A photograph of an offshore wind farm with several wind turbines in a row on the ocean. The sky is clear and blue. The foreground shows a close-up of a turbine's nacelle and tower.

International Conference on Advances in Energy Systems and Environmental Engineering (ASEE19)

9–12 June, 2019
Wroclaw, Poland

Conference Programme

CLEAN ENERGY | CLEAN WATER | CLEAN AIR

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Sunday 9 June 2019

15:00-17:00 Registration (building D-1, Pl. Grunwaldzki 13, hall 14.1)

Monday 10 June 2019

08:30 – 13:00 Registration (Congres Centre – building D -20, 8 Janiszewskiego Street)

09:00 – 10:00 Coffee

10:00 – 10:20 Opening Ceremony of ASEE19 (Congres Centre – building D-20, hall 10AC)
Prof. Katarzyna Piekarska - Dean of Faculty of Environmental Engineering
Prof. Cezary Madryas - Rector of Wrocław University of Science and Technology
Dr Jacek Ossowski - Municipality of Wrocław
Chairmen: **Prof. Hussam Jouhara** Brunel University of London,
Prof. Evgeniy Shchesnyak, RUDN University of Moscow,
Prof. Jan Danielewicz, Wrocław University of Science and Technology

10:20 – 10:50 Lecture/keynote: *Renewable Energy Systems: Current Status and Prospects*,
by **Prof. Soteris Kalogirou** (Cyprus University of Technology, Limassol)
Chair: **Prof. Hussam Jouhara** (UK), Prof. Jan Danielewicz (Poland)

10:20 – 10:50 Lecture/keynote: *Possibilities and potentials for utilization of waste heat in the production of special steels*,
by **Mr Alojz Buhvald** (Executive Director of Production at SIJ Metal Ravne, Slovenia)
Chair: Prof. Hussam Jouhara (UK), Prof. Jan Danielewicz (Poland)

11:20 – 11:40 Sponsor presentation

11:40 – 12:00 Coffee Break

12:00 – 13:00 Scheduled session 1 (hall 10AC), session 2 (hall 10B) and session 3 (hall 10D)

13:00 – 14:00 Lunch (The Students Cultural Zone-building C-18, 10 Hoene-Wrońskigo Street)

14:00 – 17:00 Scheduled session 4 - Part A and B (hall 10AC)
“**The International Symposium on Energy Efficiency in Europe**” **Part I** (hall 10D)
Poster session I (hall 114)

18:00 – 22:00 Banquet at the Centennial Hall with a fountain show (Wystawowa 1 street, Wrocław)



Centennial Hall, Wrocław UNESCO, Wystawowa 1 street, Wrocław

Monday 10 June 2019

	Session 1 (hall 10AC) ENERGY AND BUILDING ENVIRONMENT Chair: Prof. Vassilis Stathopoulos Prof. Sylvie Rouge	Session 2 (hall 10B) INDOOR AIR QUALITY Chair: Prof. Janusz Wojtkowiak Dr. Fabio Schiro	Session 3 (hall 10D) COOLING TECHNOLOGY FOR ENVIRONMENT Chair: Prof. Stanisław Kajl Dr. Sylwia Szczęśniak
12:00-12:15	Distribution and forecast of air temperature in determining of heat output of the district heating substation with heat storage M. Turski, R. Sekret	Diversity of occupants' activity impact on indoor air A. Szczurek, M. Maciejewska, A. Dolega	Maisotsenko Cycle: a new source of renewable Energy D. Pandelidis, A. Pacak, S. Anisimov
12:15-12:30	The use of green walls and the impact on air quality and life standard M. Wesołowska, M. Laska	Recognition of emission from the wood based products waste combustion using differential ion mobility spectrometry M. Maciejewska, A. Szczurek, Ż. Zajczek	Universal unit for cooling and heating systems through the Maisotsenko Cycle D. Pandelidis, A. Pacak, S. Anisimov
12:30-12:45	Ensuring the reliability and safety of renovation facilities when introducing modern methods of building control A. Yurgaytis, D. Topchy, A. Popova	The influence of crop dryer operation parameters on the efficiency of energy recovery from extract air E. Przydróżny, A. Przydróżna, S. Szczęśniak, J. Walaszczyk	A method of cooling capacity enhancement of ceiling panel J. Wojtkowiak, L. Amanowicz
12:45-13:00	Increasing the share of RES in Polish district heating systems using power-to-heat technology M. Kwęstasz, M. Chaczykowski	Temperature and airflow setting in dual-duct ventilation systems E. Przydróżny, A. Przydróżna	Estimation of sensible and latent heat based on measurements for non-typical large room S. Szczęśniak, J. Walaszczyk

Monday 10 June 2019

Session 4 (hall 10AC)		“THE INTERNATIONAL SYMPOSIUM ON ENERGY EFFICIENCY IN EUROPE”		POSTER SESSION I (hall 114)
RENEWABLE ENERGY TECHNOLOGIES & STORAGE		PART I (hall 10D)		Chair: Prof. Barbara Widera Prof. Iwona Zawieja
Chair: Prof. Oksana Karpenko Prof. Wojciech Lipiński		Chair: Prof. Fouad Al-Mansour		
Part A				
14:00-14:15	Numerical Investigation on the Performance of a Small Counter-Rotating Wind Turbine M. Pacholczyk, K. Blecharz, D. Karkosiński	14:00	Keynote: Luca Montorsi A novel Carbon Capture and Utilisation concept applied to the ceramic industry	1. Renewables for district heating in Lithuania R. Jonynas, R. Poškas, L. Paukštaitis, V. Lukoševičius, J. Gudzinskas, H. Jouhara, E. Puida
14:15-14:30	The effect of anionic surfactants on aeroponic cultivation of lettuce in space applications K. Janiak, A. Jurga, J. Kuźma, W. Breś	14:25	Keynote: Fouad Al-Mansour Possibilities and potentials for utilization of waste heat in the production of special steels	2. Disposal of flue gases in oil reservoirs with high-viscosity oil in order to increase oil recovery and improve the environmental situation E. Shchesnyak, A. Ryzhkov, I. Ledovich, A. Osipov, A. Musin
14:30-14:45	Effect of meteorological conditions on odour emission at biogas plants processing municipal waste – pilot research M. Wiśniewska, A. Kulig, K. Lelicińska-Serafin	14:50	EU Project: IMPROOF: Peter Oud Low-Emission Cracking Furnace	3. Selection of optimal parameters of horizontal wells with SAGD technology based on numerical simulation E. Shchesnyak, A. Ryzhkov, I. Ledovich, A. Osipov, A. Musin
14:45-15:00	Systematic Approach for Improving Energy Efficiency in Industrial Facilities, from Energy Audit to Practical Implementation – Case Study Production of Autoclaved Aerated Concrete B. Susic, M. Peckaj, Z. Tomsic, J. Uranic			4. Effect of food shortage and metal contamination on the mealworm <i>Tenebrio molitor</i> (Coleoptera: Tenebrionidae) M. Wróbel, J. Rybak
15:05 – 15:25 Coffee break				
Part B				
15:30-15:45	Thermodynamic and techno-economic analyses of a combined-cycle solar thermal power plant with manganese oxide based thermochemical energy storage Q. Lei, R. Bader, P. Kreider, K. Urkalan, J. Jordan, K. Lovegrove, W. Lipiński	15:35	Bakartxo Egilegor Ezenarro ETEKINA: Analysis of the potential for waste heat recovery in three sectors: aluminium low pressure die casting, steel sector and ceramic tiles manufacturing sector	5. Use of waste heat recovery from refrigeration system in a commercial facility – a case study A. Zając
15:45-16:00	Testing the performance of a prototype thermal energy storage tank working with organic phase change material for space heating application conditions M. K. Koukou, M. G. Vrachopoulos, G. Dogkas, Ch. Pagkalos, K. Lymperis, L. Coelho, A. Rebola	15:50	Ana M. López-Sabirón Advanced retrofitting solution for furnaces and processes as a key path towards creating eco-efficient and competitive energy intensive industries	6. The Modelling of Nuclear Power Plant’s evaporative cooling tower operation taking into account hydrometeorological conditions A. Solovyev, D. Solovyev, L. Shilova, A. Adamtsevich
16:00-16:15	Studies on the possible application of heat storage devices for powering the ORC (Organic Rankine Cycle) systems P. Kolasiński	16:05	Bakartxo Egilegor Ezenarro Modelica model of industrial gas furnaces	7. Long-term trends of air pollutant concentrations in Poland S. Hoffman
16:15-16:30	Dual Media Thermocline (DMT) design methodology for heat storage in the range 80-600°C- The SMARTREC project S. Rougé, B. W. Robinson, O. Soriano, A. Gibbs	16:20	Peter Vrtič Analysis of photovoltaic system with battery storage in winter period	8. Modeling the global biogeochemical cycle of carbon and nitrogen in the system atmosphere-plant-soil A. Kurbatova, M. Tarko, P. Kozhevnikova
16:30-16:45	Renewable hydrogen as an energy storage solution B. Widera	16:35	Bertrand Delpech Waste heat recovery in the ceramics industry using a Heat Pipe Heat Exchanger system	9. Fluidisation of iron-based oxygen carrier for chemical looping combustion G. Berkowicz, M. Miłkoś
16:45-17:00	Experimental determination of cold water temperature at the inlet to solar water storage tanks M. Żukowski			10. Biogas production in the methane fermentation of excess sludge oxidized with Fenton’s reagent I. Zawieja, K. Brzeska
				11. Influence of ultrasonic field parameters on the biochemical activity of leachates from the composting process M. Worwąg, I. Zawieja
				12. Evaluating a Prototype Compact Thermal Energy Storage Tank Using Paraffin-based Phase Change Material for Domestic Hot Water Production G. Dogkas, J. Konstantaras, M. K. Koukou, V. N. Stathopoulos, L. Coelho, A. Rebola
				13. Experimental and CFD analysis on heat transfer and fluid flow characteristic of a tube equipped with variable pitch twisted tape S. Paneliya, P. Prajapati, U. Patel, I. Trivedi, A. Patel, K. Patel, S. Khanna
				14. Innovative model of trigeneration system generating desalinated, hot and cold water by using low grade heat recovery from nuclear reactor set in cascade of sorption devices. R. Zwierzchowski, M. Malicki, M. Lipka
				15. Decomposition of LCD screen inverter by pyrolysis A. Gurgul, W. Szczepaniak, M. Zablocka-Malicka
				16. The impact of ETC/PCM solar energy storage on the energy performance of a building R. Sekret, P. Feliński
				17. Analysis and simulation of the circulation pump operation M. Fijewski, I. Polarczyk, J. Paduchowska
				18. Energy-saving analysis of grey water heat recovery systems for student dormitory J. Paduchowska, A. Żabnieńska-Góra, I. Polarczyk
				19. Summer local solar parameters in relation to typical meteorological data J. Rudniak
				20. Utilization and recycling of municipal solid waste in a subarctic zone. E. V. Savenkova, M. A. Sayegh, A. Y. Bystrykov, T. K. Blokhina, O. A. Karpenko,

Tuesday 11 June 2019

- 09:00 – 12:30** **The International Workshop on: Valorisation of industrial waste heat** (Hall 10B)
EU H2020 DREAM Workshop, EU H2020 SMARTREC Workshop
- 09:30 – 10:10** Lecture/keynote: *Indoor Air quality - new environmental challenge*, (Hall 10AC)
 by **Prof. Andrzej Szczurek**, Wroclaw University of Science and Technology
 Chair: Prof. Soteris Kalogirou, Mr. Alojz Buhvald
- 10:10 – 10:50** Lecture/keynote: *Heat recovery and ceramic tiles production cycle*, (Hall 10AC)
 by **Mr Gabriele Frignani**, Technical Training Service of SACMI FORNI
 Chair: Prof. Soteris Kalogirou, Mr Alojz Buhvald
- 10:50 – 11:10** Coffee Break
- 11:10 – 12:40** Scheduled session 5 (hall 10AC) , and poster session II (hall 114)

THE INTERNATIONAL WORKSHOP ON: VALORISATION OF INDUSTRIAL WASTE HEAT (hall 10B) Chair of EU H2020 DREAM: Mr Gabriele Frignani Chair of EU H2020 SMARTREC: Mr Andy Gibbs		Session 5 (hall 10AC) RENEWABLE ENERGY TECHNOLOGIES Chair: Prof. Christian Heschl Dr. Anatoly Ryzkov		POSTER SESSION II (hall 114) Chair: Prof. Justyna Rybak Prof. Fouad Al-Mansour	
09:00-09:15	09:00-9:15 Keynote: Waste Heat Recovery Potential in aluminium recycling Presenter: Andy Gibbs (ALTEK)	11:10-11:25	System efficiency of PVT-collector driven heat pumps F. Hengel, C. Heschl, F. Inschlag, P. Klanatsky	21. Long-wave radiation balances of grassy surface and bare soil in Wroclaw K. Bryś, T. Bryś, H. Ojrzńska	29. A GIS Open Source Software application for mapping solar energy resources in urban areas M. Pietras-Szewczyk
09:55-09:50	09:15-9:30: Topic (TWI-Corrosion) Presenter: TWI Ben Robinson 09:35- 09:50: Topic (CEA-DMT/ LH Storage) Presenter: CEA Sylvie Rouge	11:25-11:40	Comprehensive heat treatment using solar energy to produce high quality foam concrete B. Tokmyrza, L. Aruova, N. Dauzhanov, Z. Ospanova, A. Utkelbaeva	22. Antibiotic resistance in tap water during the summer season – preliminary research A. Siedlecka, K. Piekarska	30. Energy saving and reduction of emissions in heating residential buildings in Poland - potential and selected P. Lis
09:50-10:30	09:55- 10:10: Topic (Spike) Presenter: Paolo Taddei	11:40-11:55	A new funding scheme for MSW management to support WtE program Farizal, N. Amalin, A. Rachman	23. Studies on PV power plant design to fulfil the energy demand of small community in Poland E. Krawczak	31. Methods of drainage and transfer of rainwater R. Malmur
10:35-10:50	10:15-10:30: Topic (Per- CFD) Presenter: FPS Attendance: TBC 10:35-10:50: Topic (Econotherm + ITC —ITC HPHE) Presenter: ITC Attendance: TBC	11:55-12:10	Modern Information and mathematical models in construction Industry V. A. Minaev, V. M. Pizengolts, A. O. Faddeev, A. Y. Bystryakov, E. V. Savenkova, E. V. Kruglikova	24. Improvement of operation of steam cushion system for sensible thermal energy storage R. Zwierzchowski	32. Heavy metals pollution of a solid waste landfill T. K. Blokhina, O. A. Karpenko
10:55-11:10	10:55-11:10: Topic: Presenter: Daniel Brough	12:10-12:25	Numerical Laminar Forced Convection Modelling in a Ceramic and Concrete Solar Collector with Non-Circular Duct T. J. Teleszewski	25. Design of materials for solid oxide fuel cells cathodes and oxygen separation membranes based on fundamental studies of their oxygen mobility and surface reactivity V. Sadykov, E. Sadovskaya, N. Ereemeev, E. Pikalova, N. Bogdanovich, E. Filonova, Y. Fedorova, A. Krasnov, P. Skriabin, A. Lukashevich	34. Renewable energy sources for gas preheating S. Englart, A. Jedlikowski, W. Cępiński, M. Badura
11:10-12:30	11:10am 11:30: End of Session 12:00-12:30: Panel Session	12:25-12:40	Multi-objective optimization of CuO based organic Rankine cycle operated using R245ca P. Prajapati, V. Patel	26. The prevalence of dentofacial anomalies and the prognosis of morbidity of the population living in the zone of ecological distress of the Republic of Dagestan T. F. Kosyreva, F. I. Astarkhanova, I. Astarkhanov, T. S. Astarkhanova, L. I. Alibalaeva, I. N. Osmanov	35. The influence of airflow on the effectiveness of rotary heat exchangers operating under high-speed rotor conditions P. Kanaś, A. Jedlikowski, S. Anisimov
				27. Sensor network for PM2.5 measurements on an academic campus area M. Badura, I. Sówka, P. Batóg, P. Szymański, Ł. Dąbrowski	36. The vibroisolation effectiveness of fiber reinforced natural composites compared to the elastomer materials produced from non-renewable resources. A. Pawlik, S. Frackowiak, K. Leluk
				28. The influence of the secondary geodynamic factors on medicobiological and economic risks V.A. Minaev, M.P Sychev , A.O. Faddeev, V.M. Pizengolts, D.P. Karpova	36. Oversizing and HVAC system operation M. Stanescu, S. Kaji, L. Lamarche
					37. Implementation of greywater heat recovery system in hospitals E. Dudkiewicz, A. Ludwińska, K. Rajski
					38. A review of heat recovery possibility in flue gases discharge system of gas radiant heaters E. Dudkiewicz, P. Szałański

12:45 – 14:00 Lunch (The students Cultural Zone-building C-18, 10 Hoene-Wrońskiego Street)

14:00 – 17:00 Scheduled session 6 - Part A and B (hall 10AC)
“The International Symposium on Energy Efficiency in Europe” Part II (hall 10BD)

Session 6 - Part A (hall 10AC) WASTE MANAGEMENT Chair: Prof. Andrzej Szczurek, Prof. Monika Maciejewska		“THE INTERNATIONAL SYMPOSIUM ON ENERGY EFFICIENCY IN EUROPE” PART II (hall 10BD) Chair: Prof. Luca Montorsi	
14:00-14:15	Radiant waste heat recovery from steelmaking and glass industry J. Iturralde, M. G. de Arteché, P. Aguirre, J. Bárcena, S. López, E. Ubieta, P. F. Arroiabé, M. M. Bou-Ali, I. Unamuno	14:00	Keynote: Jurgita Malinauskaite Renewable energy policies in the EU
14:15-14:30	Biobased polymers as substrates for electrospinning K. Leluk, K. Sobczyk, M. Borowczak	14:25	Keynote: Abdul Ghani Olabi Renewable Energy Developments in UAE
14:30-14:45	Unique properties of Ecoflex® electrospun structures. M. Borowczak, K. Sobczyk, K. Leluk	14:50	Carlo Alberto Rinaldini Combustion Analysis of a Light Duty Diesel Engine using Oxygen-Enriched and Humidified Combustion Air
14:45-15:00	PLA – based electrospun structures K. Sobczyk, M. Borowczak, K. Leluk		
15:05 – 15:25 Coffee break			
Session 6 - Part B (hall 10AC) ENVIRONMENTAL BIOLOGY & WASTE TREATMENT Chair: Prof. Artur Jaworski, Prof. Mirosław Żukowski			
15:30-15:45	Performance assessment of a four-air-cathode membraneless microbial fuel cell stack for wastewater treatment and energy extraction. A. Tremouli, P. K. Pandis, T. Kamperidis, V. N. Stathopoulos, Ch. Argiris, G. Lyberatos	15:35	Per Kjellgren SmartRec system for waste heat recovery in high temperature processing industries
15:45-16:00	Hydrothermal carbonization of the digestate as an innovative way for recovery of the water for agricultural purposes A. Urbanowska, M. Kabsch-Korbutowicz, M. Wnukowski, M. Baranowski, H. Pawlak-Kruczek, M. Serafin-Tkaczuk, K. Krochmalny, L. Niedzwiecki	15:50	Elmar Bartlmae Developing a Social Media strategy for R&D in energy efficiency – a case study in progress
16:00-16:15	Biodiversity of organisms inhabiting the water supply network of Wrocław. Detection of pathogenic organisms M. Wolf-Baca, K. Piekarska	16:05	Sulaiman Almahmoud Experimental and analytical investigation of a multi-pass air to water heat pipe heat exchanger performance based on the ε-NTU method
16:15-16:30	Operational characteristics of an innovative device dedicated for the hydrodynamic disintegration of sewage sludge. M. Zubrowska-Sudol, A. Garlicka, Justyna Walczak, K. Sytek-Szmeichel, A. Mikołajczak, M. Stępień, P. Krawczyk, K. Umiejewska, M. Wołowicz	16:20	Daniel Brough Identification of waste heat streams in aluminium production
16:30-16:45	First-Principles Study of Organic Molecule for Corrosion Inhibition R. Belkada, D. Hammoutene, R. Ftibigui, I. M. Said	16:35	Matteo Venturelli Experimental and Numerical Analysis of a Liquid Aluminium Injector for an Al-H ₂ O based Hydrogen Production System
16:45-17:00	Conversion of Organic Compounds into Biogas on a Full Scale Brewery WWTP Using IC Reactor K. Umiejewska		

18:00 – 22:00 Social event (optional)

Wednesday 12 June 2019

Session 7 – Part A (hall 10AC)		Session 8 - Part A (hall 10BD)	
HEAT PUMPS		INDUSTRIAL TECHNOLOGIES FOR ENVIRONMENT II	
Chair: Prof. Renata Krzyżyńska, Prof. Marderos Ara Sayegh		Chair: Prof. Peter Vrtič, Prof. Luca Montorsi	
09:00-09:15	Characteristics of Oder river water temperature for heat pump M. A. Sayegh, A. Żabnieńska-Góra	09:00-09:15	A novel use of hydrophobic membrane in a humidification-dehumidification desalination system D. Ahmada, T. De Chobot, H. Jouhara
09:15-09:30	The influence of the solar-ground heat pump system on the ground temperature in the boreholes and in their vicinity – study based on experimental data P. Rynkowski	09:15-09:30	Business models used in heat recovery applications in process industries. L. Ahmad, J. Malinauskaitė, A. Chauhan, H. Jouhara
09:30-09:45	Perspectives on the use of geothermal heat pump systems to reduce low-emission in the health resort areas A. Szulc, B. Tomaszewska	09:30-09:45	Modelling and Computational Study of a Photovoltaic-Thermal System N. Khordehghah, H. Jouhara, S. P. Lester
09:45-10:00	Total carbon dioxide emissions from ground source heat pump and groundwater one in Białystok A. Gajewski	09:45-10:00	Methylene blue sorption to 300°C mixed municipal discarded material derived char J. Hoslett, H. Ghazal, H. Jouhara
10:00-10:15	Seasonal evaluation of heat pump system for building heating and ventilation – A case study A. Bugaj, M. Miniewicz	10:00-10:15	Nitrate ions removal by adsorption and electrodialysis from the PV cells factory effluent F. D. Belkada, O. Kitous, O. Fella, O. Bouchelaghem, N. Drouiche, N. Abdi, N. Ameri
10:15-10:30	Impact of location characteristics on renewable energy production for a group of buildings K. Szczerbak	10:15-10:30	Air-to-air heat pump: Review of recent advances and future potential N. Serey, D. Ahmad, H. Jouhara
10:30 – 10:50 Coffee break			
Session 7 - Part B (hall 10AC)		Session 8 - Part B (hall 10BD)	
INDUSTRIAL TECHNOLOGIES FOR ENVIRONMENT I		INDUSTRIAL TECHNOLOGIES FOR ENVIRONMENT III	
Chair: Prof. Stanisław Kajl, Prof. Kazimierz Gaj		Chair: Prof. Barbara Widera, Prof. Janusz Wojtkowiak	
10:50-11:05	Heavy metal content in products from pyrolysis of waste tyres D. Czajczyńska, R. Krzyżyńska, H. Jouhara	10:50-11:05	Development of an experimental test rig for the pyrolysis of plastic residues and waste tires M. Milani, L. Montorsi, G. Storch, M. Venturelli
11:05-11:20	Batch Pyrolysis of Cotton Stalks for Evaluation of Biochar Energy Potential R. Al Affif, S. S. Anayah, Ch. Pfeifer	11:05-11:20	Determination of Polycyclic aromatic hydrocarbons (PAHs) in Yerbaté herbal drink Ch. Nwankwo, S. Barton, H. Ghazal
11:20-11:35	Potentialities of hydrogen enriched natural gas for residential heating decarbonization and impact analysis on premixed boilers F. Schiro, A. Stoppato, A. Benato	11:20-11:35	A new compact hydraulic propeller turbine for low heads. D. Barsi, M. Ubaldi, P. Zunino, R. Fink
11:35-11:50	Estimate of traffic energy consumption from vehicle fleet distribution forecast B. Luin, F. Al-Mansour, D. Šemrov	11:35-11:50	Comparing Water and Paraffin PCM as Storage Mediums for Thermal Energy Storage applications C. Pagkalos, M. G. Vrachopoulos, J. Konstantaras, K. Lymperis
11:50-12:05	Experimental investigations of the performance of a thermoacoustic electricity generator A. Hamood, A. Jaworski	11:50-12:05	The impact of adverse environmental factors on the occurrence and prevalence of diseases in the Republic of Dagestan T. F. Kosyreva, F. I. Astarkhanova, I. R. Astarkhanov, T. S. Astarkhanova, L. I. Alibalaeva, I. N. Osmanov
12:05-12:20	Numerical simulation of the Effect of Plate Spacing on Heat Transfer Characteristics within a Parallel-Plate Heat Exchanger in a Standing Wave Thermoacoustic System H. Huang, A. Jaworski	12:05-12:20	Long-wave radiation balance of the active surface in the south-west Poland K. Bryś, T. Bryś, A. Głogowski

Wednesday 12 June 2019

POSTER SESSION III (hall 114)

Chair:

Prof. Malgorzata Kabsch-Korbutowicz

Dr. Ana M. López-Sabirón

09:00-10:30

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| <p>39. Seasonal coefficient of performance of air-to-air heat pump and energy performance of a building in Poland
P. Kowalski, P. Szałański</p> <p>40. Analysis of annual energy consumption by a warehouse building
M. Besler, W. Cepiński, P. Kęskiewicz, M. Skrzycki</p> <p>41. Dual Media Thermocline (DMT) techno-economic interest for heat storage on the range 80°C -600°C- The SMARTREC project
S. Rougé, M. Chowdhury, F. Chowdhury</p> <p>42. Removal of quaternary ammonium compound in ion exchange process
A. Klimonda, I. Kowalska</p> <p>43. Alternative scenarios investigation of 1990..2016 CO₂ emission from Public Electricity and Heat Production sectors in Europe
E. Niemierka, P. Jadwiszczak</p> <p>44. Minimization of fan energy consumption in ventilation and (or) air-conditioning systems as an optimization calculus of variations
M. Karpuk</p> <p>45. Classification of saline water for irrigated agriculture using near infrared spectroscopy coupled with pattern recognition technique
R. Lapcharoensuk, J. Phuphanutada, P. Wongpromrat</p> <p>46. Study of Atrazine Adsorption Kinetics by Using an Activated Carbon Synthesised from Water Hyacinth
P. Deetae, P. Wongpromrat</p> <p>47. Influence of temperature and C:N ratio on nitrifying and denitrifying bacteria of biofilters treating wastewater from de-icing airport runways
A. Mielcarek, K. Ostrowska, J. Rodziewicz, W. Janczukowicz, J. Struk-Sokołowska</p> <p>48. Purification of model biogas from toluene using deep eutectic solvents
E. Słupek, P. Makoś, J. Gębicki, A. Rogala</p> <p>49. Dimethyl ether (DME) as potential environmental friendly fuel
P. Makoś, E. Słupek, J. Sobczak, D. Zabrocki, J. Hupka, A. Rogala</p> <p>50. Analysis of the power extraction rate change for boreholes in time and in different heat load conditions
N. Fidorów-Kaprawy, E. Stefanowicz</p> | <p>51. Influence of the building's heating energy demand profile on the results of the air/water heat pump energy efficiency simulation
M. Szulgowska-Zgrzywa, K. Piechurski</p> <p>52. Environmental and social effects of the change of heat sources on the example of a selected quarter of tenement houses in Wrocław
M. Szulgowska-Zgrzywa, M. Baborska-Narożny, K. Piechurski, E. Stefanowicz, A. Chmielewska, N. Fidorów-Kaprawy, M. Laska</p> <p>53. Study of physical and mechanical properties of additional materials on the recycled rubber structure during its disposal
I. R. Antypas, G. Kharmanda, A. Dyachenko, T. Savostina</p> <p>54. System-friendliness of PV-battery hybrids used by commercial consumers in a renewable power system
A. Kies, J. Jurasz, B. Schyska, B. Kaźmierczak</p> <p>55. Influence of ammonia on wet-limestone flue gas desulfurization process from coal-based power plant
T. Wypiór, R. Krzyżyńska</p> <p>56. Assessment of potential mutagenicity of dust air pollutants adsorbed on PM2.5 dust using strains of <i>S. typhimurium</i> TA98 and TA100
A. Trusz, H. Ghazal, K. Piekarska</p> <p>57. The features of stormwater treatment technology schemes of airports
A. Kurbatova, K. Mikhaylichenko, I. Vasilyuk</p> <p>58. Energy efficient environment in architecture
T. K. Samuratova, Z.E. Kaliyeva, M. Makhanov, Z.K. Yermekova</p> <p>59. Effect of CO₂ increase on ecological parameters of plant ecosystems in Central and South America countries
A. Tarko, A. Kurbatova, S. Llerena</p> <p>60. Long-term changes in air temperature, sunshine duration and wind speed in the context of renewables in Poland
F. A. Canales, P. Jadwiszczak, J. Jurasz, M. Wdowikowski, B. Kaźmierczak</p> <p>61. Evaluation of Zn- and Fe- rich organic coatings for corrosion protection and condensation performance on waste heat recovery surfaces
P. K. Pandis, S. Papaioannou, V. Siaperas, A. Terzopoulos, V. N. Stathopoulos</p> <p>62. The zero-energy store model
P. Zając</p> <p>62. Experimental determination of cold water temperature at the inlet to solar water storage tanks
M. Żukowski</p> |
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12:20 – 13:00 Closing Ceremony of ASEE19 (Congres Centre – building D-20 , 8 Janiszewskiego Street, hall 10AC)

Prof. Hussam Jouhara Brunel University of London,

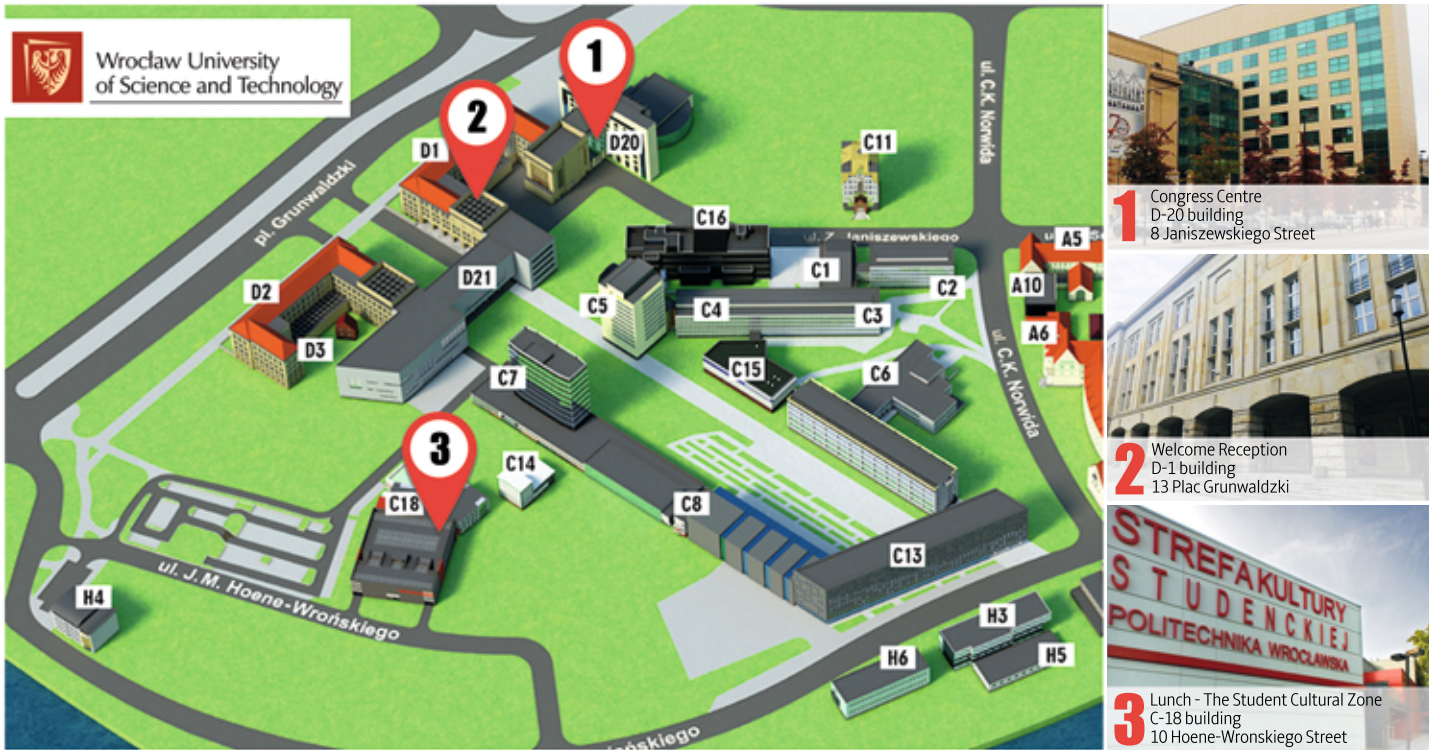
Prof. Evgeniy Shchesnyak, RUDN University of Moscow,

Prof. Jan Danielewicz, Wrocław University of Science and Technology.

13:00 – 14:30 Lunch



CAMPUS MAP - WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY



1 Congress Centre
D-20 building
8 Janiszewskiego Street

2 Welcome Reception
D-1 building
13 Plac Grunwaldzki

3 Lunch - The Student Cultural Zone
C-18 building
10 Hoene-Wronskiego Street

CITY MAP - LET'S MEET IN WROCLAW!



1 Congress Centre
D-20 building
8 Janiszewskiego Street

2 Centennial Hall
10 June, 18:00 - Banquet
1 Wystawowa Street

3 Mercure Hotel
Accommodation
1 Plac Dominikanski

4 John Paul II Hotel
Accommodation
2 sw. Idziego

5 Market Square with the City Hall
Gastronomy, entertainment
50 Rynek

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