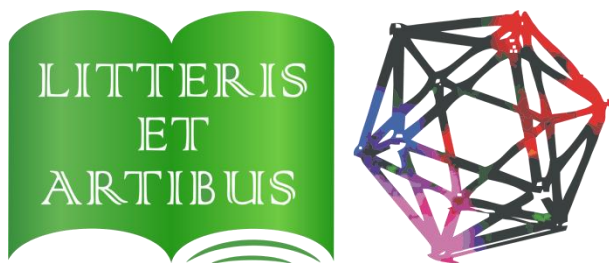


Ministry of Education and Science of Ukraine
Lviv Polytechnic National University



**8TH INTERNATIONAL
JOINT YOUTH SCIENCE FORUM
«LITTERIS ET ARTIBUS»
&
13TH INTERNATIONAL
CONFERENCE
«YOUNG SCIENTISTS TOWARDS
THE CHALLENGES OF MODERN
TECHNOLOGY»**

Official Program

November 22–24, 2018
Lviv, Ukraine

SCIENCE FORUM IS ORGANIZED BY:

*Lviv Polytechnic
National University
(Ukraine)*

*Scientific Society of
Students, Doctoral
Candidates and Young
Researchers of Lviv
Polytechnic National
University*

*Students and PhD
Students Board and
Union of Lviv
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*Warsaw University of
Technology
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Foundation for Young
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*Alumni Association of
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*Foundation Manus
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*Association PhD of
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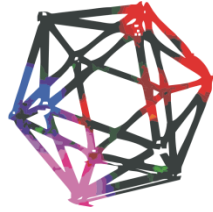
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General Program



THURSDAY, NOVEMBER 22, 2018

09:00

Registration of participants starts

Tech StartUp School, 2 Kolessy Str.

10:30–13:00

Ceremonial opening and plenary session

Tech StartUp School, 2 Kolessy Str.

11.00–13:00

Plenary discussion «Perspectives and Obstacles of Implementing Open Science and Open Peer Review in Eastern Europe»:

- **Gareth O'Neill**, European Council of Doctoral Candidates and Junior Researchers, NL
- **Grygoriy Mozolevych**, Ministry of Education and Science of Ukraine, UA
- **Oleksandr Berezko**, Scientific Society of Students, Doctoral Candidates and Young Researchers of Lviv Polytechnic National University, UA
- **Artur Babyda**, Warsaw University of Technology, PL
- **Wojciech Wodo**, Wroclaw University of Science and Technology, PL
- **Yuliia Ovchynnykova**, Donetsk National University, UA
- **Marta Gajadhur**, Warsaw University of Technology, PL

- 13:00–14:00** **Lunch & coffee break**
- 14:00–18:00** **Forum poster and oral sessions**
TechStartUp School, 2 Kolessy Str.
- 14:00–15:00** **Poster sessions of the conferences MEMST, CCT and EcoTour Conferences.**
Please find detailed conferences programs below in their specific sections.
TechStartUp School, 2 Kolessy Str.
- 15:00–16:00** **Poster sessions of the conferences CSE, GAC and EPECS Conferences.**
Please find detailed conferences programs below in their specific sections.
TechStartUp School, 2 Kolessy Str.
- 16:00–17:00** **Poster sessions of the conferences HSS, EM and LPS Conferences.**
Please find detailed conferences programs below in their specific sections.
TechStartUp School, 2 Kolessy Str.
- 17:00** **Informal meeting of the Joint Forum participants**
TechStartUp School, 2 Kolessy Str.

FRIDAY, NOVEMBER 23, 2018

- 10:00–12:00** **Lviv Polytechnic National University tour**
*Lviv Polytechnic National University main building,
12 Bandera Str.*
- 12:00–13:00** **Closing ceremony. Summarizing the results of the Joint Forum. Awarding of the best conferences' presentations/posters**
*Lviv Polytechnic National University main building,
12 Bandera Str.*

13:00–14:00 **Lunch break**

14:00–17:00 **Lviv city tour starts**

In front of Lviv Polytechnic National University main building, 12 Bandera Str.

SATURDAY, NOVEMBER 24, 2018

12:00–14:00 **2nd Round table «Problems of Open Science in Eastern Europe»**

*Lviv Polytechnic National University main building,
12 Bandera Str.*

**10th INTERNATIONAL ACADEMIC CONFERENCE
"COMPUTER SCIENCE & ENGINEERING 2018"
(CSE-2018)**



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**9th INTERNATIONAL ACADEMIC CONFERENCE
“GEODESY, ARCHITECTURE & CONSTRUCTION 2018”
(GAC-2018)**



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**8th INTERNATIONAL ACADEMIC CONFERENCE
“ELECTRIC POWER ENGINEERING & CONTROL SYSTEMS
2018” (EPECS-2018)**



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**8th INTERNATIONAL ACADEMIC CONFERENCE
“HUMANITIES AND SOCIAL SCIENCES 2018”
(HSS-2018)**



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**7th INTERNATIONAL ACADEMIC CONFERENCE
“ECONOMICS & MANAGEMENT 2018”
(EM-2018)**



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**7th INTERNATIONAL ACADEMIC CONFERENCE
“MECHANICAL ENGINEERING,
MATERIALS SCIENCE, TRANSPORT 2018”
(MEMST-2018)**

MEMST

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**7th INTERNATIONAL ACADEMIC CONFERENCE
“CHEMISTRY & CHEMICAL TECHNOLOGY 2018”
(CCT-2018)**



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**5nd INTERNATIONAL ACADEMIC CONFERENCE
“LAW AND PSYCHOLOGY 2018”
(LPS-2018)**



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**5th INTERNATIONAL ACADEMIC CONFERENCE
“ENVIRONMENTAL PROTECTION, NATURAL RESOURCE
MANAGEMENT AND TOURISM 2018”
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THE JOINT FORUM POSTER AND ORAL SESSIONS

COMPUTER SCIENCE & ENGINEERING

- Klushyn Yu.* Software complex for realization of mathematical models, methods and algorithms of estimation of time of execution of complex problems in multiprocessor computer systems
- Düşünceli F., Çelik E.* Gegenbauer Polynomial Method for Linear Complex Differential Equations
- Sahanovskyi V., Bochkarov O.* Context-aware decision support software service
- Popova A., Lytvyn V.* Development of online taxi ridesharing
- Mozil Z., Vavruk Ye.* Selection of optimal path finding algorithm for data transmission in Distributed Systems
- Khobzei M., Apostolyuk M., Vovchuk D.* Model of Antenna Modified by Regular Wire Media for Control of its Main Characteristics
- Diachok R., Klym H.* Hardware and software complex of intellectualized orientopter-type systems
- Rzheuskiy A., Veretennikova N., Laba R., Kunanets N.* Creating a virtual tour of the main building at Lviv Polytechnic National University
- Guk B., Morozov Y.* Computer system for video-based Traffic Violation Detection
- Bachynskyy R., Stefanivskyy M.* Monitoring and analysis of air indicators from sensors of various types in the cyberphysical system “ Smart home”
- Synko A., Burov Ye.* Functional model of information system of facility’s business activities
- Dunets R., Chernetskiy S., Slavytiak A.* Specialized computer system for controlling microclimate through recuperation
- Grebennyak A., Lykhotop D.* Basic approaches to designing the structures of embedded systems
- Havano B.* Problems of privacy and security in cyber physical systems of intellectual houses
- Chipko T., Berezko L.* Software Application for Intelligent Dialog Systems Maintenance
- Bachynskyy R., Pankiv B.* System for license plate recognition based on Viola-Jones algorithm
- Mulyarevich O., Turchynskyy S.* Solving the dynamic travelling salesman problem with the use of evolutionary computation
- Mulyarevich O., Benovskyi B.* Recognition of road signs in video images
- Hrabovskyy V., Paramud Ya.* Corporate computer network with high level information security
- Petsukh R., Kytsun H.* Microprocessor control system of Unmanned Aerial Vehicle
- Vavruk E., Kushnir D.* Mobile system for text recognition and translation with using Microsoft cognitive API
- Alev Kelleci, Mehmet Bektaş* Some new results for Hasimoto surfaces
- Prymyska S.* The cost’s indicators of the homogeneous reactions in the cascade of perfect mixing reactors prediction by mathematic modelling
- Dutkevych S., Lytvyn V.* Prospects of information system project for organizing volunteering activities

- Haci Mehmet Baskonus, Faruk Düşünceli* Singular Soliton to the Hyperbolic Generalization of the Burgers Model
- Bilskyi D., Katrenko A.* Intelligent system for forming behavior of actors in computer game
- Panchuk I., Lytvyn V.* The Project of Information System on Organization of Tourist Trips
- Ihnatovych A., Pyvovar V.* Password Complexity Evaluation Instruments in Access Control Components of Cyber-Physical Systems

GEODESY, ARCHITECTURE & CONSTRUCTION

- Khymytsia O.,* Analysis of trends in the development of hybrid housing: European experience of the 21st century
- Savchyn I., Romanovskiy A., Danyliv N.* Research of horizontal movements of the earth's crust in the archipelago argentine islands (Antarctida) during period 2003-2018
- Savchyn I., Danyliv N., Zygar A., Romanovskiy A.* Research of vertical dynamics of Earth's surface movements in areas of Dniester PSP
- Duma M.* Dniester PSPP base GNSS network optimization
- Cilek A., Berberoglu S., Cenk D.* Biotope Mapping in Wetlands Using High-Resolution Satellite Images
- Ivashchyshyn H., Kropyvnytska T., Kirakevych I.* Low-Carbon Blended Cement With High Content of Supplementary Cementitious Materials
- Matsiyevska O., Buhrii M.* Smart-monitoring system of the water supply network and the quality of transported water
- Gołębiewski M.* Hemp-Lime Bio-Composites – Review and Analysis of World-Wide Architectural Examples
- Semeniv R., Kaminskyy A.* Efficiency of the Modifiers Use for Protection of Brick Structures
- Surmai M., Tkach R., Hula V., Kozak R.* The Experimental Research of Glass Multilayer Columns with a Central Compression
- Shkoloyar S.* The role of art clusters as a new form of artistic practices in urban space

ELECTRIC POWER ENGINEERING AND CONTROL SYSTEMS

- Lys S., Yurasova O., Lashkovska N.* Methods of Extending the Life Cycle of a TII-100A Boiler
- Luchko M., Biletskyi Yu.* Comparative Analysis of Different Types of Dynamic Solar Tracking Systems
- Lompart Yu., Biletskyi Yu.* Analysis of the feasibility of using an AC motor with new winding type for building electric vehicle
- Mariana Dobriianska* Increasing the bandwidth of networks by moving to a higher voltage class
- Korchak M., Fediv Ye., Sivakova O.* Virtual source of reactive power in electricity supply systems of household consumers
- Skvarok O., Kuznetsova M.* Modernization of water supply system of steam generator PGV-1000
- Voloshyna I., Moroz V.* Dynamic research of the rope electric drives
- Klos S., Svyryd O., Fedoryshyn R.* Optimization of Analog Signal Filtration Process

- Rymar T., Kravets T., Smirnov O., Kleman V.* Research of the coefficient of hydraulic resistance of padding with triangular channels of the package of cold and hot layer of RAH
- Balitskyi O., Dnistrian M., Sviastyn V.* Smart technologies for common building equipment of dwelling buildings
- Kovalenko T., Galyanchuk I., Galyanchuk V.* Improving power plant equipment work by applying alloyed industrial oil
- Dychuk P., Fedoryshyn R.* Computer-Aided Design of Gas Flow Temperature Measurement Errors
- Fedak Yu.* Prospects of the Ukraine's energy sector development with renewable energy sources

HUMANITIES & SOCIAL SCIENCES

- Monastyrna O.* The Effectiveness of Cooperative Learning in Teaching English as a Foreign Language (TEFL)
- Verkhoturova M.* Guns of the 16th century from the collection of Lviv historical museum
- Ustyianovych T., Khymysia N.* Application of machine learning algorithms for the study of Galicia population's social characteristics in the interwar period (1919-1939)
- Baranovska N., Hordon D.* Ukrainian national movement in Galicia through the prism of Ivan Franko's historical and cultural heritage
- Baranovska N., Herasimchuk O.* The process of dispossession of the kulaks as a personal tragedy Podolsk family

ECONOMICS & MANAGEMENT

- Blahii A., Kondrat I.* The impact of depreciation policy on investment.
- Dziurakh Yu.* Development of innovation and investment activity in agriculture of Ukraine
- Halanets V., Dziurakh Yu.* State support of agriculture in Ukraine: innovation and investment aspects
- Karpiv O., Pozniakova O.* Current state and prospects of development of cryptocurrency in Ukraine
- Kulinich T., Herelius N.* Factors of success of brewing enterprises (by the example of "Mykulynetskyi Brovar" LLC)
- Kulinich T., Perminova O.* Preparation of ideas for a social project: methods and practice of process management
- Kulyniak I., Cherkis S.* Integration of the Innovative System of Employee Adaptation at the Enterprise in the Context of Modern Challenges
- Lashchik I., Bondarenko L.* Theoretical approach to the banking crisis management model
- Melnyk O., Adamiv M., Todoshchuk A.* Foreign customs experience as a basis for reforming Ukrainian customs system in terms of European integration
- Patsai T., Kondrat I.* Anticrisis management goals
- Strypa N., Kondrat I.* The impact of FinTech on the development of traditional banking
- Synyutka N., Kurylo O., Bondarenko L.* Implementing Digital Tax Administration in Ukraine
- Yaremko I., Karkovska V.* The management of the potential of the economic system
- Yaskova I., Kondrat I.* Public-private partnership projects implementation

MECHANICAL ENGINEERING, MATERIALS SCIENCE, TRANSPORT

- Bojkiv M., Bura R.* Question of the quality of the service of cyclist traffic
- Bura R., Maksymiuk S.* Possibilities for implementation the bus rapid transit on city expressways with controlled motion
- Hrytsun O., Davosyr V.* Analysis of pedestrian speed of movement within signaled pedestrian crossings
- Shtoyko I., Dolinska I., Khaburskyi Ya., Kaniuk Yu.* Calculation of pipe residual lifetime of the exploited oil and gas pipelines
- Pyndyk V., Shevtsiv R., Ratych I.* Scientific approaches to the provision of dangerous goods transportation
- Nowak M.* Comparative tests of samples of high-speed tool steel with high-speed steel with DLC coating in terms of abrasion resistance
- Prykhodko V., Vikovych I.* Organization of international carriage of goods by transport
- Vovk Yu., Furman O., Masonkov O.* Dependence of the passenger's functional state changing from the public transport service quality
- Prykhodko V., Zhytenko O.* Study of comfort pedestrian traffic conditions
- Szewczynski K., Blach M.* The most common damage to the first generation Bosch unit injectors
- Ognik T., Soliński M.* Threats at car sprayer job

CHEMISTRY & CHEMICAL TECHNOLOGY

- Kalin D., Chobit M., Tokarev V.* Investigation of Mechanical Properties of Composites Filled with Modified Hydroxyapatite
- Brovarets' O., Tsiupa K., Dinets A., Hovorun D.* Quantum-mechanical survey of the novel conformational and tautomeric transformations of the classical Watson-Crick A·T(WC), reverse Watson-Crick A·T(rWC), Hoogsteen A·T(H) and reverse Hoogsteen A·T(rH) DNA base pairs
- Shpyrka I., Nebesnyi R., Orobchuk O., Ivasiv V., Khalameida S., Sydorchuk V.* The Effect of Hydrothermal Treatment of Silica-based Catalysts on their Efficiency in Acrylic Acid Synthesis via Oxidative Condensation of Methanol with Acetic Acid
- Melnyk S., Ostash B.* The Expression of Pleiotropic and Pathway-Specific Regulators of Secondary Metabolism in Clorobiocin Producer *Streptomyces Roseochromogenes* NRRL3504
- Hrab P., Yushchuk O., Ostash I., Ostash B.* Genes for Morphogenetic Proteins of Chaplin and Rodlin Families in Landomycin Producer *Streptomyces cyanogenus* S136
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