



# POWER PLANTS 2021

## ELEKTRANE 2021



**Date: 18.11.2021 (SECOND DAY OF THE CONFERENCE)**

**Time: 09:30-16:40**

**Organization: Society of Thermal Engineers of Serbia**

**Venue: Congress hall 211, University of Belgrade, Faculty of Mechanical Engineering,  
Kraljice Marije 16, Belgrade, Serbia**

**Date: 18.11.2021**

**Time: 09:30-12:00**

**Venue: Congress hall 211**

**Session 4: DECARBONIZATION, EFFICIENCY, ENERGY RESOURCES, SUSTAINABLE DEVELOPMENT AND COMPETITIVENESS, INVITED LECTURES**

Time	Contribution	Speaker
09:30-09:55	SILYZER - HYDROGEN PRODUCTION	Nenad Veljović and Petar Tatomirović, SIEMENS-Energy, Belgrade
09:55-10:20	REPOWERING COAL 2 GAS	Lazar Radovanović, SIEMENS-Energy, Belgrade
10:20-10:45	EXPERIENCE FROM THE IMPLEMENTATION OF THE RESEARCH AND DEVELOPMENT PROJECT "POWER UNITS 200+. INNOVATIVE TECHNOLOGY OF CHANGING THE OPERATING REGIME OF 200 MWE POWER UNITS"	Radosław Klón RAFAKO Innovation, Poland
10:45-11:10	TECHNOLOGIES FOR NEGATIVE CO <sub>2</sub> EMISSION	Dr Edgardo Coda Zabetta, Sumitomo SHI FW, Finland
11:10-11:35	NEW CHALLENGES OF GERMAN ENERGY TRANSITION	Dr Dragan Stevanović, HiTES Holding GmbH, Germany
11:35-12:00	TRANSITION TOWARD A LOW-CARBON ECONOMY	Vasilije Manović Combustion and CCS Center, Cranfield University, Bedford, UK
12:00-12:30	Coffee and snack break	

**Date:** 18.11.2021  
**Time:** 12:30-14:10  
**Venue:** Congress hall 211

**Session 5: IMPLEMENTATION OF NEW POLICIES, TECHNOLOGIES, INNOVATIVE SOLUTIONS AND EQUIPMENT**

Time	Contribution	Speaker
12:30-12:55	FLEXIBILITY OF ELECTRO POWER SYSTEMS AND THE NEW ROLE OF REVERSIBLE HYDROPOWER PLANTS	Prof Dr Aleksandar Gajić, Academy of Engineering Sciences of Serbia
12:55-13:20	RENEWABLE ENERGY SOURCES AND ITS ROLE IN THE FUTURE OF ENERGY SYSTEM OF REPUBLIC OF SRPSKA	Prof Dr Pero Gvero, Mech.eng.Faculty Banja Luka
13:20-13:45	ON COMPETITIVENESS OF POWER SYSTEMS IN TECHNOLOGY TRANSITION	Prof Dr Vojin Grković, Faculty of Technical Sciences, Novi Sad
13:45-14:10	NUKLEARNE ELEKTRANE U SRBIJI I OKRUZENJU >HVALA NE TREBA	Pof Dr Milovan Studović, Mech.eng.Faculty Beograd
14:10-14:30	Coffee break	

**Date:** 18.11.2021  
**Time:** 12:30-14:10  
**Venue:** Room No. 1

**Session 7: THERMAL/HYDRO/WIND/SOLAR AND OTHER POWER PLANTS OPERATION CHALLENGES, Numerical modelling, Conference papers**

Time	Contribution	Speaker
12:30-12:50	INFLUENCE OF THE COMBUSTION SYSTEM CHANGE ON PROCESSES IN THE STEAM BOILER IN TPP UGLJEVIK	Prof Dr Goran Stupar, Mech.eng.Faculty Beograd
12:50-13:10	IMPACT ANALYSIS OF PRIMARY MEASURES REDUCTION OF NOX PROCESSES IN STEAM BOILER K-3 OF COMBINED HEAT AND POWER PLANT NOVI SAD	Prof Dr Goran Stupar, Mech.eng.Faculty Beograd
13:10-13:30	SELECTIVE CATALYTIC REDUCTION FOR NOX ABATEMENT: A REVIEW OF THE TECHNOLOGY AND MODELING APPROACHES	Dr Ivan Tomanović, VINCA Institute, Belgrade
13:30-13:50	INFLUENCE OF THE ASH DEPOSIT TYPE ON THE NUMERICAL SIMULATION RESULTS OF A PULVERIZED COAL - FIRED FURNACE	Dr Nenad Crnomarković, VINCA Institute, Belgrade
13:50-14:10	THE CALCULATION OF THREE-DIMENSIONAL FLOW THROUGH A SINGLE STAGE AXIAL GAS TURBINE	Petar Babić, Mech.eng.Faculty Banja Luka
14:10-14:30	Coffee break	



**Date:** 18.11.2021  
**Time:** 14:30-16:10  
**Venue:** Congress hall 211

**Session 6: THERMAL/HYDRO/WIND/SOLAR AND OTHER POWER PLANTS OPERATION CHALLENGES, Conference papers**

Time	Contribution	Speaker
14:30-14:50	DESIGN AND CONSTRUCTION OF A PHOTOVOLTAIC SOLAR POWER PLANT OF 500 KW ON THE ROOF OF THE FACTORY GRUNER Serbian d.o.o. – VLASOTINCE	Miodrag Vuković, “CONSECO Inženjering” Belgrade
14:50-15:10	HYBRID POWER SUPPLY OF THE AGROKAPILARIS® SYSTEM FOR IRRIGATION OF VEGETABLE CROPS ON THE PLOT "GRABOVAC" – OBRENOVAC	Dr Željko V.Despotović, Institute “Mihajlo Pupin”, Belgrade, Serbia
15:10-15:30	ASSESSMENT OF POTENTIAL FOR ON-SITE ELECTRICITY PRODUCTION FOR COOLING AND FREEZING FACILITIES BY APPLICATION OF PHOTOVOLTAICS	Milica Jovčevski, Mech.eng.Faculty Niš
15:30-15:50	OVERVIEW OF PART OF THE COAL SUPPLY MANAGEMENT AND SUPERVISION SYSTEM IN TE NIKOLA TESLA B	Vladimir Obradović INFORMATIKA a.d., Belgrade
15:50-16:10	TWO STAGE COGENERATION IN DISTRICT HEATING SYSTEMS	Dr Goce Vasilevski, Mining institute, North Macedonia
16:10	<b>CLOSING CEREMONY</b>	

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**Session 8: THERMAL/HYDRO/WIND/SOLAR AND OTHER POWER PLANTS OPERATION CHALLENGES, Renewable power generation/use, Conference papers**

Time	Contribution	Speaker
14:30-14:50	THE TECHNO-ECONOMIC ANALYSIS OF SMALL HYDROPOWER PLANTS INSTALLED PARAMETERS FOR THREE DIFFERENT MOUNTAIN WATERCOURSES	Vidosava Vilotijević, Mech.eng.Faculty Podgorica, Montenegro
14:50-15:10	COMPARATIVE ANALYSIS OF TWO ARTIFICIAL NEURAL NETWORKS IN THE PREDICTION OF THE VIBRATIONAL BEHAVIOR OF A HYDRAULIC TURBINE	Jovana Petrović, Institute “Mihajlo Pupin”, Belgrade, Serbia
15:10-15:30	DIGITAL TECHNOLOGIES EMERGENCE IN THE CONTEMPORARY HYDROPOWER PLANTS OPERATION	Bogdan Ristić, Mech.eng.Faculty Belgrade
15:30-15:50	A METHOD TO DETERMINE THE STRUCTURAL WARNINGS OF MALFUNCTION IN POWER GRID NETWORKS BY USE OF SIMPLICIAL COMPLEXES	Dr Miroslav Anđelković, VINCA Institute, Belgrade
Short break before <b>closing ceremony at Congress hall 211</b>		

