysis</b> O. Lutsyk, Yu. Obukh, B. Rusyn Karpenko Phisico-Mechanical Institute of National Academy of Science of Ukraine, Lviv, UKRAINE
37.	<b>Probable Methods of Complex Images Formation</b> Valentina Bozhenko, Petro Kondratov Lviv Polytechnic National University, Lviv, UKRAINE
38.	<b>Detection of 4-Positional Phase Shift Signal at Low Signal to Noise Ratio</b> Andriy Bondarev, Bohdan Mandziy Lviv Polytechnic National University, Lviv, UKRAINE
39.	<b>Research Of Influencing Of Areas Of Frenel At The Different Heights Of Aerials</b> Leonid Ozirkovskyy, Mariya Pelishok, Volodymyr Pelishok Lviv Polytechnic National University, Lviv, UKRAINE

40.	<p><b>Accuracy Improvement of the Wigner Distribution Estimate in non-Gaussian Noise Environment by Means of Clipping Technique Application</b></p> <p>A. Roenko, I.Djurovi<sup>1</sup>, V. Lukin, A. Zelensky National Aerospace University, Kharkiv, UKRAINE 1-University of Montenegro, MONTENEGRO</p>
41.	<p><b>Secondary signal processing systems for SiGe-based thermal sensors</b></p> <p>Anatoly Druzhinin, Ihor Ostrovskii, Iurii Kogut Lviv Polytechnic National University, Lviv, UKRAINE</p>
42.	<p><b>Unsupervised two-color ELISPOT image segmentation based on k-means clustering</b></p> <p>Wojciech Bieniecki, Michał Krupiński, Szymon Grabowski, Katarzyna Kocińska-Kasprzak, Dominika Drulis-Fajdasz, Oktawia Mazanowska, Marian Klinger Technical University of Lodz, Lodz, Poland</p>
43.	<p><b>Taking into Consideration the Process of Electronic Beam and Potential Relief Interaction in Television Systems of Image Processing</b></p> <p>Valentin Abakumov, Olena Lomakina National Technical University of Ukraine “Kyiv Polytechnic Institute”, Kyiv, UKRAINE</p>
44.	<p><b>Method of the 3-D Image Processing</b></p> <p>Vladimir Barannik, Sergey Karpenko Kharkov University of Aircraft of the name of Ivan Kozheduba,</p>
45.	<p><b>Technology of the Data Processing on the Basis of Spectral-Frequency Transformation of Multiadical Presentation of Images</b></p> <p>Vladimir Barannik, Sergey Sidchenko Kharkov University of Aircraft of the name of Ivan Kozheduba,</p>
46.	<p><b>Image Compression Method based on Transformative Encoding</b></p> <p>Alexander Gorobets, Maryna Kaminska, Irina Hahanova Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE</p>

**SECTION 4**  
**INFOCOMMUNICATION SYSTEMS AND NETS**

**Wednesday, February 20**

**15.00 – 19.00**

**Co-Chairs:**

Prof., DSc **Bogdan Rusyn**, Lviv Polytechnic National University

Prof., DSc **Vladimir Lukin**, *National Aerospace University*

1.	<p><b>Modeling of Packets Loss in VoIP Networks and Measurement of Speech Quality</b> Olexander Tymchenko, Maxim Zayarnyuk Lviv Polytechnic National University, Lviv, UKRAINE</p>
2.	<p><b>The variant of quality increasing of video information transmission via WIMAX fixed connection radio channel</b> O. Strelnitskiy, O. Tsopa, O.Tsopa, V. Shokalo Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE</p>
3.	<p><b>Polychanell monitoring device of the telecommunication systems' synchroinformation</b> Valeriy Koval', Bogdan Kostik, Olga Kravec, Igor Shklyarevskiy, Oksana Nechyporuk Odessa National Polytechnic University, Odessa, UKRAINE</p>
4.	<p><b>New computer aided design of most efficient electro- and acousto-optic cells as main component for modern fiber-optic infocommunication systems</b> Anatoliy Andrushchak, Bohdan Mytsyk<sup>1</sup>, Ivan Solskii<sup>2</sup>, Mykola Kaidan, Taras Voronyak<sup>1</sup>, Nataliya Demyanyshyn<sup>1</sup>, Oleg Yurkevych Lviv Polytechnic National University, Lviv, UKRAINE 1- Karpenko Phisico-Mechanical Institute of National Academy of Science of Ukraine, Lviv, UKRAINE</p>
5.	<p><b>Digital Signature Protocol for corporate network</b> Anna Nelasa, Victor Dolgov, Anatolij Pogorily Zaporizhzhia National Technical University, Zaporizhzhia, UKRAINE</p>
6.	<p><b>Quasioptimal Algorithm of Carrier Recovery in Coherent Receiver of M-ary Alphabets APK-Signals without PLL</b> Vitaliy Balashov, Leonid Lyakhovetsky, Victor Panteleev Odesa Research Institute of Communication, Odesa, UKRAINE</p>
7.	<p><b>Comparison of ASP.NET and Apache Struts Technologies Based on Internet Library Application</b> Lukasz Ciechanowski, Bartosz Sakowicz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND</p>
8.	<p><b>Multiservice Telecommunication Systems design with network's incoming self-similarity flow</b> Ageyev Dmytro, Evlash Dmytro Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE</p>
9.	<p><b>Advertising Service Based on Spring Framework</b> Marcin Mela, Bartosz Sakowicz, Jakub Chlapinski Technical University of Lodz, Lodz, POLAND</p>

10.	<b>Optical Power Transmission Coefficient in Photonic-Crystal Fiber Connection</b> Alexander Filipenko, Igor Nevludov, Oksana Sychova Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
11.	<b>Multicriteria optimization of projects solutions using performance characteristics method when planning mobile communication networks</b> Valeriy Bezruk, Daria hebotariova Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
12.	<b>Control System of Mobile Ad-hoc Networks</b> Anatoliy Minochkin, Valeriy Romanyuk Military Institute of Telecommunications and Information Technology, Kyiv, UKRAINE
13.	<b>The analysis of time signals jitter influence on the telecommunication systems work quality</b> Gennadiy Bortnik, Mikola Vasylkivskyj, Mihailo Minov Vinnitsya National Technical University Vinnitsya , UKRAINE
14.	<b>Thermovacuum deposition of conductive polymers thin films for telecommunication application</b> Zenon Hotra, Pavlo Stakhira, Vladyslav Cherpak, Volodymyr Chegel, Iryna Kremer, Dmytro Volynyuk Lviv Polytechnic National University, Lviv, UKRAINE

#### POSTER SECTION

15.	<b>Failover and Load Sharing in SIP-based IP telephony</b> Ievgeniia Kuzminykh Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
16.	<b>Communications capabilities of the DS80C400 MAXIM/Dallas microcontroller as a server in the LAN environment</b> Igor Kurytnik , Bohdan Borowik , Wolodymyr Karpinsky <sup>1</sup> Technical Universities of Bielsko-Biala, Bielsko-Biala, POLAND 1 Ternopil National Economic University, Ternopil, UKRAINE
17.	<b>Concept of the strategic decision-making support system at the commercial enterprise using the OLAP technology</b> Valentyna Moskalenko, Volodymyr Moskalenko National Technical University "Kharkiv Polytechnic Institute", Kharkiv, UKRAINE
18.	<b>Investigation Of Methodologies Of Systematic Design Of Informative-Communicative Systems</b> Pavlo Maslyanko National Technical University of Ukraine " Kyiv Polytechnic Institute", Kyiv ,UKRAINE
19.	<b>An A priory Routing Mechanisms Application in Transport Informational Networks</b> Mykhailo Klymash, Ivan Demydov

	Lviv Polytechnic National University, Lviv, UKRAINE
20.	<b>Multiparametric Multipath Routing in Mobile Ad Hoc Networks Using Fuzzy Logic</b> Oleg Sova Military Institute of Telecommunication and Information Technology, Kyiv, UKRAINE
21.	<b>Technique of Operating Time Enumeration in The Agile-Projects</b> Galina Tabunshchik, Sergey Malyuk Zaporizhzhе National Technical University, Zaporizhzhе, UKRAINE
22.	<b>The Method of Software-Hardware Implementation of Serial Interfaces</b> Ihor Maykiv Ternopil National Economic University, Ternopil, UKRAINE
23.	<b>Imitative modeling of telecommunication control processes in automatic telephone exchanges</b> Yaroslav Shyika Lviv Polytechnic National University, Lviv, UKRAINE
24.	<b>Ways of 2G/2,5G networks modernization to the 3G networks</b> Vitaly Burjak, Volodymyr Shvaichenko National Technical University of Ukraine “ Kyiv Polytechnic Institute”, Kyiv ,UKRAINE
25.	<b>Angler’s web service built on Java Enterprise Edition platform</b> Marcin W sik, Bartosz Sakowicz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
26.	<b>Selected Aspects of Information Exchange Between Database and Operating System</b> Bartłomiej wiercz, Bartosz Sakowicz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
27.	<b>Package Delivery Company Web-Based Supporting System with Usage of Java EE Technology.</b> Bartosz Sakowicz, Piotr Młoczek, Przemysław Nowak, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
28.	<b>Website for Providing Statistic Services Based on Java EE Platform</b> Bartosz Sakowicz, Adam Bednarek, Marek Kaminski, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
29.	<b>Job Recruitment System Based on Java Enterprise Edition 5 Platform</b> Tomasz Milczarek, Bartosz Sakowicz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND

30.	<b>CRM system with behavioral scenarios based on Spring framework</b> Szymon Gradka, Bartosz Sakowicz, Piotr Mazur, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
31.	<b>Redundant Monitoring and Control System for Large Server Farms</b> Piotr Mazur, Marek Kamiński, Bartosz Sakowicz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
32.	<b>Parallel computing process algorithm</b> L.S. Globa, K. Iermakova, T. Kot National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, UKRAINE
33.	<b>Hotel Reservation System Based on the JavaServer Faces Technology</b> Karolina Czekalska, Bartosz Sakowicz, Jan Murlewski, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
34.	<b>The model of a small corporate network, protected from insiders</b> Anton Govorov, Gennady Nikulischev, Yuriy Grosfeld Zaporizhzhya National Technical University, Zaporizhzhya, UKRAINE
35.	<b>Particularities of the Amplitude Shift Keying Signal Spectrum Calculation</b> Ivan Gorbatyy Lviv Polytechnic National University, Lviv, UKRAINE
36.	<b>The mathematical providing of procedure of relative-level knowledge evaluation for computer testing</b> Ksenia Chaban Lviv Polytechnic National University, Lviv, UKRAINE
37.	<b>Processing of signals by wavelet and Fourier transformations</b> Vasiliy Kychak, Olexandr Stalchenko, Sergiy Bortnyk Vinnitsya National Technical University Vinnitsya, UKRAINE
38.	<b>Approaches to Optical Transport Systems Efficiency Increasing</b> Mykhailo Klymash Lviv Polytechnic National University, Lviv, UKRAINE
39.	<b>Analysis of QoS evaluation methods for VoIP applications</b> Olexander Tymchenko, Roman Kolodij Lviv Polytechnic National University, Lviv, UKRAINE
40.	<b>Design Of Model Of Optical Circles Of Telecommunications Network</b> Leonid Ozirkovsky, Oleksandr Mulyak, Mykhaylo Zmysnyi

	Lviv Polytechnic National University, Lviv, UKRAINE
41.	<b>IP Multimedia Subsystem and its protocols: a step to convergence</b> Ewa Gałczy ska, Wojciech Zabierowski, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
42.	<b>Fiber-optic sensors based on conductive polymers</b> Vladyslav Cherpak, Iryna Kremer, Zenoviy Shandra, Myhaylo Hladun, Andriy Lopatynskyy, Olga Lopatynska Lviv Polytechnic National University, Lviv, UKRAINE
43.	<b>The Modeling of the Limitation Factors Influence onto the Optical Transport Systems</b> Olexin M.I., Chernykhivsky E.M Lviv Polytechnic National University, Lviv, UKRAINE
44.	<b>Research in to Data Transmission Rate in Wi-Fi Networks</b> Bogdan Gumenyuk, Grygoriy Vaskiv, Volodymyr Yankevych Lviv Polytechnic National University, Lviv, UKRAINE
45.	<b>Network coexistence and flaws while occupying neighbouring channels under 802.11g standard</b> Volodymyr Yankevych Lviv Polytechnic National University, Lviv, UKRAINE

## SECTION 5

### QUALITY, RELIABILITY AND DIAGNOSTICS OF ELECTRONIC AND TELECOMMUNICATION SYSTEMS AND DEVICES

Friday, February 22

15.00 – 18.30

#### Co-Chairs:

Prof., DSc **Leonid Nedostup**, Lviv Polytechnic National University

Prof., DSc **Volodymyr Kryshchuk**, Zaporizhzhya National Technical University

1.	<b>Diagnostics of surge effects for gas-turbine engine by the modified S-discriminant's algorithm and wavelet-analysis</b> Valeriy Dubrovin, Tanya Keeprich, Mikhail Lyusin Zaporizhzhya National Technical University, Zaporizhzhya, UKRAINE
2.	<b>Products Parametric Reliability Estimation and Insurance on Base of Individual Prediction</b> Yuriy Bobalo, Leonid Nedostup, Myroslav Kiselychnyk, Oxana Lazko Lviv Polytechnic National University, Lviv, UKRAINE
3.	<b>Supercapacitor Modeling and Testing for Hybrid Vehicle</b> Oleg Shynkaruk, Valeriy Martynyuk Khmelnyskiy National University, Khmelnytskiy, UKRAINE
4.	<b>The Logical Model of Product Assembly Technological Process Design</b> Igor Nevlyudov, Olexander Tsymbal, Swetlana Milyutina Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE

5.	<b>The Evaluation of Rational Stocks of Components for Electronic System</b> Viktor Stupak Mykolas Romeris University, Kaunas, LITHUANIA
6.	<b>Software for Modeling, Analysis and Optimization of Electronic Devices Process Improvement</b> Yuriy Bobalo, Leonid Nedostup, Oleg Nadobko, Myroslav Kiselychnyk, Oxana Lazko Lviv Polytechnic National University, Lviv, UKRAINE
7.	<b>Development Of An Interpolation Method For Complicated Geometric Surfaces In Problems Of An Automated Designing</b> Igor Nevlyudov, Stanislav Velykodniy Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
8.	<b>Stochastic synthesis of the measuring systems</b> Bojko W.I., Solodenko . . ., Yytso, Dron S.A. Dniprodcerzinskij state technical university, Dneprodcerzinsk, UKRAINE
9.	<b>Tolerance Assignment by Mapping Method</b> Galina Shilo, Daria Kovalenko, Mykola Gaponenko Zaporizhzhya National Technical University, Zaporizhzhya, UKRAINE
10.	<b>Analysis of Bifurcational Properties of the Mechanism RED</b> O.V. Lemeshko, O.V. Starkova, .V. Merkulov Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
11.	<b>Electronic and Telecommunication Devices Quality Analysis Methods</b> Oxana Lazko Lviv Polytechnic National University, Lviv, UKRAINE
12.	<b>Research of Strategies of Maintenance of Fault-Tolerant System with Majority Structure And Sliding Redundancy of its Modules</b> Bohdan Mandziy, Bohdan Volochiy, Leonid Ozirkovskyy Lviv Polytechnic National University, Lviv, UKRAINE
13.	<b>The Estimation Of Built-In Devices Measurement Error Influence On The Authenticity Of Microwave Units Parameters Monitoring</b> Yuriy Gimpilevich Sevastopol National Technical University, Sevastopol, UKRAINE
14.	<b>Mathematical Maintenance Of Automation Of Development And Check Of The Programs Of Microcontrollers</b> Volodimir Krischuk, Oleksandr Maly Zaporizhzhya National Technical University, Zaporizhzhya, UKRAINE
<b>POSTER SECTION</b>	
15.	<b>Statistical Methods of Missed Data Restoration and Estimation</b> Yuriy Bobalo, Oxana Lazko Lviv Polytechnic National University, Lviv, UKRAINE

16.	<b>Mathematical Models of Electronic Devices Reliability</b> Oxana Lazko Lviv Polytechnic National University, Lviv, UKRAINE
17.	<b>Genetic Algorithms Application for Parametric Synthesis Optimization</b> Yuriy Bobalo, Oxana Lazko Lviv Polytechnic National University, Lviv, UKRAINE
18.	<b>Adequacy of Distribution Models based on Orthogonal Polynomials</b> Oxana Lazko Lviv Polytechnic National University, Lviv, UKRAINE
19.	<b>Effectiveness Increase Of Ergatic Control Systems Of Objects With High Degree Of Inertia</b> Anatoliy Andreev, Volodymyr Lvov Odesa National Academy of Communication named after A.S. Popov, Odesa, UKRAINE
20.	<b>Photomasks Diagnostic In The Automated Optical Inspection System</b> Viktor Krylov, Svetlana Antoshchuk, Galina Shcherbakova Odesa National Polytechnic University, Odesa, UKRAINE
21.	<b>Investment Decision Support System</b> Valentyna Moskalenko, Tetyana Zakharova National Technical University "Kharkiv Polytechnic Institute", Kharkiv, UKRAINE
22.	<b>The research of business modeling technologies for informative-communicative systems design</b> P. Maslyanko, O. Maystrenko National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, UKRAINE
23.	<b>Research Of The Indexes Of Reliability Of Telecommunications System With Including Of Control Means, Diagnostics And Maintenance Works</b> Leonid Ozirkovskyy, Igor Kulyk Lviv Polytechnic National University, Lviv, UKRAINE
24.	<b>Thermodynamic Model for Process of Expense Resource Electronic Devices</b> Victoria Nevlyudova Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
25.	<b>Optimization of mass and size of heat sinks with finned surfaces</b> Nikolay Gaponenko, Eugeny Ogrenich Zaporizhzhya National Technical University, Zaporizhzhya, UKRAINE

**SECTION 6**  
**INFOCOMMUNICATION SYSTEMS DATAWARE AND SOFTWARE**

**Friday, February 22**

**15.00 – 18.30**

**Co-Chairs:**

Prof., DSc **Mychailo Klymash** , Lviv Polytechnic National University  
Prof., DSc **Volodymyr Chachanov**, Kharkiv National University of Radioelectronics

1.	<b>The research and analysis of technologies and methods of portal architecture</b> P Maslyanko., K. Stokoz National Technical University of Ukraine “Kyiv Polytechnic University”, Kyiv, UKRAINE
2.	<b>The research of the informative resources and instruments of their production</b> Pavlo Lissov National Technical University of Ukraine “Kyiv Polytechnic University”, Kyiv, UKRAINE
3.	<b>Sub-atomic field processing for improved web log compression</b> Sebastian Deorowicz, Szymon Grabowski Technical University of Lodz, Lodz, POLAND
4.	<b>Data Mining Techniques for a Functional Verification of SoC</b> Alexander Adamov, Roman Hwang, Andrey Gavrushenko Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
5.	<b>Technologies for Hardware Simulation and Verification</b> Vladimir Hahanov, Anna Hahanova, Volodymyr Obrizan, Konstantin Zaharov Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
6.	<b>Application of JEE 5 technologies for a system to support dental clinic management</b> Anna Niziałek, Wojciech Zabierowski, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
7.	<b>Classification Data Exploration Methods In Modern Real-time Data Warehouse</b> Jakub Chłapiński, Piotr Mazur, Jan Murlewski, Marek Kamiński, Bartosz Sakowicz Technical University of Lodz, Lodz, POLAND
8.	<b>Inversion of masked data in GF(2<sup>N</sup>)</b> Lesya Korkishko Ternopil National Economic University, Ternopil, UKRAINE
9.	<b>Universal Database Analysis Repository Model for Use in Near Real-Time Database Warehouse Environment</b> Piotr Mazur, Jan Murlewski, Marek Kamiński, Bartosz Sakowicz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND

10.	<b>Modelling of Data Coding-Decoding Algorithms with the Use of ANSI II Code Table of Symbols</b> Natalia Dorosh, Halina Kuchmiy, Vitalij Grohola Lviv Polytechnic National University, Lviv, UKRAINE
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**POSTER SECTION**

11.	<b>Building Computer System for Musical School with CSM Plone</b> Krzysztof Gajdka, Wojciech Zabierowski, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
12.	<b>An optimal distribution of tasks in parallel computing system</b> Mary Yurich Zaporizhzhya National Technical University, Zaporizhzhya, UKRAINE
13.	<b>Building Winbase Application Using Windows Forms 2.0 And C#.Net</b> A. Płatek, W. Zabierowski, A. Napieralski Technical University of Lodz, Lodz, POLAND
14.	<b>Java Language Interactive Course</b> M.Rozwandowicz, W. Zabierowski, A. Napieralski Technical University of Lodz, Lodz, POLAND
15.	<b>Presentation Of Improvements For PHP Programmers, Based On Symfony Framework. Creation Of Example Portal And Description Of Used Technology.</b> J. Jarmołowicz, W. Zabierowski, A. Napieralski Technical University of Lodz, Lodz, POLAND
16.	<b>Selected Applications Of Ip Protocol In Mobile Networks By Means Of Network Programming In J2me</b> Przemysław Gładysz, Wojciech Zabierowski, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
17.	<b>Utilization Of Web Technology On The Example Of Portal Starosty District In Plock.</b> A. Kosi ski, W. Zabierowski, A. Napieralski Technical University of Lodz, Lodz, POLAND
18.	<b>Design consideration for incremental data refresh in real time data warehouses.</b> Jan Murlewski, Przemysław Nowak, Marek Kami ski, Bartosz Sakowicz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
19.	<b>Implementation of a web hosting service based on J2EE technology.</b> Marcin liwi ski, Bartosz Sakowicz, Bartłomiej wiercz, Andrzej Napieralski Technical University of Lodz, Lodz, POLAND
20.	<b>Method of response time optimization in LANs based on active experiment planning</b> Anna Babich, Aleksey Sushanov, Sergey Miroshnichenko

	Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
21.	<b>System of Synthesis and Verification of Hardware Models-Formulas for Series Summation in RKHS</b> Chumachenko S.V., Melnikova . Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
22.	<b>Overview of Object-Oriented Approach to HDL-Testbench Construction for System-on-Chips</b> Vladimir Hahanov, Dmitriy Melnik, Oleg Zaharchenko, Sergey Zaychenko Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
23.	<b>Boolean Function Minimization Based on Intel Architecture</b> Sergey Mikhtonyuk, Maksim Davydov, Eugene Kuznetsov, Alexander Parfentiy Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
24.	<b>Language translation module for instant messaging systems</b> Andrew Rutkas Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
25.	<b>Malicious Code Testing in Executable Files</b> Aleksandr Saprykin, Vitaly Kiktenko, Sergey Galagan, Artem Kunitsky Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
26.	<b>Fault Diagnosis and Repair of SoC Memory</b> Eugenia Litvinova , Karina Mostovaya, Karina Krasnoyarujskaya Kharkiv National University of Radioelectronics, Kharkiv, UKRAINE
27.	<b>Gradient Method for Autonomous Robot Navigation</b> Oleh Adamiv, Anatoly Sachenko, Viktor Kapura Ternopil National Economic University, Ternopi, UKRAINE

**SECTION 7**  
**ECONOMIC AND ORGANIZATION PROBLEMS OF TRAINING SPECIALISTS IN  
 THE FIELD OF RADIOELECTRONICS, TELECOMMUNICATIONS AND  
 COMPUTER TECHNOLOGY DUE TO BOLOGNA PROCESS**

Wednesday , February 20

20.00 – 22.00

Chair:

Assoc. Prof., PhD **Galyna Kopets**, Lviv Polytechnic National University

1.	<p><b>Training of Radio Engineering Professionals In The Context of Bologna Declaration</b>          Volodymyr Pravda, Volodymyr Smyrnov, Viktor Dmitruk, Stanislav Dyachenko          National Technical University of Ukraine “Kyiv Polytechnic University”, Kyiv, UKRAINE</p>
2.	<p><b>A General Modular Construction of Educational Disciplines for Preparation of Bachelors in «Telecommunication» Discipline</b>          Michael Ilchenko, Sergii Bunin, Sergii Kravchuk          National Technical University of Ukraine “Kyiv Polytechnic University”, Kyiv, UKRAINE</p>
3.	<p><b>The Results of Introduction of Students Individual Curriculum Into Educational Process</b>          Alexander Lukyanchuk, Igor Vetrov          Sevastopol National Technical University, Sevastopol, UKRAINE</p>
4.	<p><b>Aspects of Research Paper Design for Graduate Students in Radioelectronics and Computer Science</b>          Galyna Kopets, Vasyl Golynskyy, Igor Grybyk          Lviv Polytechnic National University, Lviv, UKRAINE</p>
5.	<p><b>Organization of integrated information environment for collaboration of university staff and students</b>          Nikolay Alekseyev, Olena Shtogrina          National Technical University of Ukraine “Kyiv Polytechnic University”, Kyiv, UKRAINE</p>
6.	<p><b>UGrid- National Grid infrastructure for scientific research and education</b>          Anatoliy Petrenko          National Technical University of Ukraine “Kyiv Polytechnic University”, Kyiv, UKRAINE</p>
7.	<p><b>Credit-modular system: the peculiarities of its introduction in the Vyacheslav Chornovil State Institute of Modern Technologies and Management of Lviv</b>          Ivan Kostyuk          Vyacheslav Chornovil State Institute of Modern Technologies and Management of Lviv, Lviv, UKRAINE</p>
8.	<p><b>Textbook “Theory of processes and signals” for students of</b></p>

