

PROGRAM KONFERENCIJE IEEP 2022 CONFERENCE PROGRAM

Utorak, 8. novembar 2022 / Tuesday, November 8, 2022 (SALA 211 / ROOM 211, 2. SPRAT / 2. FLOOR)

Zoom Link: <https://zoom.us/j/99776323783?pwd=dGFRMHAzaEYyYWNiaXhHNm9pdi9aQT09>

Meeting ID: 997 7632 3783

Passcode: 033774

9:00-10:00 REGISTRACIJA UČESNIKA / REGISTRATION OF THE PARTICIPANTS

10:00-10:30 SVEČANO OTVARANJE / OPENING CEREMONY

POZDRAVNI GOVORI / WELCOME GREETINGS:

Prof. dr Vladimir POPOVIĆ

dekan Mašinskog fakulteta /

Dean of the Faculty of Mechanical Engineering

Prof. dr Milan RADOVANOVIĆ

predsednik Društva termičara Srbije /

President of the Society of Thermal Engineers of Serbia

Prof. dr Goran JANKES

predsednik Organizacionog odbora IEEP 2022 /

President of the Organizing Committee of IEEP 2022

Miroslav Lutovac

savetnik predsednika Privredna komora Srbije / Advisor of the president of the Serbian Chambers of Commerce

ZVANIČNO OTVARANJE / OFFICIAL OPENING

10:30-12:00 UVODNA IZLAGANJA (20 minuta) / INTRODUCTORY LECTURES (20 minutes per lecture)

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SOLVING THE NET-ZERO EMISSION EQUATION FOR INDUSTRY

Miodrag M. MESAROVIĆ, Secretary General of the Serbian WEC Member Committee, Senior Advisor in Energoprojekt Entel Consulting Engineers Co. in Belgrade and president of the scientific committee of the Society of Thermal Engineers of Serbia

SUSTAINABLE AND LOW-CARBON ENERGY SYSTEM POLICIES IN DEVELOPING COUNTRIES: A CASE STUDY OF MACEDONIA

Gligor KANEVČE, Macedonian Academy of Science and Art / Makedonska akademija nauka i umetnosti, North Macedonia

USE OF NATURAL GAS IN SERBIA

Vojislav VULETIĆ, Serbian Gas Society / Udruženje za gas Srbije

KLUČNI REZULTATI I PROJEKCIJE RANIH KONSULTACIJA ZA NACRT NEKP-A / KEY FINDINGS AND PROJECTIONS FOR THE DRAFT NECP EARLY CONSULTATION

Nenad JOVANOVIĆ, Senior Energy Consultant, LDK Consultants / Viši savetnik za energetiku, LDK Consultants

12:30-13:00 PREZENTACIJA SPONZORA / PRESENTATION OF SPONSOR – ENERGOTEHNIKA JUŽNA BAČKA

Zoom Link: <https://zoom.us/j/99776323783?pwd=dGFRMHAzaEYyYWNiaXhHNm9pdi9aQT09>

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13:00-14:00 *Energetska politika, snabdevanje energijom, zakonodavstvo i podsticajni elementi /
Energy policy, energy supply, legislature and incentives*



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ONE SCENARIO FOR SERBIA'S DECARBONISATION IN THE FIELD OF ENERGY PRODUCTION

Borivoj STEPANOV, Faculty of Technical Sciences, Novi Sad / Univerzitet u Novom Sadu, Fakultet Tehničkih nauka, Serbia

ASSURED CAPACITY, TOTAL ASSURED CAPACITY AND DISPATCHABILITY OF SERBIAN POWER SYSTEM AND POWER PLANTS

Vojin GRKOVIĆ, Đorđe ČANTRAK, Miroslav BENIŠEK, Dragan PETROVIĆ, Đorđije DODER

ENERGY-TIME FRAME PROCEDURE FOR COMPETITIVENESS ASSESSMENT OF ENERGY TECHNOLOGIES

Vojin GRKOVIĆ, Miroslav KLJAJIĆ, Vladimir ŽIVKOVIĆ

SELECTED SUSTAINABLE ENERGY LESSONS FROM FUTURE

Borivoj STEPANOV, Željko VLAOVIĆ, Aleksandar ANĐELKOVIĆ, Vladimir RAJS, Zoran ČEPIĆ, Mladen TOMIĆ

15:30-17:00 *Energetska efikasnost i energetska menadžment u industriji /
Energy efficiency and energy management within the industry*

Zoom Link: <https://zoom.us/j/96478666670?pwd=Y1NPSDIEZUIORUpWNkYWVHZuS2VEUT09>

Meeting ID: 964 7866 6670

Passcode: 776997

ENERGETSKA EFIKASNOST KAO KLJUČNI POKRETAČ ZA ODRŽIVI RAZVOJ MALIH I SREDNJIH PREDUZEĆA U INDUSTRIJSKOM SEKTORU SRBIJE / ENERGY EFFICIENCY AS A KEY DRIVER FOR SUSTAINABLE GROWTH IN SMEs IN INDUSTRIAL SECTOR IN SERBIA

Mirjana STAMENIĆ, University of Belgrade, Faculty of Mechanical Engineering / Univerzitet u Beogradu, Mašinski fakultet, Beograd, *Serbia*

INDUSTRIJSKE TOPLLOTNE PUMPE – EKOLOŠKI I ENERGETSKI EFIKASAN OBNOVLJIVI IZVOR TOPLLOTNE ENERGIJE

Zoran STAJIĆ, Emerson Commercial & Residential Solutions – Vilter

PRIMENA TOPLLOTNIH PUMPI ZA KORIŠĆENJE OTPADNE TOPLOTE U INDUSTRIJI / APPLICATION OF HEAT PUMPS FOR UTILIZATION OF WASTE HEAT IN INDUSTRY

Nikola TANASIĆ, Goran JANKES, Mirjana STAMENIĆ, Vuk ADŽIĆ

RAZMATRANJE MOGUĆNOSTI KORIŠĆENJA OTPADNE TOPLOTE U RAFINERIJAMA / POSSIBILITY OF USING WASTE HEAT IN OIL REFINERIES

Stojan SIMIĆ, Krsto BATINIĆ, Davor MILIĆ, Goran ORAŠANIN, Srđan VASKOVIĆ, Jovana BLAGOJEVIĆ

UPOREDNA ANALIZA SUŠENJA DRVETA / COMPARATIVE ANALYSIS OF WOOD DRYING

Vuk MAROVIĆ, Damir ĐAKOVIĆ, Miroslav KLJAJIĆ

EKSPERIMENTALNA OPTIMIZACIJA ATMOSFERSKIH GORIONIKA MALE SNAGE / EXPERIMENTAL OPTIMIZATION OF LOW POWER ATMOSPHERIC BURNER

Aleksandar MILIVOJEVIĆ, Miroljub ADŽIĆ, Vuk ADŽIĆ, Mirjana STAMENIĆ

HEAT RECOVERY OF INDUSTRIAL AIR SCREW COMPRESSOR

Adem BUREKOVIĆ, Almir MUJIĆ, Adnan MEŠINOVIĆ, Mona NEMER, Rejhana ĐAKOVAC, Sumeja LEPIĆ, Berina Delalić-Gurda, Nijaz Delalić, Džana KADRIĆ, Edin KADRIĆ

17:30-18:30 *Posebna sesija: Procesni i upravljački aspekti unapređenja energetske efikasnosti industrijskih procesa / Special Session: Process and control aspects of improving the energy efficiency of industrial processes*

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UPRAVLJANJE AKTIVNIM ISPRAVLJAČEM KAO VIRTUELNOM SINHRONOM MAŠINOM

Jovana GLUŠČEVIĆ, Mihailo TANASIĆ, Lepasava RISTIĆ, Milan BEBIĆ

ANALIZA PRIMENE ENERGETSKIH FILTERA I DIGITALNE OBRADNE SIGNALA KOD AKTIVNOG ISPRAVLJAČA

Nemanja MILOŠEVIĆ, Lepasava RISTIĆ, JELENA ČERTIĆ

PRIMENA TIPIČNIH STRATEGIJA UPRAVLJANJA POGONOM SA SINHRONIM MOTOROM SA STALNIM MAGNETIMA U CILJU POSTIZANJA OPTIMALNIH PERFORMANSI

Uroš MILOŠEVIĆ, Lepasava RISTIĆ, Mladen TERZIĆ

ENERGETSKI PREGLED I MERE ZA POVEĆANJE ENERGETSKE EFIKASNOSTI INDUSTRIJSKIH POSTROJENJA / ENERGY AUDIT IN SELECTED INDUSTRIAL COMPANY AND PROPOSED MEASURES FOR ENERGY EFFICIENCY IMPROVEMENTS

Tomislav STEPANOVIĆ, Nikola KIJANOVIĆ, Lepasava RISTIĆ, Mirjana STAMENIĆ, Saša MARKOVIĆ

Sreda, 9. novembar 2022 / Wednesday, November 9, 2022 (SALA 211 / ROOM 211, 2. SPRAT / 2. FLOOR)

09:00-10:00 *Posebna sesija: Ventili, zatvarači, rešetke, cevovodi / Special session: Valves, closures, grates, pipelines*

Zoom Link: <https://zoom.us/j/94977993229?pwd=OW4xdGV6Q3JabThQdEVIZHZ2Q0tSQT09>

Meeting ID: 949 7799 3229

Passcode: 161113

THE NATIONAL STANDARD FOR VELOCIMETRY AND POSSIBILITIES FOR IT IN SERBIA

Đorđe ČANTRAK, University of Belgrade, Faculty of Mechanical Engineering / Univerzitet u Beogradu, Mašinski fakultet, Beograd, Serbia

EXPERIMENTAL AND NUMERICAL INVESTIGATION OF BALL VALVE CHARACTERISTICS

Milan RAKOVIĆ, Lazar LEČIĆ, Aleksandar ČOČIĆ, Novica JANKOVIĆ

CONTROL VALVES TRIM DESIGN, RETROFITTING AND TESTING

Đorđe ČANTRAK, Ljubomir SAVIĆ, Novica JANKOVIĆ, Dejan ILIĆ

NEINVAZIVNA SANACIJA OŠTEĆENIH CEVOVODA U VODOVODNIM SISTEMIMA

Aleksandar STOJANOVIĆ

ODVODNJAVANJE MULJA IZ KANALIZACIONE OTPADNE VODE POMOĆU VIJČANE PRESE

Nemanja RADIĆ, Nebojša RADIĆ

10:00-10:30 **PREZENTACIJA SPONZORA / PRESENTATION OF SPONSOR – SIEMENS Energy d.o.o., Beograd**
PETAR TATOMIROVIĆ: HIGH-TEMPERATURE HEAT PUMPS

Zoom Link: <https://zoom.us/j/94977993229?pwd=OW4xdGV6Q3JabThQdEVIZHZ2Q0tSQT09>

Meeting ID: 949 7799 3229

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11:00-13:00 *Energetska efikasnost i energetska menadžment u zgradarstvu i daljinskom grejanju / Energy efficiency and energy management within building and in district heating system*

Zoom Link: <https://zoom.us/j/94977993229?pwd=OW4xdGV6Q3JabThQdEVIZHZ2Q0tSQT09>

Meeting ID: 949 7799 3229

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FUTURE ENERGY PATHWAYS FOR A UNIVERSITY CAMPUS CONSIDERING POSSIBILITIES FOR ENERGY EFFICIENCY IMPROVEMENTS

Nataša NORD, Norwegian University of Science and Technology, Department of Energy and Process Engineering, Faculty of Engineering, Norway

THERMAL ENERGY STORAGE FOR DATA CENTRE WASTE HEAT RECOVERY IN DISTRICT HEATING SYSTEMS

Haoran LI, Juan HOU, Nataša NORD

OPERATIONAL CHARACTERISTICS OF THE CHP PLANT IN THE DISTRICT HEATING SYSTEM OF BELGRADE

Vladimir TANASIĆ, Nikola TANASIĆ, Mirjana STAMENIĆ

PRIPREMNE AKTIVNOSTI ZA PROGRAM „ENERGETSKA EFIKASNOST U ZGRADAMA CENTRALNE VLASTI“

Maja MATEJIĆ, Dragan UROŠEVIĆ

DETEKCIJA TOPLOVODNE INFRASTRUKTURE TERMALNOM KAMEROM MONTIRANE NA BESPILOTNU LETELICU I TEHNOLOGIJOM SKENIRANJA GEORADAROM

Aleksandar RISTIĆ, Željko BUGARINOVIĆ, Milan VRTUNSKI, Aleksandra RADULOVIĆ, Milka ŠARKANOVIĆ BUGARINOVIĆ

EXPERIMENTAL ANALYSIS OF THE JUSTIFICATION OF USING A SPACE HEATING SYSTEM USING A PELTIER THERMOELECTRIC GENERATOR

Milan PUPČEVIĆ, Petar GVERO, Čedomir ZELJKOVIĆ, Milovan KOTUR, Predrag MRŠIĆ

INTERAKCIJA VAZDUHA I VODE TOKOM PUNJENJA CIJEVNOG SISTEMA POD PRITISKOM

Vuko KOVIJANIĆ, Uroš KARADŽIĆ

13:00-13:30 **PREZENTACIJA SPONZORA / PRESENTATION OF SPONSOR**

Zoom Link: <https://zoom.us/j/94977993229?pwd=OW4xdGV6Q3JabThQdEViZHZ2Q0tSQ09>

Meeting ID: 949 7799 3229

Passcode: 161113

15:00-16:30 *Zaštita životne sredine i održivi razvoj / Environmental protection and sustainable development*

Zoom Link: <https://zoom.us/j/91880947839?pwd=c0VxK1hKQ2pxc29wSGNyZDRFeU5rUT09>

Meeting ID: 918 8094 7839

Passcode: 559321

ATMOSPHERIC DISPERSION MODELING OF POLLUTANTS FROM COMBUSTION PLANTS

Dušan TODOROVIĆ, University of Belgrade, Faculty of Mechanical Engineering / Univerzitet u Beogradu, Mašinski fakultet, Beograd, Serbia

HYDROGEN PRODUCTION BY THERMAL CRACKING OF NATURAL GAS – TEST FACILITY

Dragan STEVANOVIĆ, Judith SCHIMMEL, Tarek PHILIPPI

A THERMODYNAMIC ANALYSIS OF THE PROCESS OF HYDROGEN PRODUCTION BY NATURAL GAS DECOMPOSITION IN THE LOW-TEMPERATURE THERMAL PLASMA REACTOR

Nada MILUTINOVIĆ, Aleksandar ERIĆ, Dejan CVETINOVIĆ, Nikola ŽIVKOVIĆ, Jovana ANĐELKOVIĆ

SISTEM ZA PRAĆENJE KONCENTRACIJE PM_{2.5} ČESTICA BAZIRAN NA ARDUINO PLATFORMI I GIS

Milan VRTUNSKI, Aleksandr RISTIĆ, Dušan JOVANOVIĆ, Željko BUGARINOVIĆ

NUMERICAL SIMULATION OF WET FLUE GAS DESULPHURIZATION IN SPRAY ABSORBER

Milan PETROVIĆ, Vladimir STEVANOVIĆ, Sanja MILIVOJEVIĆ, Milica ILIĆ

CO₂ EMISSION REDUCTION BY USING CORN AS A RAW MATERIAL IN REFINED ALCOHOL PRODUCTION

Saša MARKOVIĆ, Branislav GAJIĆ, Srbslav GENIĆ

16:45-18:15 *Paralelna sesija - Energetska efikasnost energetski procesi i tehnologije (SALA 512) / Parallel Session - Energy efficiency and energy process and technologies (ROOM 512)*

Zoom Link: <https://zoom.us/j/94235040373?pwd=aWJKYtCbXJpRXNpNVhzTG41amtzQT09>

Meeting ID: 942 3504 0373

Passcode: 505092

THIRD LIFE OF COAL POWER PLANTS ANALYSIS

Željko VLAOVIĆ, Borivoj STEPANOV, Aleksandar ANĐELKOVIĆ, Vladimir RAJS, Zoran ČEPIĆ, Marko JUROŠEVIĆ

EXPERIMENTAL RESEARCH OF ENERGY CHARACTERISTICS OF VAWT IN A WIND TUNNEL

Časlav MITROVIĆ, Goran VOROTOVIĆ, Jela BURAZER, Aleksandar BENGIN, Nebojša PETROVIĆ, Miloš JANUZOVIĆ

NOISE ANALYSIS OF 3-BLADED H-DARRIEUS TURBINE AT DIFFERENT ANGLES OF ATTACK

Marta TRNINIĆ, Vuk ADŽIĆ, Mirko DINULović, Miloš JANUZOVIĆ, Jela BURAZER

ISPITIVANJE ZASNOVANO NA RIZIKU: STANDARDI I PERSPEKTIVE

Vladimir PILIĆ

THERMODYNAMIC EQUILIBRIUM MODELING OF THE THERMAL PLASMA GASIFICATION PROCESS USING ASPEN PLUS

Jovana ANĐELKOVIĆ, Dejan CVETINOVIĆ, Aleksandar ERIĆ, Nada MILUTINOVIĆ, Mirjana KIJEVČANIN

16:45-18:15 *Paralelna sesija - Korišćenje obnovljivih izvora energije (SALA 211) /*

Parallel Session - The use of renewable energy sources (ROOM 211)

Zoom Link: <https://zoom.us/j/91880947839?pwd=c0VxK1hKQ2pxc29wSGNyZDRFeU5rUT09>

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SOLAR UPDRAFT TOWER TECHNOLOGY AS CLEAN AND RENEWABLE ENERGY SOURCE

Aleksandar ĆOČIĆ, University of Belgrade, Faculty of Mechanical Engineering / Univerzitet u Beogradu, Mašinski fakultet, Beograd, Serbia

MODERN WOOD CHIPS COMBUSTION PLANTS – DESIGN, ACCEPTANCE TESTS AND EMISSION OF POLLUTANTS

Marko OBRADOVIĆ, University of Belgrade, Faculty of Mechanical Engineering / Univerzitet u Beogradu, Mašinski fakultet, Beograd, Serbia

FORECASTING SOLAR PHOTOVOLTAIC ENERGY PRODUCTION USING ARTIFICIAL NEURAL NETWORK

Budimirka MARINOVIĆ, Aleksandra ILJAČIĆ, Milica KAŠIKOVIĆ

MODELING THE OPERATING PARAMETERS OF THE COOLING TOWER USING THE METHOD RESPONSE SURFACES

Mona NEMER, Jusri DIZDAREVIĆ, Sajma GLEDO-MERDAN, Rejhana ĐAKOVAC, Sumeja LEPIĆ, Adem BUREKOVIĆ, Almir MUJIĆ, Adnan MEŠINOVIĆ, Berina DELALIĆ-GURDA, Nijaz DELALIĆ, Džana KADRIĆ, Edin KADRIĆ

UPOREDNA ANALIZA VARIJANTNIH REŠENJA PELTON TURBINE PRI REVITALIZACIJI MALOG HIDROAGREGATA DRUŠTVENOG TROŠENJA

Jelica PEŠIĆ, Ivan BOŽIĆ, Bogdan RISTIĆ

DEFINISANJE I PRORAČUN KRITERIJUMA ZA OPTIMIZACIJU ENERGETSKOG MIKSA UZ PRIMJENU MCDM METODA ZA PROCES NJEGOVE OPTIMIZACIJE

MRKIĆ-BOSANČIĆ, S. VASKOVIĆ, Petar GVERO

PRIMERI DOBRE PRAKSE - KORIŠĆENJE BIOMASE U REPUBLICI SRPSKOJ

Petar GVERO

PRIMERI DOBRE PRAKSE - MALE SOLARNE ELEKTRANE

Miloš KOSTIĆ

18:15-18:45 **ZATVARANJE KONFERENCIJE – ZAKLJUČCI / CLOSING – CONCLUSIONS (ROOM 211)**

Zoom Link: <https://zoom.us/j/91880947839?pwd=c0VxK1hKQ2pxc29wSGNyZDRFeU5rUT09>

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