CADSM'2017

**2017 14th International Conference
The Experience of Designing and Application
of CAD Systems in Microelectronics (CADSM)**

21-25 February 2017
Polyana-Svalyava (Zakarpattya), Ukraine

2017 14th International Conference
The Experience of Designing and Application
of CAD Systems in Microelectronics (CADSM)

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Polyana-Svalyava (Zakarpattya), Ukraine

CADSM 2017 Program Overview

	Tuesday, February 21
	Conference Hall
14^{00}-15^{30}	PLENARY **Chairman:** **Prof. Mykhaylo Lobur** **Secretary:** **Dr. Nazariy Andrushchak**
15^{30}-16^{00}	Coffee Break
16^{00}-17^{00}	Poster Session
17^{00}-18^{30}	Session I Chairman: **Prof. Oleh Matviykiv** Secretary: **Dr. Nazariy Andrushchak**

	Wednesday, February 22
	Conference Hall
14^{00}-15^{30}	Session II Chairman: **Prof. Vasyl Teslyuk** Secretary: **Dr. Nazariy Jaworski**
15^{30}-16^{00}	Coffee Break
16^{00}-17^{00}	Poster Session
17^{00}-18^{30}	Session III (Room A, Conference Hall) Chairman: **Prof. Vladimir Hahanov** Secretary: **Prof. Serhiy Shcherbovskych**
17^{00}-18^{30}	Session III (Room B) Chairman: **Prof. Larysa Globa** Secretary: **Dr. Nazariy Jaworski**

	Thursday, February 23
	Conference Hall
14^{00}-15^{30}	Session IV (Room A, Conference Hall) Chairman: **Prof. Andrzej Napieralski** Secretary: **Dr. Mykhaylo Melnyk**
14^{00}-15^{30}	Session III (Room B) Chairman: **Prof. Serhiy Shcherbovskych** Secretary: **Dr. Volodymyr Karkulyovskyy**
15^{30}-16^{00}	Coffee Break
16^{00}-17^{00}	Poster Session
17^{30}-19^{00}	Session V Chairman: **Dr. Michal Szermer** Secretary: **Dr. Rostyslav Kryvyy**

	Friday, February 24
	Conference Hall
16^{00}-17^{00}	Poster Session
17^{30}-19^{00}	Session VII Chairman: **Dr. Lukasz Starzak** Secretary: **Dr. Mykhaylo Melnyk**

	Saturday, February 25
9^{00}-11^{00}	General Discussion, Conference Closing

TIME OF PRESENTATIONS

Oral presentation at the plenary session – 30 min.

Oral presentation at the regular session – 10 min.

Poster presentation at the poster session – 2 min.

Discussion, questions – 5 min.

2017 14th International Conference
The Experience of Designing and Application
of CAD Systems in Microelectronics (CADSM)

Organized by

CAD Department
Institute of Computer Science and
Information Technologies,
Lviv Polytechnic National University

in Technical Co-Sponsorship with

IEEE Section Ukraine
IEEE MTT/ED/AP/CPMT/SSC
West Ukraine Chapter

under the auspices of

Ministry of Science and Education of Ukraine

Lviv Polytechnic National University

TRAVEL ARRANGEMENT

As the previous 13 successful ones, this conference will be held in Polyana, Svalyava region, Zakarpattya, Ukraine in the Carpathian Mountains and approximately 190 km drive south of Lviv. Lviv is one of the oldest historic cities in Europe, an industrial and educational centre of the West Ukraine. We hope that the wonderful scenery and fresh air of the Carpathian Mountains will make for fruitful work at the conference and leave pleasant memories about the Conference.

ORGANIZING COMMITTEE

Chairman:	Prof. **Mykhaylo Lobur,** Head of CAD Department, Lviv Polytechnic National University, Ukraine
Vice-chairmen:	Prof. **Oleh Matviykiv,** CAD Department of Lviv Polytechnic National University, Ukraine
	Prof. **Mykhaylo Andriychuk,** CAD Department of Lviv Polytechnic National University, Ukraine
Conference Secretary:	Dr. **Nazariy Andrushchak**, CAD Department of Lviv Polytechnic National University, Ukraine

MEMBERS OF ORGANIZING COMMITTEE

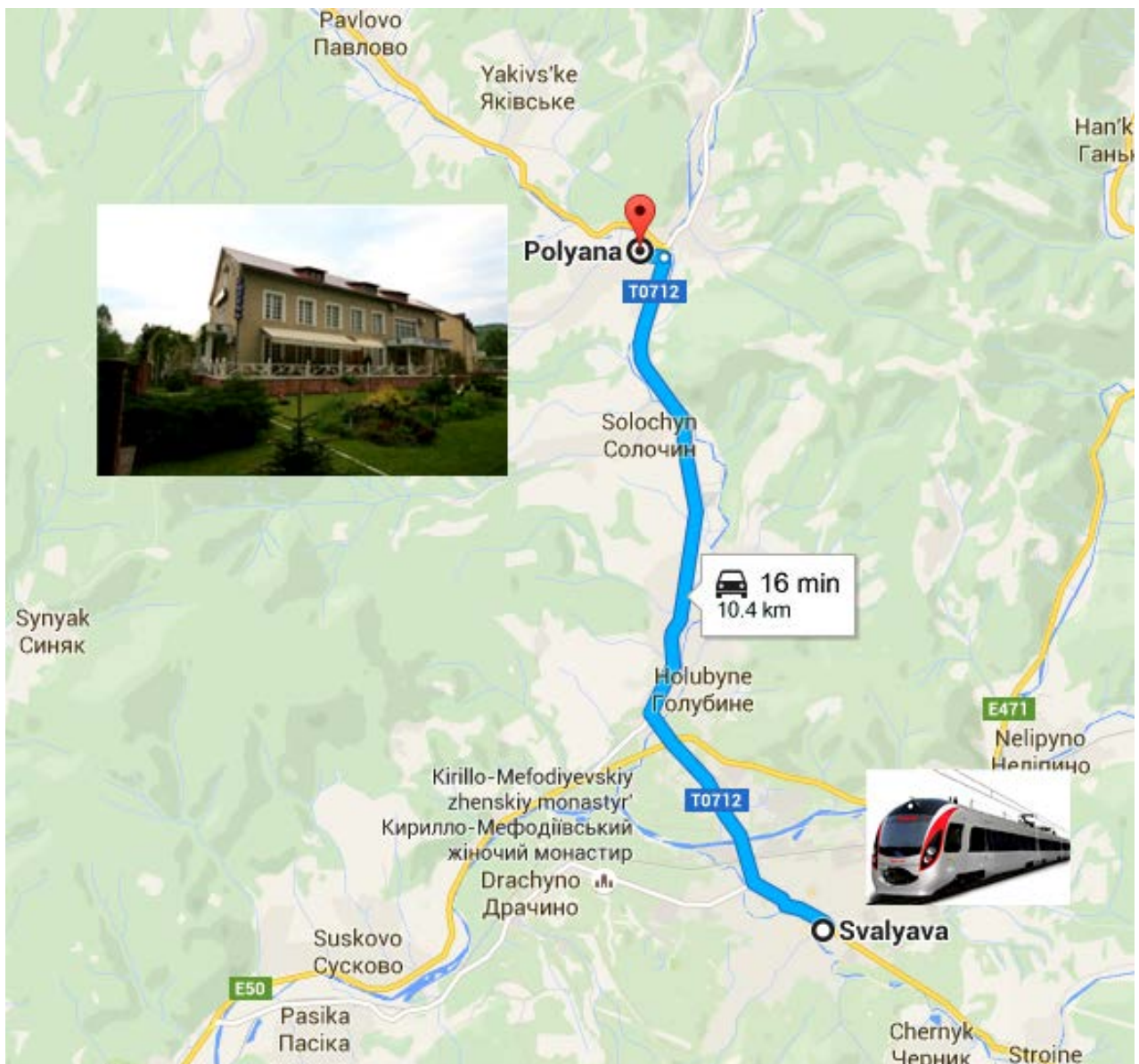|	
Prof. Sergiy Shcherbovskyh	Lviv Polytechnic National University, Ukraine
Dr. Rostyslav Kryvyy	Lviv Polytechnic National University, Ukraine
Dr. Mykhaylo Melnyk	Lviv Polytechnic National University, Ukraine
Dr. Volodymyr Karkulyovskyy	Lviv Polytechnic National University, Ukraine
Dr. Andriy Kernytskyy	Lviv Polytechnic National University, Ukraine
Dr. Ulyana Marikutsa	Lviv Polytechnic National University, Ukraine
Dr. Igor Farmaga	Lviv Polytechnic National University, Ukraine
Dr. Nazariy Jaworski	Lviv Polytechnic National University, Ukraine
MCS. Oleg Faitas	Lviv Polytechnic National University, Ukraine

INTERNATIONAL PROGRAM COMMITTEE

Prof. Andriychuk M.	IEEE MTT/ED/AP/CPMT/SSC West Ukraine Chapter, Ukraine
Prof. Dziuban J.	Wroclaw University of Technology, POLAND
Prof. Fedasyuk D.	Lviv Polytechnic National University, UKRAINE
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Prof. Levin B.	Holon Institute of Technology, ISRAEL
Prof. Lobur M.	Lviv Polytechnic National University, UKRAINE (Chairman)
Prof. Mandziy B.	Lviv Polytechnic National University, UKRAINE
Prof. Matviykiv O.	Lviv Polytechnic National University, UKRAINE
Prof. Melnyk A.	Lviv Polytechnic National University, UKRAINE
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Prof. Pavlysh V.	Lviv Polytechnic National University, UKRAINE
Prof. Petrenko A.	National Technical University of Ukraine, UKRAINE
Prof. Pleskacz W.	Warsaw University of Technology, POLAND
Prof. Prudyus Iv.	Lviv Polytechnic National University, UKRAINE
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Prof. Sankowski D.	Technical University of Lodz, POLAND
Prof. Skryshevsky V.	Kyiv National Taras Shevchenko University, UKRAINE
Prof. Tavzarashvili K.	University of Georgia, GEORGIA
Prof. Teslyuk V.	Lviv Polytechnic National University, UKRAINE
Prof. Yanovsky F.	National Aviation University, UKRAINE
Prof. Yashchyshyn Ye.	Warsaw University of Technology, POLAND

LOCATION

The conference will be held in Polyana, Svalyava region, Zakarpattya, Ukraine in the Carpathian Mountains approximately 190 km drive south of Lviv. Lviv is one of the oldest cities in Europe, an industrial and educational centre of the West Ukraine. There are an international airport, a railway, and bus stations in Lviv. We hope that the wonderful scenery and healthful air of the Carpathian Mountains will make for the fruitful work at the conference and leave pleasant memories about it.

Hotel "Fortuna", Address: 61, Duhnovycha Str, Polyana – Svalyava.

REGISTRATION

Tuesday, February 21	10^{00}-13^{00}

Registration of participants.

PLENARY SESSION

Tuesday, February 24	14^{00}-15^{30}

Chairman: **Prof. Mykhaylo Lobur**

Secretary: **Dr. Nazariy Andrushchak**

SPEECH OF THE CONFERENCE CHAIRMAN

Head of CAD Department of Lviv Polytechnic National University

Mykhaylo Lobur

INVITED LECTURES

1. **Method of Finite-Element Mesh Repositioning for FSI Modeling of Living Cell Behavior in Microfluidics**
   Danylo Lizanets, Oleh Matviykiv, Oleksandr Halushko
2. **RLC-Circuit Reduction Algorithm Modifications**
   Oleksiy Chkalov, Oleksandr Beznosyk, Oleksii Finogenov, Tatiana Ladogubets
3. **Mathematical Models of Informative Characteristic of Tissues in Surgical Wound at Monitoring the Recurrent Laryngeal Nerve by Electrophysiological Method**
   Mykola Dyvak, Andriy Pukas, Natalia Padletska, Viktor Shidlovsky, Andriy Dyvak

SESSION I

Tuesday, February 21	17^{00}-18^{30}

Chairman: **Prof. Oleh Matviykiv**
Secretary: **Dr. Nazariy Andrushchak**

1. **Method of Developing the Structural-Automaton Models of Fault-Tolerant Systems**
   Dmytro Fedasyuk, Serhiy Volochiy
2. **Calculation of the Drying Agent in Drying Chambers**
   Yaroslav Sokolovskyy, Oleksiy Sinkevych
3. **Mathematical Modeling of Visco-elastic State of Materials with Fractal Structure**
   Jaroslav Sokolovskyy, Maryana Levkovych, Olha Mokrytska, Volodymyr Kryshtapovych
4. **The method of computing organization in high loaded SDN controller system**
   Maria Skulysh
5. **Method of mediated assessment contaminated soils by vehicles emissions using interval discrete models**
   Mykola Dyvak, Iryna Darmorost, Natalia Porplytsya, Mykhailo Shpintal
6. **Modified Artificial Bee Colony Algorithm for Structural Identification of Models of Objects with Distributed Parameters and Control**
   Mykola Dyvak, Nataliya Porplytsya, Yurii Maslyiak, Nataliya Kasatkina

7. **Testing Model with Semi-Markov Switching**
   Yaroslav Chabanyuk, Oksana Ukhans'ka, Andrii Senyk, Uliana Khimka, Anastasiia Kinash

SESSION II

Wednesday, February 22	14^{00}-15^{30}

Chairman: **Prof. Vasyl Teslyuk**

Secretary: **Dr. Nazariy Jaworski**

1. **ASICs Design for Space Applications and Research of Related Thermal and Electro-Magnetic Phenomena**
   Andrzej Napieralski
2. **KAPE (to be defined)**
3. **Analysis of SPICE Models for SiC MOSFET Power Devices**
   Andrii Stefanskyi, Łukasz Starzak, Andrzej Napieralski, Mykhaylo Lobur
4. **The Atomic-Force Microscope – Project of the CAD Department of Lviv Polytechnic National University**
   Mykhaylo Lobur, Petro Kosobutskyy, Ruslan Holovatskyy, Nazariy Jaworski, Ihor Farmaga
5. **Analysis of Visual Quality for Denoised Images**
   Andrii Rubel, Oleksii Rubel, Volodymyr Lukin
6. **Design of QoS-Routing Scheme under the Timely Delivery Constraint**
   Oleksandr Lemeshko, Oleksandra Yeremenko, Ahmad M. Hailan

SESSION III

Wednesday, February 22	17^{00}-18^{30} **(Room A)**

Chairman: **Prof. Vladimir Hahanov**

Secretary: **Dr. Serhiy Shcherbovskych**

1. **Image Quality Prediction for DCT-based Compression**
   Ruslan Kozhemiakin, Vladimir Lukin, Benoit Vozel
2. **User-Defined Functions of MATLAB for Modeling Linear Periodically-Time-Variable Circuits**
   Yuriy Shapovalov, Bohdan Mandziy, Dariya Bachyk, Marian Turyk
3. **Intelligent Components of Multilevel System for Energy Efficiency Management in Regional Economy**
   Teslyuk Taras, Tsmots Ivan, Teslyuk Vasyl, Medykovsky Mykola, Holovatyy Andriy
4. **Histogram-based Method for Image Contrast Enhancement**
   Elena Yelmanova, Yuriy Romanyshyn
5. **Concept of Intrusion Detection System With Implementation of Topological Sorting**
   Orest Lavriv, Zenoviy Kharkhalis, Bohdan Strykhaliuk
6. **Two-Level Method of Fault-Tolerant Inter-Area Routing**
   Oleksandra Yeremenko, Olena Nevzorova, Ali Salem Ali
7. **Estimation of the guard interval duration variation effectiveness in the orthogonal harmonic signals transmission systems**
   Vasil Oreshkov, Irina Barba, Olena Iegupova

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8. **Design of Flight Simulator Components in LabVIEW**
   Vitalii Larin, Nina Chichikalo, Katerina Larina, Iana Sawitskaya, Volodymir Kharchenko

9. **A new method of multi-frequency active aperture synthesis for imaging of SAR blind zone under aerospace vehicle**
   Vladimir Pavlikov, Valery Volosyuk, Semen Zhyla, Huu Nguyen Van, Kiem Nguyen Van

SESSION III

Wednesday, February 22	17^{00}-18^{30} **(Room B)**

Chairman: **Prof. Larysa Globa**

Secretary: **Dr. Nazariy Jaworski**

1. **Method of Generalized Quality Index Calculation in Mobile Networks**
   Ievgen Volvach, Larysa Globa

2. **Model Of A Controller For Registering Passenger Flow Of Public Transport For The "Smart" City System**
   Oleh Boreiko, Vasyl Teslyuk

3. **The Alignment Method of Code Structures for Enhancing the Information's Reliability in the Infocommunication Networks**
   Vladimir Barannik, Sergey Podlesny, Oleh Suprun, Tanya Belikova

4. **No-reference Contrast Assessment by Image Histogram**
   Elena Yelmanova, Yuriy Romanyshyn

5. **The Method for Detecting Energy Reserve of Components of Computer-Integrated Systems**
   Andriy Lukashenko, Maryna Chichuzhko, Dmytro Lukashenko, Kostiantyn Rudakov, Volodymyr Lukashenko, Petr Dyachenko, Valentyna Lukashenko

6. **Development of digital part of ratio-type radiometer**
   Vladimir Pavlikov, Alexey Odokiyenko, Anton Sobkolov, Kseniya Nezhalskaya, Maxym Antonov

7. **The method of correlation investigation of acoustic signals with priority placement of microphones**
   Bohdan Trembach, Roman Kochan, Rostyslav Trembach

8. **A Method of Nanoporous Anodic Aluminum Oxide Structure Modeling Based on Bezier Curves Generation**
   Nazariy Jaworski, Nazariy Andrushchak

9. **Approach to the FPGA-based self-configurable computer systems support using Unix-like operation system**
   Melnyk Viktor, Kit Andrii

10. **The Security Methods in Automated Microscopy System**
    Oleh Berezsky, Lesia Dubchak, Oleh Pitsun

11. **Experimental analysis of PCPB scheduling algorithm**
    Gvozdetska Nataliia, Stepurin Oleksandr, Globa Larysa

Poster SESSION

Wednesday, February 22	16^{00}-17^{00}

1. **Modelling of Type I and II Errors of Switching Device for Systems with Hot and Cold Redundancy based on Two-Terminal Dynamic Fault Tree**
Serhiy Shcherbovskykh, Mykhaylo Lobur, Tetyana Stefanovych

2. **Research of Efficiency of Microprogram Final-State Machine with Datapath of Transitions**
Roman Babakov, Alexander Barkalov, Larysa Titarenko

3. **Asymptotic Method for the Investigation of the Mathematical Model of Nonlinear Bending Vibrations for Some Electromechanical Screw System**
Petro Pukach, Mykhaylo Melnyk, Oksana Brodyak, Pavlo Pukach

4. **Identification the Interval Difference Operators Based on Artificial Bee Colony Algorithm in Task of Modeling the Air Pollution from Vehicular Traffic**
Iryna Voytyuk, Natalia Porplytsya, Andriy Pukas, Taras Dyvak

5. **Application of a Principle of Mathematical Models Reduction for Optimal Vector of Induced Optical Effects in Crystalline Materials for Optoelectronics**
Nazariy Andrushchak, Yaroslav Matviychuk, Anatoliy Andrushchak

6. **Determination of Global Maxima of Electro-, Piezo- and Acousto-optic Effects in Langasite Crystals**
Oleh Byryy, Zenon Hotra, Anatoliy Andrushchak

7. **A Synthesis of Barker Sequences is by Means of Numerical Bundles**
Riznyk O, Balych Bogdan, Yurchak Irina

8. **Usage of SpreadSpectrum Technology in Voltage Converters**
Viktor Spivak, Vladimir Makarenko

9. **The Generalized Shift Operator and Non-harmonic Signal Analysis**
Ivanna Dronyuk, Olga Fedevych, Zhanna Poplavska

10. **Complex Optimality Criterion for Load Balancing with Multipath Routing in Telecommunications Networks of Nonuniform Topology**
Amal Mersni, Andriy Ilyashenko, Tetiana Vavenko

11. **The Parallel Acyclic Adder**
Mykhailo Solomko, Petro Olshansky

12. **Testing of Communication Range in ZigBee Technology**
Ievgeniia Kuzminykh or Arkadii Snihurov or Dmytro Ageyev, Anders Carlsson

13. **Accelerated Bit Rate of the Video Stream Dynamic Control Method**
Vladimir Barannik, Vitaliy Tverdokhleb, Dmytrij Okladnoj, Aleksandr Musienko
Natalia Korolyuk

14. **Methodology for Accelerated Searching a Crossover Coefficient in Images Synthesis Tasks**
Dmytro Peleshko, Olena Vynokurova, Ivan Izonin, Marta Peleshko, Sergii Mykhailiuk

15. **Digital Method of SSB Modulation**
Spartak Mankovskyy, Emiliya Mankovska, Myron Nykolyshyn

16. **Digital Filter Design using VHDL**
Anastasia Serhienko, Sergiyenko Anatolij

17. **Heterogeneous Network Capacity Distribution among Service Flows**
Orest Lavriv, Bohdan Buhyl, Pavlo Huskov, Roman Bak

18. **3D scanner with modulation of light intensity**
Andrii Nazar, Vasyl Tataryn, Yaroslav Bobitski, Svitlana Ponomarenko

19. **Spectral Properties of TiO2-Ag Nanoshells with Different Shapes for Biomedical Applications**
Tetiana Bulavinets, Iryna Yaremchuk, Yaroslav Bobitski

SESSION III

Thursday, February 23	14^{00}-16^{30} (Room A)

Chairman: **Prof. Andrzej Napieralski**

Secretary: **Dr. Mykhaylo Melnyk**

1. **An approach to the Internet of Things system with nomadic units developing**
Larysa Globa, Vasyl Kurdecha, Ivan Ishchenko, Andrii Zakharchuk
2. **Qubit Test Synthesis of the Functionality**
Vladimir Hahanov, Tamer Bani Amer, Eugenia Litvinova, Tetiana Soklakova, Mykhailo Liubarskyi, Nikolay Shavlak, Kseniia Dziuba
3. **Deductive Qubit Fault Simulation**
Ivan Hahanov, Svetlana Chumachenko, Igor Iemelianov, Vladimir Hahanov, Lina Larchenko, Tymofieiev Daniyil
4. **Analyzes of the distributed system load with multifractal input data flows**
Lyudmyla Kirichenko, Tamara Radivilova
5. **Architecture of a tool for automated testing the worst-case execution time of real-time embedded systems' firmware**
Dmytro Fedasyuk, Ratybor Chopey, Bohdan Knysh
6. **Investigation into applicability and efficiency of SQLite for implementation of Dijkstra's algorithm**
Iryna Yurchak, Volodymyr Dudas
7. **Performance Evaluation Model for Spectrum Decision Methods in Cognitive Radio**
Maryan Kyryk, Nazar Pleskanka, Volodymyr Yanyshyn
8. **Dynamic Objects Emergency State Monitoring By Means Of Smartphone Dynamic Data**
Viktor Shevchenko, Oleksiy Bychkov, Alina Shevchenko
9. **Adaptive Flow Routing Model in SDN**
Mykola Beshley, Marian Seliuchenko, Oleksiy Panchenko, Artur Polishuk
10. **Content Delivery Network Usage Monitoring**
Maryan Kyryk, Nazar Pleskanka, Maryana Pleskanka
11. **Modeling of Cyber Physical Systems for Quality Monitoring of Protective Consortive Ecotones**
Anatoliy Obshta, Maria Ruda, Iryna Soroka

SESSION IV

Thursday, February 23	14^{00}-16^{30} (Room B)

Chairman: **Prof. Serhiy Shcherbovskych**

Secretary: **Dr. Volodymyr Karkulyovskyy**

1. **Representation of the Greedy Algorithms Applicability for Solving the Combinatorial Optimization Problems Based on the Hypergraph Mathematical Structure**
Artem Potebnia

2. **The Method of Optimization of Mass-Size and Thermal Parameters of Hermetically Sealed Electronic Equipment**
Yuliya Lopatka, Galina Shilo, Tatiana Kulyaba-Kharitonova

3. **Optimization of the Mass Characteristics of the Electronic Equipment Enclosures with Natural Air Cooling**
Evgeniy Areshkin, Shilo Galina, Ogrenich Evgen

4. **A Synthesis of Barker Sequences is by Means of Numerical Bundles**
Oleg Riznyk, Balych Bogdan, Yurchak Irina

5. **The mathematical method development of decisions supporting concerning products placement based on analysis of market basket content**
Khrystyna Shakhovska, Petro Pukach

6. **Real-time Fire Detection Method Combining AdaBoost, LBP and Convolutional Neural Network in Video sequence**
Oleksii Maksymiv, Taras Rak, Dmytro Peleshko

7. **Photo-Controllable Self-Assembly of Azobenzene-Decorated Nanoparticles in Bulk: Computer Simulation Study**
Arsen Slyusarschuk, Jaroslav Ilnytskyi

SESSION V

Thursday, February 23	17^{30}-19^{00}

Chairman: **Dr. Michal Szermer**

Secretary: **Dr. Rostyslav Kryvyy**

1. **Stochastic Method Forming the Optimal "Saturated Block" in the Localization Task of Solutions the Interval System of Linear Algebraic Equations**
Iryna Oliynyk, Manzhula Volodymyr, Shevchuk Ruslan, Dyvak Mykola

2. **Simulation of Sequential and Partially Parallel Fuzzy ART Neural Network**
Serhii Shatnyi, Pavlo Tymoshchuk

3. **Mathematical models of attendance Websites and methods her improving**
Mykhailo Susla, Pasichnyk Roman, Honchar Lyudmyla, Avhustyn Ruslan

4. **Increasing the Reliability of Distribution Systems by the Use of Intrusion Detection System Based on Ricci Flows**
Yulia Klymash, Strykhalyuk Bogdan

5. **Computer Diagnostic Tools Based on Biomedical Image Analysis**
Oleh Pitsun, Oleh Berezsky, Serhiy Verbovyy, Tamara Datsko, Andriy Bodnar

Poster SESSION

Thursday, February 23	16^{00}-17^{00}

1. **Investigation of the Mathematical Model of Bending Oscillations of the Oil Tanks' Walls In the Transformers Considering Nonlinear Dissipative Forces**
Petro Pukach, Volodymyr Il'kiv, Zinovii Nytrebych, Myroslava Vovk

2. **FPGA Implementation of Vertically Parallel Minimum and Maximum Values Determination in Array of Numbers**
Ivan Tsmots, Vasyl Rabyk, Oleksa Skorokhoda, Volodymyr Antoniv

SESSION VI

Friday, February 24	17^{30}-19^{00}

Chairman: Dr. Lukasz Starzak

Secretary: Dr. Mykhaylo Melnyk

1. **Evaluation of Static Characteristics of Capacitive Micro-machined Ultrasound Transducer**
   Oleksii Chkalov, Oleksandr Beznosyk, Bogdan Kyriusha, Oleksii Finogenov
2. **Parametrized model of MEMS microphone in Comsol Multiphysics**
   Cezary Maj, Wojciech Zabierowski, Andrzej Napieralski
3. **FEM Analysis of a 3D Model of a Capacitive Surface-micromachined Accelerometer**
   Michal Szermer, Jacek Nazdrowicz, Wojciech Zabierowski
4. **Canonical Mathematical Model and Information Technology for Cardio-Vascular Diseases Diagnostics**
   Igor Atamanyuk, Vyacheslav Shebanin, Yuriy Kondratenko, Yuriy Volosyuk
5. **Development and Implementation of Image Processing Technique for Laser-Based 3D Scanner**
   Nazariy Andrushchak, Yaroslav Neznaradko, Vladyslav Hnatyuk
6. **Design and Measurements of the Specialized VLSI Circuit for Blood Oxygen Saturation Monitoring**
   Adam Jarosz, Cezary Kolacinski, Jerzy Wasowski, Andrzej Szymanski, Ewa Kurjata-Pfitzner, Dariusz Obrebski, Tomasz Borejko, Krzysztof Siwiec, Witold A. Pleskacz

Poster SESSION

Friday, February 24	16^{00}-17^{00}

1. **A model of Load Distribution between Data Center's Computing Nodes**
   Raed Yahya Abdulghafoor, Olena Tkachova, Hassan Mohamed Muhi-Aldeen
2. **Development of the diagnostic subsystem for the RELDES remote laboratory**
   Olga Gladkova, Mykhailo Poliakov, Aleksandr Sokolyanskii, Anzhelika Parkhomenko
3. **Mobile Specific Testing: Tips &Tricks**
   Tetyana Sviridova, Georgiy Gulov, Ulyana Marikutsa
4. **Conceptual Model of Near Duplicates Detection in Electronic Documents**
   Alexander Kuchansky, Andrii Biloshchytskyi, Svitlana Biloshchytska, Anastasiia Dubnytska
5. **The method of data exchanging between smartphone and smart watch**
   Svitlana Popereshnyak, Olha Suprun
6. **Computer-Aided Design of the Route Network Based on Packet Models**
   Vitaliy Mazur
7. **Design and Development of Mobile Application for Learning Technical Terms**
   Uliana Marikutsa, Yuliia Hryhorenko, Serhii Londar, Ihor Farmaha

8. **Statistical analysis of noise measurement system based on accelerometer-gyroscope GY-521 and Arduino platform**
   Roman Ferens, Petro Kosobutskyy
9. **Technology research testing of electronic components based on imported chips**
   Mikhail Piganov, Alexey Nasedkin, Ilya Shumskih, Sergey Tyulevin

10. **Improvement of the Interval Arithmetic-Based Algorithm for Solving Quadrics' Equation Sets in Microcontrollers**
    Tetyana Marusenkova, Iryna Yurchak, Roman Solomko

11. **Application of COMSOL API for Autonomous Modeling of Thin Film Resonator**
    Rostyslav Kryvyy, Volodymyr Karkulovskyy, Dmytro Korpyljov

12. **MEMS Accelerometers Production Technological Route Selection**
    Igor Nevludov, Vladyslav Yevsieiev, Viktoriia Bortnikova, Svitlana Miliutina

13. **Amplitude-frequency Response Quencher Mechanical Vibrations**
    Ihnatyshyn Mykola, Pelekh Yaroslav

14. **Express Diagnostics of Cardiovascular System by Spectral Methods**
    Liubov Klepach, Tetiana Tereschenko, Julia Yamnenko, Dmitry Larin

15. **Reliability Analysis of Complex Systems Based on the Probability Dynamics of Subsystem Failures and Deviation of Parameters**
    Alexey Grishko, Nikolay Yurkov, Nikolay Goryachev

16. **The Construction of Information Measuring System of Defects Detection in Conductive Patterns of Printed Circuit Boards**
    Evgeniya Danilova, Igor Kochegarov, Nikolay Yurkov

17. **Implementation of Systems Approach to Identification and Quality Management**
    Eduard Lapshin, Nikolay Yurkov, Sergey Brostilov

18. **Structural and Parameter Optimization of the System of Interconnected Processes of Building Complex Radio-Electronic Devices**
    Aleksey Grishko, Igor Kochegarov, Nikolay Yurkov

FINAL SESSION

Saturday, February 25	9^{00}-11^{00}

1. Concluding reports of Section Chairman.

2. Discussion.

3. Conference summary.

   Conference closing.

Notes

Notes