



CYSENI

15TH INTERNATIONAL CONFERENCE OF YOUNG SCIENTISTS ON ENERGY ISSUES CYSENI 2018, on 23-25th May

1st Conference day (23 May, 2018)

| | | |
|-------------|---|-----------------------------------|
| 08.00-09.00 | Registration (Main Hall) | |
| 09.00-10.50 | Morning session (Main Hall) | |
| 10.50-11.40 | Coffee brake | |
| | Section A Main Hall | Section B AK-202 |
| 11.40-13.00 | Renewable energy sources | Combustion and plasma processes |
| 13.00-14.00 | Launch | |
| 14.00-15.40 | Renewable energy sources | Materials sciences and technology |
| 15.40-16.00 | Coffee brake | |
| 16.00-17.40 | Energy economics and policy Hydrogen energy and fuel cell technologies | Renewable energy sources |
| 17.40-19.00 | Coffee break and poster session (1st Floor) | |
| 19.00 | Conference dinner (Canteen) | |

2nd Conference day (24 May, 2018)

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| 08.30-09.00 | Registration (Main Hall) | |
| 09.00-10.00 | Morning session (Main Hall) | |
| 10.00-11.00 | Coffee brake | |
| | Section A Main Hall | Section B AK-202 |
| 11.00-12.40 | Combustion and plasma processes | Nuclear fission and radiation protection |
| 12.40-13.40 | Launch | |
| 13.40-15.40 | Materials sciences and technology | BRILLIANT seminar |
| 15.40-16.00 | Coffee brake | |
| 16.00-17.20 | Renewable energy sources Energy efficiency and reliability Smart energy networks | BRILLIANT seminar |

3rd Conference day (25 May, 2018)

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|-------------|---|---|
| 08.30-09.00 | Registration (Main Hall) | |
| | Section A Main Hall | Section B AK-202 |
| 09.00-10.20 | Renewable energy sources | Energy economics and policy Global change and ecosystems |
| 10.20-10.40 | Coffee brake | |
| 10.40-12.00 | Thermal physics, fluid mechanics and metrology | Fusion energy Renewable energy sources |
| 12.00-12.30 | Coffee brake | |
| 12.30-13.00 | Final discussion and closure (Main Hall) | |
| 13.30-17.00 | Guided tour to „Achema“ (Entrance of LEI) | |



CYSENI

15TH INTERNATIONAL CONFERENCE OF YOUNG SCIENTISTS ON ENERGY ISSUES

CYSENI 2018, on 23-25th May

Day 1 (23th May, 2018)

MORNING SESSION (MAIN HALL)

MORNING SESSION

Keynote section A0 (Chairman: Vytautas Akstinas)

- 08.00-09.00 **REGISTRATION**
- 09.00-09.15 **WELCOME**
- 09.15-09.30 **WELCOME FROM THE MINISTRY OF EDUCATION AND SCIENCE OF THE
REPUBLIC OF LITHUANIA**
Eugenijus Butkus (Adviser to the Minister, Lithuania)
- 09.30-09.50 **NEW STRATEGY OF NATIONAL ENERGY**
Lina Sabaitienė (Vice-Minister of Energy, Lithuania)
- 09.50-10.20 **THE EUROPEAN ROADMAP TOWARDS FUSION ELECTRICITY**
Tony Donné (Programme Manager (CEO) of EUROfusion, Germany)
- 10.20-10.50 **HYDROPOWER IMPACTS ON RIVER SYSTEMS: THE HYDROMORPHOLOGICAL
APPROACH**
Francesco Comiti (Associate Professor at the Free University of Bozen-Bolzano, Italy)

10.50-11.40 Coffee break

SECTION A (MAIN HALL)

1. RENEWABLE ENERGY SOURCES

Section A1 (Chairman: Vytautas Akstinas)

- 11.40-12.00 **DEMAND-ORIENTED ENERGY SUPPLY BY THE ANAEROBIC DIGESTION OF
ORGANIC WASTE**
M. Wehner, W. Müller, A. Bockreis (University of Innsbruck, Austria)
- 12.00-12.20 **COMPARISON OF HYDRODYNAMIC LOADING MODELS ON FIXED MONOPILES IN
STEEP REGULAR WAVES**
*A. Mockutė, E. Marino, C. Borri (University of Florence, Italy), C. Lugni (CNR-INSEAN –
Maritime Research Institute - National Research Council, Italy)*
- 12.20-12.40 **THE USE OF CELLULAR COMMUNICATION MASTS FOR WIND SHEAR
RESEARCH**
*V. P. Bezrukovs (Institute of Physical Energetics, Latvia), V. V. Bezrukovs, S. Upnere, L.
Gulbe (Ventspils University College, Latvia), D. V. Bezrukovs (Riga Technical University,
Latvia)*
- 12.40-13.00 **THE INVESTIGATION OF FACTORS DETERMINING WIND POWER PREDICTION
ACCURACY: CASE STUDY OF WESTERN LITHUANIA**
*G. Gecevičius, M. Marčiukaitis (Lithuanian Energy Institute, Lithuania), G. Gecevičius
(Kauno Kolegija - University of Applied Sciences, Lithuania)*

13.00-14.00 Lunch



CYSENI

1. RENEWABLE ENERGY SOURCES

Section A2 (Chairman: dr. Diana Meilutytė-Lukauskienė)

- 14.00-14.20 **STUDY OF THE CATALYTIC ACTIVITY OF NATURAL MINERALS AND COMPOSITES BASED ON THEM IN PROCESS OF PYROLYTIC TAR DECOMPOSITION**
S. V. Vasilevich, A. N. Asadchyi, M. V. Malko, D. V. Degterov (The Institute of Power Engineering, Belarus)
- 14.20-14.40 **RESEARCH AND ANALYSIS OF THE IMPACT OF CHAR OUTLET VELOCITY ON THE PARAMETERS OF BIOMASS GASIFICATION IN A FIXED BED GRAVITY REACTOR**
M. Ochnio (Gdańsk University of Technology, Poland), P. Kazimierski, J. Kluska, D. Kardaś (Institute of Fluid-Flow Machinery, Poland)
- 14.40-15.00 **PERFORMANCE CHARACTERISTICS OF SINGLE-STAGE BIOHYTHANE PRODUCTION BY IMMOBILIZED ANAEROBIC BACTERIA**
D. T. Ta, C. Y. Lin, C. Y. Chu (Feng Chia University, Taiwan), T. M. N. Ta (Nha Trang University, Vietnam)
- 15.00-15.20 **EFFICIENT BIOMASS VALUE CHAINS FOR HEAT PRODUCTION FROM ENERGY CROPS IN UKRAINE**
O. V. Tryboi (Institute of Engineering Thermophysics, Ukraine)
- 15.20-15.40 **INVESTIGATION OF THE EFFECT OF KAOLIN ADDITIVE AND DIFFERENT ASHING TEMPERATURE OF AGROMASS**
D. Čepauskienė, N. Pedišius (Lithuanian Energy Institute, Lithuania)

15.40-16.00 Coffee break

4. ENERGY ECONOMICS AND POLICY

5. HYDROGEN ENERGY AND FUEL CELL TECHNOLOGIES

Section A3 (Chairman: Vytautas Akstinas)

- 16.00-16.20 **REPRESENTATION OF STOCHASTIC WIND POWER GENERATION IN ECONOMIC MODELS FOR LONG-TERM ENERGY PLANNING**
E. Neniškis, A. Galinis (Lithuanian Energy Institute, Lithuania)
- 16.20-16.40 **THE BASE FOR A EUROPEAN ENGAGEMENT MODEL – AN OPEN SOURCE ELECTRICITY MODEL OF SEVEN COUNTRIES AROUND THE BALTIC SEA**
H. T. J. Henke, M. Howells, A. Shivakumar (KTH Royal Institute of Technology, Sweden)
- 16.40-17.00 **BARRIERS OF INDUSTRIAL ENERGY EFFICIENCY**
A. Zuoza (Lithuanian Energy Institute, Lithuania), V. Pilinkienė (Kaunas University of Technology, Lithuania)
- 17.00-17.20 **COMPARATIVE ANALYSIS OF THE OPTIONS FOR THE SOLID BIOFUEL MARKET DEVELOPMENT IN UKRAINE**
A. V. Pastukh (NGO Renewable energy agency, Ukraine)
- 17.20-17.40 **STUDY OF GLYCINE NITRATE PRECURSOR METHOD FOR THE COMBUSTION SYNTHESIS OF SAMARIUM-DOPED CERIA**
A. Stankevičiūtė, F. Kalyk, G. Budrytė, B. Abakevičienė (Kaunas University of Technology, Lithuania)

17.40-19.00 Coffee break and poster session (1st Floor)

19.00 Conference dinner (Canteen)



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COFFEE BREAK AND POSTER SESSION (1st Floor)

17.40-19.00

Section A4 (Chairman: Vytautas Akstinas)

MECHANICAL PRE-TREATMENT OF MUNICIPAL WASTE FOR BIOGAS PRODUCTION

A. C. P. Lopes, W. Müller, A. Bockreis (Universität Innsbruck, Austria)

TECHNOLOGICAL PROGRESS AND SUBSTITUTION EFFECTS IMPACT ON GREENHOUSE GAS EMISSIONS

G. Liobikienė (Vytautas Magnus University, Lithuania)

IDENTIFICATION OF BARRIERS AND ACTIONS FOR ELECTRIC VEHICLE ADOPTION AT THE MUNICIPAL LEVEL

P. Mačiulis (Lithuanian Energy Institute, Lithuania)

PARAMETRIC ANALYSIS OF RECIRCULATING FLOW DYNAMICS IN MICROCAVITY

P. Vilkinis, N. Pedišius (Lithuanian Energy Institute, Lithuania)

ESTIMATION OF THE INFLUENCE OF WOOD-FIRE RETARDANTS ON FIRE BEHAVIOR OF SOME TYPES OF WOOD CONSTRUCTION MATERIALS

D. P. Kasymov, M. V. Agafontsev, V. V. Perminov (Tomsk State University, Russia)

INVESTIGATION OF THE BEHAVIOUR OF FIBROUS MATERIALS' ADHESIVE BONDS

G. Mikalauskaitė, G. Vadeikė, V. Daukantienė (Kaunas University of Technology, Lithuania)

CHARACTERIZATION OF CHEMICAL COMPOSITION AND PARAMAGNETIC CENTRES IN LATVIAN SHEEP BREED WOOL

V. Voikiva, L. Avotina, V. Kinerte, G. Kizane (University of Latvia - Institute of Chemical Physics, Latvia), L. Baumane (Latvian Institute of Organic Synthesis, Latvia)

INFLUENCE OF HYBRID LOADING ON THERMAL BEHAVIOR AND THERMOPHYSICAL PROPERTIES OF POLYAMIDE

K. V. Nikolaeva (A. V. Luikov Heat and Mass Transfer Institute, Belarus)

19.00 Conference dinner (Canteen)



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Day 1 (23th May, 2018)

SECTION B (ROOM AK-202)

10.50-11.40 Coffee break

8. COMBUSTION AND PLASMA PROCESSES

Section B1 (Chairman: dr. Svetlana Danilova-Tretiak)

- 11.40-12.00 **THE USE OF THERMAL PLASMA FOR THE TREATMENT OF SOIL CONTAMINATED BY PETROLEUM HYDROCARBONS**
D. Gimžauskaitė, A. Tamošiūnas, M. Aikas, R. Uscila (Lithuanian Energy Institute, Lithuania), J. Samosionokas (Public Agency "Soil remediation technologies", Lithuania)
- 12.00-12.20 **INVESTIGATION OF COMPRESSION EROSION PLASMA FLOW GENERATED BY A COMPACT ACCELERATOR**
P. N. Shoronov (A. V. Luikov Heat and Mass Transfer Institute, Belarus)
- 12.20-12.40 **THE REVIEW OF PLASMA SPRAY PARAMETERS EFFECT ON THE STRUCTURE OF THE COATINGS**
A. Šuopys, V. Grigaitienė (Lithuanian Energy Institute, Lithuania)
- 12.40-13.00 **NUMERICAL MODELLING OF PLASMA REACTOR FOR GASIFICATION OF WASTES WITH PREDOMINANT ORGANIC PART**
A. Liavonchyk, D. Morozov, V. Sauchyn, H. Dalholenka (A. V. Luikov Heat and Mass Transfer Institute, Belarus)

13.00-14.00 Lunch

10. MATERIALS SCIENCES AND TECHNOLOGY

Section B2 (Chairman: dr. Maria Habicht)

- 14.00-14.20 **STUDY ON THE PROPERTIES OF TiO₂ THIN FILMS DEPOSITED BY ULTRASONIC SPRAY PYROLYSIS**
Z. Chen, I. Oja Acik, I. Dündar, A. Mere (Tallinn University of Technology, Estonia)
- 14.20-14.40 **SOLVENT EFFECT ON EXTRACTION OF PYROLYSIS TYRE OIL**
T. M. Henarava, V. V. Sauchyn, V. V. Grushevskiy (A. V. Luikov Heat and Mass Transfer Institute, Belarus), S. M. Leschev (Belarusian State University, Belarus)
- 14.40-15.00 **PRELIMINARY STUDIES OF SELECTED CALCIUM FLY ASHES AS THE SUBSTRATES OF GEOPOLYMER MATERIAL**
M. Kubeł, N. Czuma, P. Baran, K. Zarębska, B. Samojedon (AGH University of Science and Technology)
- 15.00-15.20 **THE TRIBOLOGICAL PROPERTIES OF Al₂O₃ BASED COMPOSITE COATINGS DEPOSITED BY PLASMA SPRAYING**
J. S. Mathew, L. Marcinauskas, B. Thanigachalam, R. Česnavičius (Kaunas University of Technology, Lithuania), M. Milieška, R. Kėželis (Lithuanian Energy Institute, Lithuania), A. Kupec, M. Kalin (Laboratory for Tribology and Interface Nanotechnology, Slovenia)
- 15.20-15.40 **THE USE OF MATHEMATICAL MODELS FOR MODELLING OF SULPHUR DIOXIDE SORPTION ON MATERIALS PRODUCED FROM FLY ASHES**
N. Czuma, K. Zarębska, P. Baran (AGH University of Science and Technology, Poland), P. Gauden (Nicolaus Copernicus University in Toruń, Poland)

15.40-16.00 Coffee break



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1. RENEWABLE ENERGY SOURCES

Section B3 (Chairman: dr. Anton Brin)

- 16.00-16.20 **EVALUATION OF THE CALMET MESOSCALE METEOROLOGICAL MODEL AGAINST WIND MEASUREMENTS IN FOUR LANDSCAPE ZONES OF UKRAINE**
D. O. Oshurok (Ukrainian Hydrometeorological Institute, Ukraine)
- 16.20-16.40 **INVESTIGATION OF CHEMICAL COMPOSITION OF PARTICULATE MATTER EMMITED FROM SMALL AND MEDIUM SCALE BIOMASS BOILERS**
V. Zaleskas, M. Kulokas, N. Pedišius (Lithuanian Energy Institute, Lithuania)
- 16.40-17.00 **HEAT EXCHANGE UNIT WITH MICROCHANNELS FOR A THERMOPHOTOENERGY SYSTEM**
R. V. Zaitsev (National Technical University - Kharkiv Polytechnic Institute, Ukraine)
- 17.00-17.20 **INVESTIGATION OF PROCESSES IN A GRATE FURNACE TO INTENSIFY BIOFUEL DRYING**
L. Vorotinskienė, N. Striūgas (Lithuanian Energy Institute, Lithuania)
- 17.20-17.40 **DEVELOPMENT OF HYBRID THERMOPHOTOENERGY UNIT FOR AUTONOMOUS HEAT SUPPLY**
D. S. Prokopenko, R. V. Zaitsev, M. V. Kirichenko (National Technical University - Kharkiv Polytechnic Institute, Ukraine)

17.40-19.00 Coffee break and poster session (1st Floor)

19.00 Conference dinner (Canteen)



CYSENI

DAY 2 (24th May, 2018)

KEYNOTE SESSION (MAIN HALL)

MORNING SESSION

Keynote section A0 (Chairman: Vytautas Akstinas)

- 08.30-09.00 **REGISTRATION**
- 09.00-09.30 **NEW REACTORS: INTERNATIONAL DEVELOPMENTS AND SAFETY FEATURES**
Justus Oldenburg (Secretary of the Technical Director of GRS, Germany)
- 09.30-10.00 **TRADE-OFFS BETWEEN ENERGY INNOVATION AND PRICE: STATE RESPONSIBILITIES AND ENERGY JUSTICE**
Michael LaBelle (Associate Professor at the Central European University, Hungary)

10.00-11.00 Coffee break

SECTION A (MAIN HALL)

8. COMBUSTION AND PLASMA PROCESSES

Section A1 (Chairman: Vytautas Akstinas)

- 11.00-11.20 **INVESTIGATION OF KINETIC PARAMETERS FOR COMBUSTION OF PET BOTTLE CAPS WITH LIGNITE**
S. Mertdinç, N. I. Ünal, H. Haykiri-Açma, S. Yaman (Istanbul Technical University, Turkey)
- 11.20-11.40 **INVESTIGATION OF FLAME MONITORING AND Na^{*}, K^{*}, Ca^{*} RADICALS EMISSION DURING COMBUSTION OF BIOMASS PARTICLE**
M. Sadeckas, N. Striūgas (Lithuanian Energy Institute, Lithuania)
- 11.40-12.00 **AUTOIGNITION OF DECANE/AIR MIXTURE IN THE RAPID COMPRESSION MACHINE AT INTERMEDIATE TEMPERATURES**
V. V. Leschevich, O. G. Penyazkov, S. Yu. Shimchenko (A. V. Luikov Heat and Mass Transfer Institute, Belarus)
- 12.00-12.20 **RESEARCH OF CH⁺ CHEMILUMINESCENCE INTENSITY DEPENDENCE ON EXCESS AIR RATIO IN PREMIXED NATURAL AND PRODUCER GAS FLAME**
A. Saliamonas, R. Navakas, N. Striūgas, A. Džiugys, K. Zakarauskas (Lithuanian Energy Institute, Lithuania)
- 12.20-12.40 **POSSIBILITY OF FLAME TEMPERATURE MEASUREMENTS BY PHOTOEMISSION METHOD**
K. A. Viazava (A. V. Luikov Heat and Mass Transfer Institute, Belarus)

12.40-13.40 Lunch



10. MATERIALS SCIENCES AND TECHNOLOGY

Section A2 (Chairman: Vytautas Akstinas)

- 13.40-14.00 **INVESTIGATION OF THIN FILM DEPOSITION RATE DEPENDENCY ON MAGNETIC FIELD INDUCTION**
D. Stankevičius, A. Iljinas (Kaunas University of Technology, Lithuania), A. Iljinas (Kauno kolegija - University of Applied Sciences, Lithuania)
- 14.00-14.20 **APPLICATION OF RADIOGRAPHIC METHODS IN PYROLYSIS AND GASIFICATION OF A SINGLE BIOMASS PARTICLE**
P. Kazimierski, P. Tiutiurski, D. Kardaś (Institute of Fluid-Flow Machinery, Poland), M. Ochnio (Gdańsk University of Technology, Poland)
- 14.20-14.40 **FORMATION OF DOPED AMORPHOUS DIAMOND-LIKE CARBON FILMS BY DC MAGNETRON SPUTTERING**
V. Dovydatis, L. Marcinauskas, A. Iljinas (Kaunas University of Technology, Lithuania)
- 14.40-15.00 **LEAD FERRITE SYNTHESIS BY REACTIVE MAGNETRON SPUTTERING AND ANALYSIS**
B. Beklešovas, V. Stankus (Kaunas University of Technology, Lithuania)
- 15.00-15.20 **NUMERICAL PREDICTION OF MECHANICAL PROPERTIES OF ZIRCONIUM ALLOY WITH HYDRIDES USING FINITE ELEMENT METHOD**
R. Janulionis, R. Kriūkienė (Lithuanian Energy Institute, Lithuania)
- 15.20-15.40 **DEFROSTING CHARACTERISTICS OF INDIUM TIN OXIDE FILM COATED WINDSHIELDS**
P. Dolmantas, R. Ramanauskas, V. Marudinas, A. Iljinas (Kaunas University of Technology, Lithuania)

15.40-16.00 Coffee break

1. RENEWABLE ENERGY SOURCES 2. ENERGY EFFICIENCY AND RELIABILITY 3. SMART ENERGY NETWORKS

Section A3 (Chairman: dr. Gunta Šlihta)

- 16.00-16.20 **REMOVAL OF INORGANIC CONSTITUENTS FROM CORN STALK BIOMASS**
N. Baydar, H. Açma, S. Yaman (Istanbul Technical University, Turkey)
- 16.20-16.40 **ENHANCING ENERGY EFFICIENCY THROUGH LOW-CARBON TECHNOLOGIES IN BUILDINGS**
A. Vitkutė, J. Dvarionienė (Kaunas University of Technology, Lithuania)
- 16.40-17.00 **INVESTIGATION OF DYNAMIC LINE RATING BASED ON NEURAL NETWORKS**
L. Rácz, B. Németh (Budapest University of Technology and Economics, Hungary)
- 17.00-17.20 **MIXED-INTEGER LINEAR PROGRAMMING BASED LOAD SCHEDULING OPTIMIZATION FOR SMART HOMES IN TURKEY**
A. C. Duman, Ö. Güler, Ö. Gönül, K. Deveci (Istanbul Technical University, Turkey)



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DAY 2 (24th May, 2018)

SECTION B (ROOM AK-202)

7. NUCLEAR FISSION AND RADIATION PROTECTION

Section B1 (Chairman: dr. Tadas Kaliatka)

- 11.00-11.20 **ADVANCED SIMULATION TOOL OF NUCLEAR FUEL CYCLE**
B. Chmielarz, W. Gudowski, Y. Hrabar, C. Ding, J. Zou (KTH Royal Institute of Technology, Sweden), B. Chmielarz (USNC Europe, France), C. Ding, J. Zou (Tsinghua University, China), A. Bidakowski (Uppsala University, Sweden)
- 11.20-11.40 **ANALYSIS OF THE CROSS SECTION FUNCTION OF Cd113 IN THE COLD NEUTRONE ENERGY RANGE**
Zs. Tóth (Budapest University of Technology and Economics, Hungary)
- 11.40-12.00 **NUMERICAL INVESTIGATION OF THE THERMAL HYDRAULIC PHENOMENA IN A RECTANGULAR ENCLOSURE**
A. Graževičius (Lithuanian Energy Institute, Lithuania)
- 12.00-12.20 **THERMAL STATE OF WWER-1000 SPENT FUEL ASSEMBLIES AT THE DRY INTERIM STORAGE**
D. Lunov, S. Alyokhina (V. N. Karazin Kharkiv National University, Ukraine)
- 12.20-12.40 **CALCULATING THE CORRECTION CROSS SECTION FUNCTION OF NON 1/V NUCLEI IN COLD NEUTRON BEAM MEASUREMENTS**
Zs. Tóth (Budapest University of Technology and Economics, Hungary)

12.40-13.40 Lunch

BRILLIANT seminar

Section B2 (Chairman: dr. Egidijus Urbonavičius)

- 13.40-13.45 **Welcome**
S. Rimkevičius (Lithuanian Energy Institute, Lithuania)
- 13.45-14.00 **Ignalina NPP decommissioning and International cooperation**
L. Sabaitienė (Vice-Minister of Energy, Lithuania)
- 14.00-14.15 **Regional cooperation in R&D**
S. Juciutė (SC3 NCP, Agency for Science, Innovation and Technology, Lithuania)
- 14.15-14.30 **European Nuclear society – activities and projects**
C. Legrain (ENS Vice-President)
- 14.30-14.45 **Overview of BRILLIANT and future cooperation**
S. Rimkevičius (Lithuanian Energy Institute, Lithuania)
- 14.45-15.00 **BRILLIANT Achievements – Nuclear field studies, public communication and dissemination**
Y. Hrabar (KTH Royal Institute of Technology, Sweden)
- 15.00-15.15 **BRILLIANT Achievements – Nuclear Research Capacity building in Baltic region**
J. Jagielski (NCBJ, Poland)

15.15-15.45 Coffee break



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BRILLIANT seminar

Section B3 (Chairman: dr. Egidijus Urbonavičius)

- 15.45-16.00 **BRILLIANT Achievements – Regional cooperation on nuclear waste and fuel cycle**
L. Juodis (FTMC, Lithuania)
- 16.00-16.15 **BRILLIANT Achievements – Regional cooperation in analysis of long-term energy supply options and energy security on regional level**
E. Norvaiša (Lithuanian Energy Institute, Lithuania)
- 16.15-16.30 **BRILLIANT Achievements – Macroeconomic impact assessment of nuclear programs**
A. Auce (University of Latvia, Latvia)
- 16.30-17.00 **Concluding discussion**
“Regional cooperation perspectives”
Moderator E. Urbonavičius (Lithuanian Energy Institute, Lithuania)



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DAY 3 (25th May, 2018)

SECTION A (MAIN HALL)

1. RENEWABLE ENERGY SOURCES

Section A1 (Chairman: dr. Diana Meilutytė-Lukauskienė)

- 09.00-09.20 **STUDY OF THE YIELD OF CARBON SORBENTS FROM GRAIN HUSKS TREATED WITH SODIUM CHLORIDE**
A. N. Karnitski (Institute of Power Engineering, Belarus)
- 09.20-09.40 **DETERMINATION OF KINETIC PARAMETERS OF ORIGINAL AND TORREFIED BIOMASS SAMPLES**
A. Çalışkan, H. Haykiri-Açma, S. Yaman (Istanbul Technical University, Turkey)
- 09.40-10.00 **DEVELOPMENT AND OPTIMIZATION OF FAST ABLATIVE PYROLYSIS TECHNOLOGY IN UKRAINE**
V. I. Zubenko, A.V. Epik, V.O. Antonenko (Scientific Engineering Centre "Biomass", Ukraine)
- 10.00-10.20 **DETERMINATION OF THE EFFECTS OF PARTICLE SIZE ON COMBUSTION KINETICS OF CORN WASTE**
Ö.H. Çöp, A. Çalışkan, H. Haykiri-Açma, S. Yaman (Istanbul Technical University, Turkey)

10.20-10.40 Coffee break

9. THERMAL PHYSICS, FLUID MECHANICS AND METROLOGY

Section A2 (Chairman: Vytautas Akstinas)

- 10.40-11.00 **WASTE HEAT RECOVERY FROM FLUE GASES IN FLUE GAS CONDENSERS**
V. Kulkovas (Lithuanian Energy Institute, Lithuania)
- 11.00-11.20 **SUBSTANTIATION AND THE RANGE OF APPLICATION OF A NEW METHOD FOR HEAT TRANSFER PREDICTION IN CONDENSING INSIDE PLAIN TUBES** V. G. Rifert, V. V. Gorin, P. A. Barabash, A. S. Solomakha (National Technical University of Ukraine - Igor Sikorsky Kyiv Polytechnic Institute, Ukraine), V. V. Sereda (National University of Water and Environmental Engineering, Ukraine)
- 11.20-11.40 **INVESTIGATION OF A COMPLEX FLUID-STRUCTURE INTERACTION PROBLEM IN A PATIENT SPECIFIC OPHTHALMIC ARTERY USING FIBER-REINFORCED ARTERY WALL CONSTITUTIVE MODEL**
E. Misiulis, A. Džiugys (Lithuanian Energy Institute, Lithuania)
- 11.40-12.00 **NUMERICAL MODELING OF WOOD CHIPS PACKED BED DRYING**
G. Skarbalius, E. Misiulis, A. Džiugys, L. Vorotinskienė (Lithuanian Energy Institute, Lithuania)

12.00-12.30 Coffee break

FINAL DISCUSSION AND CLOSURE (Main Hall)

12.30-13.00

Section A3 (Chairman: Vytautas Akstinas)

**13.30 Guided tour to "Achema"
(Entrance of LEI)**



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DAY 3 (25th May, 2018)

SECTION B (ROOM AK-202)

4. ENERGY ECONOMICS AND POLICY 11. GLOBAL CHANGE AND ECOSYSTEMS

Section B1 (Chairman: dr. Justas Kažys)

- 09.00-09.20 **THE COOPERATION OF THE EU WITH THE EASTERN NEIGHBOURS IN SECURING THE GAS SUPPLY AFTER THE NEWLY ADOPTED REGULATION 2017/1938**
M. Iakovenko (University of Eastern Finland, Finland)
- 09.20-09.40 **SUSTAINABLE DEVELOPMENT AND INNOVATION AS FACTORS OF COMPETITIVENESS**
D. Silakalne-Arāja (Riga Technical University, Latvia)
- 09.40-10.00 **VARIABILITY OF PROJECTIONS OF MAXIMUM DISCHARGES IN THE LITHUANIAN RIVERS**
V. Akstinas (Lithuanian Energy Institute, Lithuania)
- 10.00-10.20 **IMPROVEMENT OF THE KTU EXPERIMENTAL DEVICE FOR THE REDUCTION OF NO_x USING CHARCOAL**
E. Kaliatkienė (Kaunas University of Technology, Lithuania)

10.20-10.40 Coffee break

6. FUSION ENERGY 1. RENEWABLE ENERGY SOURCES

Section B2 (Chairman: dr. Martynas Lelis)

- 10.40-11.00 **APPLICATION OF SENSITIVITY ANALYSIS IN EVALUATION OF AGGREGATE CROSS-SECTIONS FOR IRRADIATED EUROFER AND CUCRZR ALLOYS**
A. Tidikas (Lithuanian Energy Institute, Lithuania)
- 11.00-11.20 **LIQUID METAL SOLUTIONS FOR HEAT EXHAUSTION IN FUSION REACTORS**
I. Kaldre (University of Latvia, Latvia)
- 11.20-11.40 **HEMP ABILITY ACCUMULATE HEAVY METALS FROM HIGH LEVEL FERTILIZED SOIL OF SEWAGE SLUDGE AND SEWAGE SLUDGE CHAR**
M. Praspaliauskas (Lithuanian Energy Institute, Lithuania), J. Žaltauskaitė (Vytautas Magnus University, Lithuania)

12.00-12.30 Coffee break

FINAL DISCUSSION AND CLOSURE (Main Hall)

12.30-13.00

Section A3 (Chairman: Vytautas Akstinas)

**13.30 Guided tour to “Achema”
(Entrance of LEI)**