

Program of the ECOS2011 Conference

Sunday, 3 July

15h30-19h00	Registration
19h00 -	Welcome Reception - Terrace of Petrovaradin Fortress

Monday, 4 July

09h00-10h30	Plenary Opening Ceremony
ROOM	THE DANUBE
SPEAKERS	
Dr Gordana STEFANOVIĆ, ECOS2011 Conference Coordinator	
Dr George TSATSARONIS, ECOS 2011 Advisory Committee	
Dr Noam LIOR, President of ECOS 2011 Scientific Committee	
Dr Petar ŠKUNDRIĆ, Energy Advisor of Prime Minister of Serbia	
Mr Igor PAVLIČIĆ, Mayor of Novi Sad	
Dr Miroslav VESKOVIĆ, Rector of the University of Novi Sad	
Dr Vlastimir NIKOLIĆ, Dean of the Faculty of Mechanical Engineering in Nis	
Dr Maria Graça CARVALHO, Elected member of the European, Commission Parliament	
"EU Energy and Climate Change Strategy"	
10h30-10h50	Coffee break
10h50-12h50	World Energy Panel
ROOM	THE DANUBE
CHAIRS	Noam LIOR, University of Pennsylvania, USA
PAPERS	
Dr Noam LIOR, University of Pennsylvania, USA, ECOS2011 Co-Chair, Chair ECOS2011 International Scientific Committee, Scientific Committee of the International Centre for Sustainable Development of Energy, Water and Environment Systems Chair, "Sustainable Energy development: A Brief Introduction to the Present (2011) Situation"	
Dr Petar ŠKUNDRIĆ, Advisor to the Prime Minister of the Government of the Republic of Serbia, and former Minister of Energy, "The Status and Development of Energy of the Republic of Serbia"	
Dr Ying FAN, Director, Center for Energy and Environmental Policy, Institute of Policy and Management, Chinese Academy of Sciences, China, "Exploring China's Energy Consumption and Demand"	
Dr Kirit S. PARIKH, Former Member, Planning Commission, Government of India Chairman, Integrated Research and Action for Development, India, "Sustainable Development and Low Carbon Growth Strategy for India"	
Dr Belizza RUIZ, México: "Energy Context in Latin America"	
Dr Kirill KRAVCHENKO, Gazpromneft (Russia), General Director of the Petroleum Industry of Serbia (NIS), "Energy Activities and Plans of NIS & Gazprom Neft in Serbia and Countries in SEE Region"	
12h50-14h00	Lunch

14h00-15h30	Oral presentation sessions 1 + Ethics Panel		
ROOMS			
TRACKS			
Energy: Processes and Components	Energy: Systems	General Topics in Energy	Renewable Energy
TESLA	MILANKOVIĆ	ALAS	PUPIN
TOPICS			
Basic and Applied Thermodynamics	Simulation, Improvement and Optimization of Energy Systems I: Components I	Ethics in Science and Engineering	Sustainability and Social Impacts of Energy Systems
CHAIRS			
Michael R. VON SPAKOVSKY	Zygmunt KOLENDA	Alberto MIRANDOLA	Dušan P. SEKULIĆ
PAPERS			
G. Hirs - The Implementation of Entropy into the Economic Process	L. van der Ham - Distributing the heat integration of distillation columns for air separation	A. Ponchio - Professional Ethics	A. Agudelo Santamaría - The Fossil Trace of CO ₂ Emissions in Energy Systems
A. Sisman - Classical Thermosize Effects for Bose Gases	M. Hechinger - Towards a Rigorous Heat Loss Model of a Rapid Compression Machine for the Screening of Auto-Ignition Properties of Biofuels	O. Arnas - Engineering Ethics Education: A Military Academy Point of View	L. Stougie - The sustainability of LNG evaporation
S. de Oliveira Junior - Modeling the exergy behavior of human body	W. Kostowski - Real Gas Flow Simulation in Damaged Distribution Pipelines	V. Miltojević - Education and Engineers' Environmental Ethics	A. Zidanšek - Energy consumption and happiness in nations
I. Ertesvåg - Exergy calculations based on fixed standard environmental conditions versus actual ambient conditions	N. Tahouni - Pressure Drop Optimization in Design of Multi-Stream Plate-Fin Heat Exchangers, Considering Variable Physical Properties	N. Lior - Sustainability Ethics: A call for Damage Control and Prevention	U. Puc - Applications of underwater radar
P. Palazzo - Thermal and Mechanical Aspect of Entropy-Exergy Relationship	N. Tahouni - Consideration of Variable Physical Properties in Design of Multi-Stream Plate-Fin Heat Exchangers	A. Mirandola - Codes of Ethics and Engineering Education	M. Jovicevic Simin - Intellectual property protection and biodiesel
P. Mello - Thermodynamic Study of an EFGT (Externally Fired Gas Turbine) Cycle with One Detailed Model for the Ceramic Heat Exchanger	G. Dimopoulos - Modelling and Optimisation of an Integrated Marine Combined Cycle System		
15h30-15h50	Coffee break		
15h50-17h20	Oral presentation sessions 2		
ROOMS			
TESLA	MILANKOVIĆ	ALAS	PUPIN
TOPICS			
Internal Combustion Engines I: General	Simulation, Improvement and Optimization of Energy Systems I: Components II	Transport Energy and Emissions	Solar Integrated Systems and Components
CHAIRS			
Sotirios KARELLAS	Jovan PETROVIĆ	I. VALOIS - COELHO	Steve REYNOLDS
PAPERS			
R. Papagiannakis - Study of Performance and Exhaust Emissions of a Spark-Ignited Engine operating with Nitrogen Enrichment of Intake Air	B. Stepanov - Gas Residence Time Analysis for Efficiency Improvement of Small-scale Straw Fired Boilers	V. Đorić - Traffic Environmental Influence Assessment In Serbia	D. Đurdjević - Status of Solar Photovoltaic Power Engineering in the Republic of Serbia

A. Antonopoulos - Comparative Evaluation of Available TDC Estimation Techniques	P. Mello - Thermal Performance and Pressure Drop in a Ceramic Heat Exchanger Evaluated Using CFD Simulations	M. Wikström - Analysis of the Fuel Economy Improvement Potential of Ethanol Hybrid Buses	F. Calise - Design and dynamic simulation of a novel solar trigeneration system based on photovoltaic/thermal collectors	
M. Costa - Optimal Injection Strategies for Low Consumption of a GDI engine	G. Pickler - Evaluation of Retrofitting a Conventional Cooling Tower into a Hybrid Set in a Oil Refinery	P. Živković - Local Traffic Intensity Influence on Air Quality in Niš	M. Pons - Exergy budget of solar collector: thermal vs. photovoltaic	
E. Pariotis - Comparative Analysis of Three Simulation Models Applied on a Motored Internal Combustion Engine	S. Perencević - Numerical Investigation of Heat transfer and Pressure Drop in Finned-Tube Heat Exchangers with Different Fin Structure	I. Valois - Coelho - Transport as a Threat to Sustainable Development	F. Calise - Design and dynamic simulation of a novel polygeneration system fed by vegetable oil and by solar energy	
M. Masi - Measure of the volumetric efficiency and evaporator device performance for a LPG SI engine	D. Živković - NUMERICAL METHOD APPLICATION FOR THERMO-MECHANICAL ANALYSIS OF HOT WATER BOILERS CONSTRUCTION	N. Espinosa - Transient Organic Rankine cycle Modelling for Waste Heat Recovery on a Truck	S. Kumar - Cabinet Size Solar Dryer Design for Multiple Ingredient Drying with High Heat Capacity Material and Phase Change Material based Automatic Temperature Control	
M. A. Barranco-Jiménez - Local stability analysis of a thermoeconomic model of a Curzon-Ahlborn heat engine whit a Dulong-Petit heat transfer law	S. Yoshida - Comparative Study on Renewal Planning of Alternative Energy Supply Systems for a Hospital	Y. Glavatskaya - Exhaust heat recovery Rankine system for passanger car: modelling and design	C. Toro - Modeling and Simulation of a Hybrid PV/Thermal collector	
17h20-17h30	Coffee break			
17h30-19h30	Oral presentation sessions 3			
ROOMS				
TESLA		MILANKOVIĆ	ALAS	PUPIN
TOPICS				
Internal Combustion Engines II: Diesel, Compound Cycles and Biofuels		Simulation, Improvement and Optimization of Energy Sytems II: Systems Fundamentals	Mining and Drilling and Manufacturing	Solar Thermal Collectors, Power and Solar PV
CHAIRS				
Luis SERRANO		George TSATSARONIS	Ivica RISTOVIĆ	Luis SERRA
PAPERS				
A. Antonopoulos - Effect of Instantaneous Rotational Speed on the Analysis of Measured Diesel Engine Cylinder Pressure Data	A. Stoppato - A model for energy systems optimization based on energy hubs theory	I. Ristović - Sustainable Development of Exploitation and Use of Coal in the Countries of the EU (Slovenia) and South-eastern Europe (Serbia)	R. McGovern - Optimal Concentration and Temperatures of Solar Thermal Power Plants	
D. Tziourtzioumis - Effects of a B70 Biodiesel Blend on Transient Operation Characteristics of a High Speed, Common Rail Diesel Engine	P. Voll - Superstructure-free Synthesis and Optimization of Distributed Energy Supply Systems	M. Vulić - Energy Optimization in the Premogovnik Velenje (Velenje Coal Mine)	F. Michel - DESIGN OPTIMIZATION OF A STIRLING SOLAR DRIVEN SYSTEM	
D. Hountalas - THERMODYNAMIC ANALYSIS OF A RANKINE CYCLE APPLIED ON A DIESEL TRUCK ENGINE using STEAM and ORGANIC MEDIUM	A. Toffolo - An Hybrid Algorithm for the Synthesis/Design Optimization of a Set of Superimposed Rankine Cycles	D. Vulin - Study of Istrian Ummineable Coal Utilization	A. Ghoibeity - Optimal Design and Operation of a Volumetric Solar-Thermal Energy Receiver and Storage	
H. Stanchev - Investigation of the Performance and Emissions of Gasoline Engine Operating on Butanol-Gasoline Fuel Blends	G. Giangaspero - Application of the EGM method to a LED-based spotlight: a constrained pseudo-optimization design process based on the analysis of the local entropy generation maps	M. Schwindel - Exergy Mapping of Materials Processing: Material Separation in a Manufacturing Case Study	S. Reynolds - Modeling Spectral Matching in Two- and Four-Terminal Thin-Film Silicon Tandem Solar Cells	
M. Agathou - Electrostatic Atomization of Hydrocarbon Fuels and Bio-alcohols for Engine Applications	N. Mardan - Industrial decision making for energy efficiency – combining optimisation and simulation	P. Griffin - The Impact of UK Government Industrial Energy Efficiency Research, Development and Demonstration Programmes	S. Nedeltcheva - Energy efficiency of PV modules	
A. Medina - Effects of gasoline-ethanol blends on cycle-to-cycle variability	S. Fazlollahi - Multi-objective investment and operating optimization of energy systems with integer cut constraints and evolutionary algorithm	M. Founti - Energy Analysis and Environmental Impact of Marble Quarrying and Processing	N. Zhang - Zero CO ₂ emission solrgt system	

M. Agathou - Fuel Composition Effect on the Electrostatically-driven Atomization of Bio-butanol Containing Engine Fuel Blends	B. Hebenstreit - Efficiency Optimization of Biomass Boilers by a Combined Condensation - Heat Pump - System	Lj. Andric - Actualities in mining and mineral processing in Serbia	N. Nikolić - Mathematical model for determining the irradiated area of the lower absorber surface of the double exposure flat-plate water solar collector
L. Serrano - Performance study about biodiesel impact on buses engines using dynamometer tests and fleet consumption data	A. Vuillermoz - Process Integration in a "Food Canning Factory"		
19h30 -	Free Evening		

Tuesday, 5 July

09h00-10h30	Oral presentation session 4		
ROOMS			
TESLA	MILANKOVIĆ	ALAS	PUPIN
TOPICS			
Clean Coal Technologies I	Process Design, Analysis and Integration of Thermal and Chemical Systems	Energy Storage	Energy and Buildings IV: Renewable Energy
CHAIRS			
Tarik KUPUSOVIĆ	Francois MARECHAL	Dušan GVOZDENAC	Ryohei YOKOYAMA
PAPERS			
A. Skorek-Osikowska - Modeling and Analysis of the Selected Carbon Dioxide Capture Methods in IGCC Systems	B. Hassiba - Evaluation of the Irreversibility of Extractive Distillation with Heavy Entrainer through Entropy Production	S. Henchoz - Thermoeconomic Analysis of a Solar Enhanced Energy Storage Concept Based on Thermodynamic Cycles	V. Turanjanin - Numerical Simulation of Energy Consumption Optimization in Residential Buildings in Belgrade
S. Li - Evaluation of Potential Cost Reduction for a Coal-based Polygeneration System with CO ₂ Capture in China	K. Panopoulos - Simulations of a fixed bed catalytic reactor for the production of methane from syngas	M. Mercangoez - Thermoelectric Energy Storage with Transcritical CO ₂ Cycles	Z. Sagia - Parametric Analysis of Geothermal Residential Heating and Cooling Application
L. Duan - Integration and optimization study on the coal-fired power plant with CO ₂ capture using MEA	D. Đaković - Some Thermodynamic Properties of Water During Corn Drying	S. Rech - Optimal Operation of Heat Storage Systems with Variable Temperature Tanks for District Heating Network	L. Bastos - Hybrid Energetic Supply Model for a Public University Building
M. Blume - Reduction of the flue gas recirculation rate in oxycoal processes by means of non-stoichiometric burner operation	D. Đaković - Experimental Determination of Effective Diffusivities during Corn Drying	A. Sciacovelli - Numerical analysis of a medium scale latent energy storage unit for district heating systems	C. Zauner - Photovoltaic and Solar Thermal Energy Conversion in a Multifunctional Façade
S. Lepszy - Analysis of Gas Turbine Combined Heat and Power System for Carbon Capture Installation of Coal Fired Power Plant	B. Atakan - Alkanes as Fluids in Rankine Cycles in Comparison to Water and Benzene	J. Anagnostopoulos - Study of Pumped Storage Schemes to Support High RES Penetration in the Electric Power System of Greece	J. Radosavljević - Thermodynamic Behavior of a Passive Solar Residential Building With a Greenhouse and Thermo-Accumulative Concrete Partition Wall
	Z. Kravanja - HEN Design with Minimal Cost over an Entire Life-Time	M. Morandin - Conceptual design of a thermo-electrical energy storage system based on heat integration of thermodynamic cycles – Part A: methodology and base case system configuration	R. Cruz - Thermoeconomic and Environmental Guidelines for Trigeneration Projects in the Brazilian Amazon
	C. Tornatore - Optical diagnostics of the combustion process in a PFI SI boosted engine fuelled with butanol-gasoline blend	M. Morandin - Conceptual design of a thermo-electrical energy storage system based on heat integration of thermodynamic cycles – Part B: studying alternative system configurations	B. Elmegaard - Efficiency of Compressed Air Energy Storage
10h30-10h50	Coffee break		

10h50-11h50	Regional Energy Panel				
ROOM	THE DANUBE				
CHAIRS	Gordana STEFANOVIĆ				
PAPERS					
Dr Miodrag MESAROVIĆ, Serbia, Energoprojekt- Entel, „Regional Energy Cooperation – Coal and Clean technology“					
Dr Milan MEDVED, Slovenia, General Manager Velenje Coal Mine, „Role of Coal in Energy Supply Today and Tomorrow (Region, Europe)“,					
Dr Neven DUIĆ, Croatia, Head of Power Engineering and Energy Management Chair Department of Energy, Power Engineering and Environment Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb , “Coal Power and Regional Energy Planning”					
Dr Nataša MARKOVSKA, FYR Macedonia, Macedonian Academy of Science and Art „On Setting of the Energy-Related GHG Emission Reduction Target“					
Mr Miroslav KUKOBAT, Senior Expert on Energy and Infrastructure, Head of Unit; Regional Cooperation Council “Regional Energy Cooperation and the RCC Complementary Role”					
Mr Davide Poletto, UNESCO representative, „UNESCO Role in Education and Promotion of Renewable Energy and Energy Efficiency in SEE: Challenges and Opportunities“					
12h50-14h00	Lunch / ECOS International Committee Meeting				
14h00-15h30	Oral presentation sessions 5 + Nikola Tesla Symposium				
ROOMS					
TESLA		MILANKOVIĆ	ALAS	PUPIN	THE DANUBE
TOPICS					
Nikola Tesla Symposium		New Technologies in Heat Pumps, Refrigeration and Air Conditioning I	Energy Planning	Biomass Energy I: General	Clean Coal Technologies II
CHAIRS					
Vladimir STEVANOVIĆ		Tatiana MOROSUK	Kirit PARIKH	Neven DUIĆ	Milivoj VULIĆ
PAPERS					
J. Vujić - Tesla's Vision of Sustainable World and Free Energy for All		T. Kurevija - Effect of Borehole Array Geometry and Thermal Interferences on Geothermal Heat Pump System	Y. Fan - The impact of the EU ETS on the corporate value of European electricity corporations	E. Font de Mora - Assessment of Biodiesel Energy Sustainability Using the Exergy Return on Investment Concept	T. Malik - Energy and Exergy Analysis of Hydrogen-Oriented Coal Gasification with CO ₂ Capture
S. Car - Tesla's Rotating Magnetic Field and it's Economic Importance		I. Koronaki - Experimental analysis of hybrid open cycle air-conditioning systems with conventional heat pumps	S. Ilić - Hybrid Artificial Neural Network System for Short-Term Load Forecasting	J. Zuwała - Study on energy and ecological effects of substituting petroleum-derived start-up & back-up fuels with glycerol and tall oil	S. Berdowska - Membrane Separation of Oxygen from Air
D. Strebkov – Nikola Tesla and Future of Electric Power Engineering		T. Ommen - Thermoeconomic model of a commercial transcritical booster refrigeration system	E. Turdera - The growth of bioenergy in the Brazilian Midwest region	M. Görling - Integration Feasibilities for Gas Turbines in Biofuel Production	S. Belošević - Simulation and optimization of combustion modifications in pulverized coal utility boiler with respect to NOx emission and heat transfer efficiency
M. Cvejić - Development of Tesla Coil Apparatus		A. Sisman - Characterization of a thermoelectric generator at cryogenic temperatures	B. Čosić - Improving the RES absorption capacity of the Macedonian energy system	L. Christopher - Bioenergy and Bioproducts from Forest Biomass Hemicellulose	J. Tuka - Parametric Study of GT and ASU Integration in case of IGCC with CO ₂ removal
Z. Čivrić -Elements of the Concept of Sustainability in the Works of Nikola Tesla		A. Sisman - Modelling, design and experimental characterization of a thermoelectric cooler	M. Al-Mayyahi - A Novel Graphical Approach to Target CO ₂ Emissions for Energy Resource Planning and Utility System Ontimization	Z. Ilijevski - 20 MWel Biomass Power Plant “Koprivnički Ivanec” in Croatia Designed to Achieve Integrated Prevention and Control of Pollution	H. Kim - The experimental study on catalytic gasification reactivity and kinetics of Roto ultra clean coal under different temperature conditions

B. Stojilković - TESLA'S Research in the Field of Fountains	L. Sun - Thermodynamic Performance of A Power/ Cooling Cogeneration System Using Mid-and-Low Temperature Waste Heat	T. Puksec - Long Term Energy Demand Projections for Croatian Transport Sector	N. Crnomarković - Influence of forward scattering on prediction of temperature and radiation fields inside the pulverized coal furnace
		E. Sciubba - Extended Exergy Accounting applied to the Turkish society 2006	
15h30-15h50	Coffee break		
15h30-17h20	Oral presentation sessions 6		
ROOMS			
TESLA	MILANKOVIĆ	ALAS	PUPIN
TOPICS			
Turbines	New Technologies in Heat Pumps, Refrigeration and Air Conditioning II	Energy Economics	Biomass Energy II: Conversion Processes
CHAIRS			
Enrico SCUIBBA	Michel FEIDT	Ying FAN	Ersan PUTUN
PAPERS			
P. Lukowicz - Steam Turbine Model for Simulation of Work Under Changing Conditions	T. Morosuk - Conventional Thermodynamic and Advanced Exergetic Analysis of a Refrigeration Machine using a Voorhees' Compression Process	E. Zelenovskaya - Feasibility of Natural Gas Supply from Russia to Korea	L. Tock - Co-production of Hydrogen and Electricity from Lignocellulosic Biomass: Process Design and Thermo-economic Optimization
P. Gobatto - Coarse Grid CFD Calculations of a Dual-Fuel Gas Turbine Combustor Flow Field	R. Yokoyama - Condition Monitoring and Analysis for Operational Management of Air Conditioning Units by Gas Engine Heat Pumps	D. Kostić - Managing Energy Costs in Water Distribution Systems	F. Alfarjani - Mechanical Pre-treatment to Enhance Anaerobic Digestion Process: Overview
F. Conforti - Preliminary design and CFD-analysis of a single-stage, axial, impulse UMG	C. Nobrega - EXERGETIC ANALYSIS OF PASSIVE DESICCANT WHEELS	S. Stevanović - Financial measures Serbia should offer for solar hot water systems	A. Voll - Multi-Objective Screening of Biorefining Processes in the Early Design Stage by Reaction Network Flux Analysis
W. De Paepe - Discussion of the Effects of Recirculating Exhaust Air on Performance and Efficiency of a Typical Microturbine	C. Nobrega - PERFORMANCE OF DESICCANT COOLING CYCLES UNDER SPECIFIC ATMOSPHERIC CONDITIONS	M. Muratori - PEVs Market Penetration and Impact on Fuel Taxes	A. Mohamed - Application of Mechanical Pre-treatment to Produce Methane from Maize
M. Saffar Avval - Design and off design numerical simulation of steam injected gas turbine based on compressor and turbine performance maps	T. Morosuk - LCA, Conventional and Advanced Exergoenvironmental Analysis Applied to a Combined Cycle Power Plant	A. Ferreira - An economic perspective on small-scale cogeneration systems optimisation	M. Fussi - Numerical investigation of a swirled flame model combustor fed with pyrolysis gas
	S. Moujaes - CFD Simulation of Leak in Residential HVAC Ducts	S. Uson - Thermoeconomics and Industrial Symbiosis. Effect of By-product Integration in Cost Assessment.	A. Bula - SYNGAS FOR METHANOL PRODUCTION FROM PALM OIL BIOMASS RESIDUES GASIFICATION
17h20-17h30	Break		
17h30-19h30	Oral presentation sessions 7		
ROOMS			
TESLA	MILANKOVIĆ	ALAS	PUPIN
TOPICS			
Conventional and Advanced Power Plants	Decentralized Energy systems, Diagnostics and Control of Energy Systems	Life Cycle Assessment and Environmental Impact of Energy Systems	Biomass Energy III: Combustion, Gasification and Co-firing
CHAIRS			
Na ZHANG	Žarko ČOJBAŠIĆ	Christos FRANGOPOULOS	Silvio DE OLIVIERA JUNIOR

PAPERS			
A. Lakew - Thermodynamic and component analysis of supercritical carbon dioxide Rankine cycle using a low temperature heat source	G. Hammond - Micro-generators: The Prospects for Combined Heat and Power Systems on a Domestic Scale	B. Vučijak - Environmental Flow in Bosnia and Herzegovina - Tool for Hydropower Environmental Impacts Management	B. Erlich - Combined hydrothermal carbonization and gasification of biomass with CCS
S. Lepszy - Analysis of Gas Turbine Air-Bottoming Cycle and Heat Exchanger Modeling	C. Brandoni - Study of an innovative micro-CHP system fuelled by LPG	A. Santos - Emission Rates of Formaldehyde and Acetaldehyde in Natural Gas Confined Flames with OEC Application	T. Iluk - Parametric Analysis of Biomass Gasification Installation Integrated with a Combustion Engine
D. Tempesti - Exergy and Energy Analysis of a Dry Steam Power Plant with Heller Condenser	M. Founti - Potentials of Fuel Cells as μ -CHP Systems for Domestic Applications in the Framework of Energy Efficient and Sustainable Districts	R. Christodoulaki - Refrigerant Emissions and Leakage prevention across Europe – Results from the REAL SKILLS EUROPE Project	J. Isaksson - Integration of Biomass Gasification with a Scandinavian Mechanical Pulp and Paper Mill
A. Grill - Simulation and experimental validation of an ORC system for waste heat recovery of exhaust gas	Ž. Kanović - An Application for Induction Motor Fault Detection Based on Vibration Analysis and Support Vector Machines	J. Malca - Uncertainty analysis in life-cycle GHG emissions and energy efficiency of bioethanol replacing gasoline	E. Mihajlović - Determining the Rate of Biobriquette Combustion
T. Morosuk - Advanced Exergy-Based Analyses Applied to a System Including LNG Regasification and Electricity Generation	Ž. Čojbašić - Fuzzy-Genetic Robust Fluidized Bed Combustion Control	É. Castanheira - Life cycle assessment of palm oil biodiesel addressing land use and land use change	E. Putun - Co-pyrolysis characteristics and kinetics of plastic waste with biomass waste
S. Quoilin - Design and optimization of a Small scale organic Rankine cycle prototype using a scroll expander	P. Saša - Energy Saving in the Power Plants Using Automatic Control	G. Velu - The Material-Energy Binomial in Epicenter of Eco-Design. The Case of Materials for the "Glina" Bottled Water	E. Putun - Co-pyrolysis of oil shale and biomass
E. Luo - Thermodynamic Analysis and Experimental Demonstration of 1kW Thermoacoustic-Stirling Electrical Generator	K. Burnham - Review of developments in bilinear systems modelling and control for efficient energy utilization on industrial plant	S. Kabashi - Dynamic Modeling of Air Pollution and Acid Rain from Energy System and Transport in Kosovo	J. Zuwala - Estimation of Greenhouse Gases (GHG) Emissions in the Course of Biomass Co-firing in CHP Plant by Means of LCA (Life Cycle Assessment) Methodology
T. Morosuk - Reduction of Environmental Impact Using Exergy-Based Methods	B. Abou Khalil - Process Integration of a Water Treatment Plant with a New Modelling Approach	S. Midžić Kurtagić - Environmental Impact Assessment of Small Hydropower Plants	E. Karampinis - Greek Lignite / Cardoon Co-firing: from Cultivation to Combustion Trials
19h30-	Free evening		

Wednesday, 6 July	
09h30-10h30	Keynote speakers
ROOM	THE DANUBE
CHAIRS	Milorad BOJIĆ
PAPERS	
Dr Marija TODOROVIĆ, University of Belgrade; School of Energy and Environment Southeast University, Nanjing, China, <i>"Building Performance Simulation for Sustainable Buildings and Zero Energy Settlements and Cities"</i>	
Dr Branislav TODOROVIĆ, University of Belgrade, Faculty of Mechanical Engineering, Serbia, Editor-in-chief of Elsevier's journal Energy&Buildings, <i>"In what Manner the Thermal Behaviour of Human Body is Copied in Buildings – Similarities and Differences in Thermal Reactions"</i>	
10h30-10h50	Coffee break
10h50-12h50	Nuclear Energy Panel
ROOM	THE DANUBE
CHAIRS	Zoran V. STOŠIĆ
PAPERS	
Zoran V. STOŠIĆ (Vice President Marketing & Sales SEE, AREVA NP, Germany) "OPENING REMARKS"	

Peter SCHIMANN (Installed Base Engineering, AREVA NP, Germany) and Zoran V. STOŠIĆ (Vice President Marketing & Sales SEE, AREVA NP, Germany): "NUCLEAR ENERGY PROGRAMME IMPLEMENTING ORGANIZATION (NEPIO)"				
Tea BILIC-ZABRIC (Director, INKO Consulting, Slovenia): "ACCURATELY TIMED PLANNING FOR SUSTAINABLE ENERGY"				
Martin NOVŠAK (Director, GEN-energija, Slovenija) and Joze SPILER (Head of Technical Services and Investments Division, GEN-energija, Slovenia): "DEVELOPMENT AND EXPERIENCES OF THE SLOVENIAN NUCLEAR PROGRAMME"				
Josip LEBEGNER (Section Head Nuclear Power Plants, HEP, Croatia): "EXPERIENCES WITH THE NUCLEAR OPTION WITHIN THE CROATIAN ENERGY STRATEGY"				
Radojica PEŠIĆ (Director, Nuclear Facilities of Serbia) and Ilija PLECAS (Scientific Counsellor, Institute of Nuclear Sciences Vinča, Serbia): "RADIOACTIVE WASTE DISPOSAL AS UNAVOIDABLE ASPECT IN CONSIDERING NUCLEAR OPTION"				
Nebojša NEŠKOVIĆ (Scientific Counsellor, Institute of Nuclear Sciences Vinča, Serbia): "FUTURE OF EDUCATION IN NUCLEAR ENGINEERING IN SERBIA"				
12h50-14h00	Lunch			
14h00-15h30	Oral presentation sessions 8			
ROOMS				
TESLA		MILANKOVIĆ	ALAS	PUPIN
TOPICS				
Carbon Reduction, Capture and Storage		Energy and Buildings I	Nuclear Power	Renewable Energy Systems
CHAIRS				
Domagoj VULIN		Milorad BOJIĆ	Vladimir STEVANOVIĆ	Valentina TURANJANIN
PAPERS				
D. Vulin - The Effect of Mechanical Rock Properties on CO2 Storage Capacity		A. Hernandez-Guerrero - Optimization of energy efficiency and thermal comfort for residential buildings in Salamanca Mexico C. Tzivanidis - COMPUTATIONAL ANALYSIS OF THE ENVELOPE PARAMETERS EFFECTS ON THE TRANSIENT HEATING ENERGY CONSUMPTION OF BUILDINGS	J. Vujić - Small Modular Reactors: Simpler, Safer, Cheaper?	A. Mazalov - Adaptive Wind Power Plant with Double Fed Induction Generator
R. Anantharaman - Benchmarking Methodology for CO2 Capture Processes using Minimum Capture Work Targets			F. Granda - Self-Sustaining Thorium Boiling Water Reactors	B. Božiček - A structural model of the Mura depression-an area with great geothermal potential
K. Panopoulos - Exergy Analysis of an Hydrogen Fired combined cycle with Natural Gas reforming and membrane assisted shift reactors for CO2 capture		M. Boghrati - Improvement the Winter Space Heating by theEffect of Rotating Thermal Wall Storage	D. Vitale di Maio - An Innovative Pool with a Passive Heat Removal System	H. Velasquez A - Thermodynamic Analysis, Performance Numerical Simulation and Losses Analysis of a Low Cost Stirling Engine V-Type, and Its Impact on Social Development in Remote Areas -Revised and Corrected
H. Mikulić - Reducing CO2 emissions in cement industry – the calcination model		M. Muratori - Residential Power Demand Prediction and Modelling	O. Poveschenko - The Method of Differential Cross for Detecting Borders Between Physical Zones for Neutron Transport Methods E. Poplavskaya - Analysis of Russian nuclear energy scenarios in the context of sustainability development	C. Chourpouladis - Comparative Study of the Power Production and Noise Emissions Impact from Two Wind Farms A. Sanchez - ANALYSIS OF THE USE RENEWABLE ENERGY AT COMMERCIAL AND RESIDENTIAL SECTORS OF MEXICO
C. Keramiotis - Porous burners for low-emission combustion: An experimental investigation		I. Sazdovski - Assessment of Policy and Technical Needs for Successful Municipal Energy Efficiency Planning		
A. Valero - The actual exergy of fossil fuel reserves		F. Frontini - Influence of Different Internal Blind on Thermal Comfort: a New Method for Calculating the Mean Radiant Temperature in Office Spaces C. Toro - A Novel Integrated Exergetic Approach for the Optimization of Building Conditioning Systems	J. Vujić - Comparative Analysis of Environmental Impact of Various Energy Sources Versus Nuclear Power	M. Johansson - Bio-Syngas as Fuel in Steel Industry's Heating Furnaces – a Case Study on Feasibility and CO2 Mitigation Effects E. Deniz - Numerical Analysis of Adiabatic Two-Phase Flow Through Enlarging Channel
15h30-16h30	Coffee Break and Poster Session 1			
ROOM	THE DANUBE			
CHAIRS	dr Predrag RAŠKOVIĆ			
PAPERS				

G. Antonakos - Thermodynamic Analysis and Experimental Investigation of a Solo V161 Stirling Cogeneration Unit	
M. Boghrati - New methods for calculating the inlet hydrodynamic and thermal length in a laminar nanofluid flow by applying entropy generation theory	
S. Oh - Acoustic waves generated by a TA (ThermoAcoustic) laser pair	
D. Gewald - Integrated System Approach for Increase of Engine Combined Cycle Efficiency	
G. Stupar - 3-D Model of Solid and Gas Phase Flow in the Duct Bend Behind the Mill Gas Classifier at the Fan Mill	
D. Tucaković - WORK ANALYSIS OF THE ENERGY STEAM BOILER EVAPORATOR WITH SLIDING PRESSURE OF 350 MW BLOCK	
J. Segovia - Theoretical Analysis of a Transcritical Power Cycle for Power Generation From Low Temperature Heat Source	
J. Nicković - ANALYSIS OF ELECTRIC AND MAGNETIC FIELD REASURING RESULTS NEAR POWER TRANSFORMER STATION	
A. Tremel - Coal and Char Properties for High Temperature Entrained Flow Gasification	
P. Škobalj - Estimate of Power Plants Feasibility for Coal Co-combustion with Solid Recovered Fuel Obtained from Waste Materials	
M. Kljajić - Use of Neural Networks for Modeling and Predicting Boiler Operating Performance	
A. Duinea - THE ANALYSIS OF STEAM SEPARATOR REGULATION SCHEME FOR THE 420 t/h STEAM GENERATOR	
M. Tosun - Experimental investigation of the performance of a minichannel evaporator	
S. Ahmet Ates - Empirical analysis of Corporate Energy Management Practices of Energy Intensive Industries in Turkey	
M. Kiguchi - Long-Term On-site Evaluation of Electrical Motor-Driven VRF System	
V. Chobanov - WHAT IS PROFITABLE DISPERSED GENERATION?	
H. Arai - Investigation on Remote Control Operating Status of VRF Air- Conditioning System	
J. Persson - Phase Change Material cool storage in a Swedish Passive House	
O. Ilić - Passive Cooling Methods for Shopping Malls Buildings in Nis Climate	
A. Jovanović - Day lighting in student dorms and recommendations for sustainable design	
D. Zheng - Thermodynamic Analysis of an Absorption-Compression Hybrid Refrigeration Cycle for Distributed Energy Utilization	
E. Fahlén - Potential CO ₂ Reduction by Increased Integration of Absorption Cooling in a Swedish District Energy System	
A.Gonzalez - Technical study of CO ₂ capture process using DGA and mixing amines for a 350 MW Power Plant	
B. David - Optimization of Design and Operating Conditions of Thermoelectric Heat Pumps	
S. Reynolds - Prospects for Renewable Electricity Production in Libya, using Parabolic Trough Solar Thermal Generation	
A.Poświęta - Thermodynamic Aspects of Power Production in Thermal, Chemical and Electrochemical Systems	
S. Karellas - Investigation of lignite pre-drying in a modern Greek power plant towards zero CO ₂ emissions	
M. Costa - Optimal selection of the combustion mode in a turbo-charged diesel engine for reduced fuel consumption, noxious emissions and radiated noise	
Zornitza Kirova – Yordanova - Thermodynamic Evaluation of the Efficiency and Environmental Impact of Energy Integration and Cogeneration in Chemical Industry: The Nitrogen Fertilizers Production as a Case Study	
17h30-19h00	Transfer from Novi Sad to Belgrade
19h00 -	Conference Banquet

Thursday, 7 July

09h00-10h30 Oral presentation session 9

ROOMS

TESLA

MILANKOVIĆ

ALAS

PUPIN

TOPICS

Fuel Cells and Integrated Systems

Energy and Buildings II

Cogeneration, CHP and District Heating I

Renewable Energy Conversion, Use and Integration

CHAIRS

Vittorio VERDA

Marija TODOROVIĆ

Jiri KLEMEŠ

Andrea LAZZARETTO

PAPERS

T. Wakui - Feasibility Study on Combined Use of Residential SOFC Cogeneration System and Plug-in Hybrid Electric Vehicle from Energy-saving Viewpoint

M. Miletić - Influence of Additional Storey Construction to Space Heating of a Residential Building

C. Frangopoulos - A Method to determine the power to heat ratio, the cogenerated electricity and the primary energy savings of cogeneration systems after the European Directive

P. Varbanov - Integration and Management of Renewables into Total Sites with Variable Supply and Demand

A. Hernandez-Guerrero - NUMERICAL ANALYSIS OF A PEM FUEL CELL PERFORMANCE USING A TREE-SHAPED VASCULAR DESIGN FOR FLOW DISTRIBUTION

Z. Stevanović - CFD modelling of fire protection system in office building

A. Ljubenko - Energy Efficiency of a District Heating System and its Possible Improvements

O. Ećim-Djurić - Improvement of Greenhouse Energy Efficiency by Dynamic Modelling of Geothermal Heating Energy Storage Tank

V. Verda - SENSITIVITY ANALYSIS APPLIED TO THE MULTIOBJECTIVE OPTIMIZATION OF A MCFC HYBRID PLANT

A. JEAN - MECr: a new relative method for heat flux sensor calibration

A. Ziebig - Optimal Coefficient of the Share of Cogeneration in District Heating Systems

F. Ayachi - Exergy Assessment of Recovery Solutions from Dry and Moist Gas Available at Medium Temperature

Z. Mostefa - Numerical study of the effect of the height simple channel with straight geometry on the gases flows in a fuel cell (PEMFC).

C. Tzivanidis - NUMERICAL EVALUATION OF THE DEGREE OF PHASE CHANGE MATERIALS EXPLOITATION IN BUILDINGS PASSIVE SOLAR HEATING AND COOLING

A. Campos Celador - Thermoeconomic analysis of a micro-CHP installation in a tertiary sector building through transient simulation

A. Lazzaretto - Cost Evaluation of Organic Rankine Cycles for Low Temperature Geothermal Sources

A. Hernandez-Guerrero - 3D-NUMERICAL ANALYSIS OF A PEMFC FLOW FIELD AND COMPARISON WITH TRADITIONAL CHANNELED SYSTEMS

M. Jennings - Optimal Scheduling of Low Carbon Investment Decisions for a Social Housing Refurbishment Case Study

R. Danesfaleh - Combined heat and power in Mashhad power plant

P. Varbanov - Integration of Fuel Cells and Renewables into Efficient CHP Systems

J. Vesić Vasović - MULTI-CRITERIA APPROACH TO THE INCREASE OF ENERGY EFFICIENCY OF THE RESIDENTIAL OBJECT

M. Reini - Optimal Synthesis and Operation of Advanced Energy Supply Systems for Standard and Domotic Home

10h30-10h50 Coffee break

10h50-12h50 Oral presentation session 10

ROOMS

TESLA

MILANKOVIĆ

ALAS

PUPIN

TOPICS

Coal and its Use

Energy and Buildings III - Envelope

Cogeneration, CHP and District Heating II

Recycling and Waste Management

CHAIRS

Andrzej ZIEBIK

Jovan PETROVIĆ

Petar VARBANOV

Danijel SCHNEIDER

PAPERS			
Z. Li - Integrating Low Steam Demand CO Shift Process to Coal Based Polygeneration Energy Systems: Process Design and Analysis	M. Founti - On the Development of Computational Models for the Integrated Simulation of Buildings Thermal Behaviour: Focusing on the Phase Change Material Effect	L. Serra - ALLOCATION OF ECONOMIC COSTS IN TRIGENERATION SYSTEMS AT VARIABLE LOAD CONDITIONS	A. Agudelo Santamaría - Allocation of Wastes in Thermoeconomic Analysis
A. Kochaniewicz - Analysis of the Use of Waste Heat Obtained from Coal-fired Units in Organic Rankine Cycles and for Brown Coal Drying	K. Devs - Energy Savings and Occupant Comfort Studies for a Conditioned Open - Plan Office Building	P. Johansson - The impact from building heating system improvements on the primary energy efficiency of a district heating system with cogeneration	I. Milošević - The Application of a Multi-parameter Analysis in Choosing the Location of a New Solid Waste Landfill
K. Stępczyńska - Diverse Configurations of the Boiler Feed Pump Drive for the Ultra-supercritical 900 MW Steam Plant	D. Popescu - Benefits of Thermal Retrofitting of Residential Buildings	H. Li - Exergy and Energy Analysis of Low Temperature District Heating Network	N. Nikolić - IMPROVEMENT ANALYSIS OF WASTE MANAGEMENT PROCESS IN LUCANI REGION, SERBIA
A. Restrepo - Life cycle assessment for co-firing potential analysis in a pulverized coal power plant	A. Stefanović - Decreasing energy consumption in thermally non-insulated old house via refurbishment	S. de Oliveira Junior - Exergy and thermoeconomic evaluation of a refinery utilities plant	D. Schneider - Potential of Municipal Solid Waste for Reduction of GHG Emissions and Energy Production in Croatia
L. Soares - Comparative Exergetic Analysis of a Coke and Charcoal Blast Furnace	K. Hoinka - Mathematical model for the simulation of cumulative emissions generated by energy management of complex buildings	A. Sancez - Quantifying the reduction of irreversibility of a cogeneration system, by simulating changes in the steam generator and steam turbine	D. Marković - Life Cycle Assessment of Municipal Solid Waste Management: Case Study of Niš, Serbia
S. Karellas - A modelling evaluation of Synthetic Natural Gas production from different coal/lignite gasification processes	J. Đurić - Urban Aspects of Improving Energy Efficiency in Building	S. Behboodi - Mashad Trigeneneration Potential- an Opportunity for CO ₂ Abatement in World's Greatest Mosque	A. Luković - Anaerobic Digestion of Municipal Solid Waste for Biogas Production: A General Review
A. Restrepo - Exergetic and environmental analyses of a pulverized coal power plant: A Brazilian case	D. Cvetković - Energy, Exergy, CO ₂ Emission, and Economic Comparison Between Low Temperature Radiant Panel Systems and Radiator Systems	D. Djurić Ilić - Introduction of Absorption Cooling Process in CHP Systems – An opportunity for Reduction of Global Emissions of CO ₂	
Z. Marković - Carbon Emission Factor of The Kolubara Basin Lignite	M. Giardina - CasaB2: A Sustainable Architecture Design for the Mediterranean Climate Region	A. Bagdanavicius - Assessment of community energy supply systems using energy, exergy and exergoeconomic analysis	
12h50-14h00	Lunch		
14h00-15h30	Coffee Break and Poster Session 2		
ROOM	THE DANUBE		
CHAIRS	Goran VUČKOVIĆ		
PAPERS			
A. Dolatshahi - Thermoeconomic Analysis of a MED-TVC Desalination System Coupled to a Simple Cycle Power Plant			
A. Blanco-Marigorta - Energy and Exergy Analysis of the Different Configurations of a Reverse Osmosis Desalination Plant in Gran Canaria			
A. Jaouahdou - Solidification of a Binary Mixture: Cooling from Above			
N. Ratkovich - Energy Consumption Related to Shear Stress for Membrane Bioreactors Used for Wastewater Treatment			
I. Tanackov - Balance of the CO2 Emission on the Corridor X through Serbia and Proposals for Remediation of the Part of the Emission Applying Transportation-Logistics Systems			
R. Yokoyama - Fundamental Analysis on Energy Consumption and Environmental Impact of Electric Vehicles in Consideration of Using Fast Battery Chargers			
J. Tepić - Applying Methods to Reduce Rail Wear in the Railway Systems for Environmental Protection			
V. Stevanović - Dynamics of steam accumulation			
L. Xhagolli - EFFICIENT USE OF ENERGY AND RESOURCE IN ALBANIAN BREWERIES			
S. Kadiri - Radon Measurements in the Obiliq Thermal Power Plant and Buildings in its Vicinity Topic Conventional and Advanced Power Plants			

Z. Marković - EMISSIONS OF GREENHOUSE GASES WITHIN PUBLIC DISTRICT HEATING PLANTS OF REPUBLIC SERBIA	
L. Ruineanu - EVALUATION METHOD FOR THE REHABILITATION OF DISTRICT HEATING SYSTEMS BASED ON COGENERATION	
N. Zivković - Reduction of the CO ₂ emission in the co-combustion process of solid recovery fuels with pulverized lignite in power plants in Serbia	
S. Oh - Development of an Embedded Solar Tracker using MCU	
C. Sánchez - Model to Simulate and Design the Power Block Cycle of a Solar Power Plant	
B. Repić - Experimental Determination Thermo Physical Characteristics of Balled Biomass	
J. Segovia - Thermodynamic Properties of Second Generation Biofuels	
L. Mojiović - The Ways to Improve the Economy of Bioethanol Production on Renewable Biomass in Serbia	
V. Bakić - Dynamical simulation of a PV/Wind hybrid energy conversion system	
J. Ranogajec - Waste building materials and their usage in the production of pozzolanic mortars	
M. Radeka - EVALUATION OF THE ECONOMIC VIABILITY OF WASTE FROM CERAMIC BRICK AND TILE INDUSTRY IN THE PRODUCTION OF HISTORIC POZZOLANIC MATERIALS	
P. Janković - Application of Clean Technologies in Ecologization of Manufacturing Processes	
M. Stamenković - Environmental Aspects of Formation of Green Roofs in Urban Areas	
P. Krawczyk - Two-dimensional fluid structure interaction of a morphed wind turbine blade	
D. Krstić - Conversion Coefficients for Age Dependent ORNL Phantoms from Natural Radioactivity in Soil as a Source of External Exposure	
L. Hernández Ariano - Calibration of the Instantaneous Heat Transfer Correlation from the Study of the Polytropic Index in Internal Combustion Engines	
R. Pejanović - International Institutions Accession Funds in Financing Projects in Sustainable Agriculture	
M. Božić - Short-Term Load Forecasting with Least Square Support Vector Machines	
C.Lima - Smart metering and systems to support a conscious use of water and electricity	
S. Kuzmanovic - Application of Statistic Methods in Smart Distribution Grid Concept	
S Lima - Smart Grid will be a Reality. For Developing Countries, Energetic Matrix, Socio-cultural Issues, Regulatory and Local Development Shaping Outcomes, Incomes and Feasibility Efficiency	
15h30-16h20	Closing Ceremony
ROOM	THE DANUBE
CHAIRS	Jovan PETROVIĆ