

Međunarodno Savetovanje  
International Conference

# ENERGY ENERGETIKA 2024



## PROGRAM SAVETOVANJA CONFERENCE PROGRAM



25 - 28 / 06 / 2024  
Zlatibor, Hotel Zlatibor Resort



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# ZAŠTO PRISUSTVOVATI SAVETOVANJU

PREKO 200 UČESNIKA IZ OBLASTI ENERGETIKE

ČETIRI PANELA NA TEMU KLJUČNIH AKTUELNOSTI U ENERGETICI

PREKO 50 KONFERENCIJSKIH SAOPŠTENJA

Međunarodno savetovanje **ENERGETIKA 2024** održava se u godini u kojoj bi trebalo da postaju vidljiviji pozitivni efekti dekarbonizacije energetike, transporta i industrije sa ciljem saniranja posledica sve ubrzanijih klimatskih promena i sve intenzivnijeg zagađenja životne sredine. Srbija je prihvatila Sporazum COP28. Najveći napredak u odnosu na prethodne globalne sporazume o klimi je poziv da se do 2030. godine utrostruče kapaciteti obnovljivih izvora energije i udvostruče srednje godišnje stope rasta energetske efikasnosti, kao i poziv da se u ovoj deceniji ubrza prelazak sa fosilnih goriva u energetskim sistemima, ali na pravedan način, kako bi se do 2050. godine postigle nulte emisije. Ambicije su povećane, mere su konkretizovane, obuhvat je proširen na sva fosilna goriva, očekivanja od ubrzanja razvoja niskougleničnih tehnologija postaju realnija, ali se i pored napretka, još uvek ne vidi da su mehanizmi koji treba da omoguće njihovo ostvarenje, a koji podrazumevaju veoma visoke investicije, uravnoteženo dostupni svim zemljama, na način koji pravično odražava odgovornost za dekarbonizaciju i zaštitu planete.

Svakako se danas može konstatovati da dosadašnja politika EU prema Zapadnom Balkanu nije dovela do energetske tranzicije. Povećane ambicije Republike Srbije, morale bi biti praćene finansijskom i drugom podrškom EU, koja bi bila u skladu sa principima solidarnosti i kohezije Unije, ali i u skladu sa principima Pariskog sporazuma koji se odnose na zajedničku ali diferenciranu odgovornost, na realne mogućnosti i na specifične nacionalne okolnosti. Stimulans energetske tranzicije predstavlja i regionalna saradnja, ali ne kao do sada u trgovini emisijama intenzivnim energentima i proizvodima, već u pružanju novih energetskih usluga i primeni kompatibilnih rešenja u korišćenju OIE, pa čak i u zdravoj konkurenciji.

Pogled ka sredini ovog veka u energetici svakako nameće pitanje čime će region i Republika Srbija zameniti uglj? Koliko mogu sami obnovljivi izvori energije i šta i u kojoj meri se očekuje od korišćenja vodonika (i u mnogim tehnološkim rešenjima i od amonijaka), a šta od nuklearne energetike sa sve atraktivnijim primenama malih modularnih nuklearnih reaktora (sa snagama i preko nekoliko stotina MW)? Šta nam od ovih tehnologija može biti dostupno?

Finansijski i ekonomski aspekti energetske tranzicije predstavljaju dodatni izazov. Gde pronaći kapital za stimulaciju razvoja optimalnog korišćenja obnovljivih izvora energije i onih subjekata koji dosledno i čvrsto sprovode programe energetske efikasnosti i zaštite životne sredine? Kako obezbediti da domaća energetika ne izgubi korak sa okruženjem? Da li rešenja gde se interveniše u reindustrializaciju, ali ciljano u proizvodnju novih tehnologija obnovljivih izvora, daju ekonomske rezultate?

Republika Srbija je zemlja sa statusom kandidata za prijem u članstvo EU i potpisnica Ugovora o osnivanju Energetske zajednice. Ovo nesumnjivo otvara pitanja vezana za uvođenje cene emisije ugljendioksida i eventualnu primenu sistema EU ETS. Ideja o regionalnom ETS sistemu je izgleda definitivno napuštena, ali ostaje otvoreno koje su opcije za primenu cena emisije ugljenika u Srbiji i zemljama regiona? Kako uraditi izbor najpovoljnijih opcija i koji je pravi odgovor na uvođenje karbonske takse na uvoz u EU (EU CBAM)? Naime, CBAM dodatno naglašava potrebu da se ubrza energetska tranzicija određivanjem cene emisija ugljenika, kao i daljom integracijom tržišta, i sa te strane, nameće administrativne i finansijske troškove uvoznici CBAM robe, uključujući električnu energiju.

Energetska tranzicija, pored tehnoloških promena, finansijskih i ekonomskih izazova, donosi i značajne promene u socijalnoj sferi. Pojava i rast broja prozjumeru u Republici Srbiji kao i nekoliko energetskih zadruga su ohrabrujući znaci na putu demokratizacije energetike. Ali, kako intenzivirati ove procese? Kako da cena energije ostane dostupna građanima i privredi, da se izbegnu zamke vođenja socijalne politike preko energetike? Ima li mesta za domaćinstva i pojedince u kreiranju energetske politike (posebno u domenu toplotne energije)? Ima li energetsko zadrugarstvo u korišćenju biomase budućnost u Srbiji?

Ovo su pitanja koja će, po logici stvari, dominirati u raspravama koje će se voditi na međunarodnom savetovanju **ENERGETIKA 2024** i od odgovora na ta pitanja značajno će zavisiti razvoj energetike regiona. Usko polje primene najnovijih tehnologija u Srbiji jesu privatne inicijative i investicije u solarne i vetroelektrane, uz sve rizike primene mehanizma državnih aukcija, dok su ostali sektori privrede, energetske zadruge i domaćinstva manje u fokusu i tako u još težem položaju.

# WHY ATTEND THE CONFERENCE

OVER 200 PARTICIPANTS FROM THE ENERGY FIELD

FOUR PANELS ON THE TOPIC OF KEY NEWS IN ENERGY

OVER 50 CONFERENCE ANNOUNCEMENTS

The international conference **ENERGY 2024** is being held in a year in which the positive effects of the decarbonization of energy, transport and industry should become more visible with the aim of remediating the consequences of increasingly accelerated climate changes and increasingly intense environmental pollution. Serbia accepted the COP28 Agreement. The biggest progress compared to previous global climate agreements is the call to triple the capacities of renewable energy sources and double the average annual growth rates of energy efficiency by 2030, as well as the call to accelerate the transition from fossil fuels in energy systems in this decade, but in a fair way, in order to achieve zero emissions by 2050. Ambitions have been increased, measures have been specified, coverage has been extended to all fossil fuels, expectations for the acceleration of the development of low-carbon technologies are becoming more realistic, but despite the progress, it is still not seen that the mechanisms that should enable their realization, which imply very high investments, are equitably available to all countries, in a way that fairly reflects responsibility for decarbonization and protecting the planet.

It can certainly be stated today that the current policy of the EU towards the Western Balkans has not led to an energy transition. Increased ambitions of the Republic of Serbia would have to be accompanied by financial and other support from the EU, which would be in accordance with the principles of solidarity and cohesion of the Union, but also in accordance with the principles of the Paris Agreement, which refer to common but differentiated responsibility, real opportunities and specific national circumstances. A stimulus to the energy transition is also regional cooperation, not in the trade of emission-intensive energy sources and products, as it was before, but in the provision of new energy services and the application of compatible solutions in the use of RES, and even in healthy competition.

Looking towards the middle of this century in energy certainly raises the question: what will the region and the Republic of Serbia replace coal with? How much can renewable energy sources achieve and what exactly and to what extent is expected from the use of hydrogen (also in many technological solutions from ammonia), and what about nuclear energy with increasingly attractive applications of small modular nuclear reactors (with power of over several hundred MW)? Which of these technologies can be available to us?

The financial and economic aspects of the energy transition represent an additional challenge. Where to find capital to stimulate the development of optimal use of renewable energy sources and those entities that consistently and firmly implement energy efficiency and environmental protection programs? How to ensure that domestic energy does not lose pace with the environment? Do solutions where reindustrialization is intervened give economic results, if they are targeted at the production of new technologies of renewable sources?

The Republic of Serbia is with a status of a candidate for EU membership and is a signatory to the Agreement on the establishment of the Energy Community. This undoubtedly raises questions related to introduction of carbon dioxide emissions price and the eventual use of the EU ETS system. The idea of a regional ETS system seems to have been definitely abandoned, but it remains open what are the options for applying carbon emission prices in Serbia and the countries of the region? How to choose most favorable options and what is the right answer to the introduction of a carbon tax on imports into the EU (EU CBAM)? Namely, CBAM additionally emphasizes the need to speed up the energy transition by pricing carbon emissions, as well as further market integration, and on the other hand, imposes administrative and financial costs on importers of CBAM goods, including electricity.

Energy transition, in addition to technological changes, financial and economic challenges, also brings significant changes in the social sphere. The appearance and growth of the number of prosumers in the Republic of Serbia, as well as several energy cooperatives, are encouraging signs on the way to the democratization of energy. But how to intensify these processes? How can the price of energy remain accessible to citizens and the economy, to avoid the pitfalls of conducting social policy through energy? Is there a place for households and individuals in the creation of energy policy (especially in the field of thermal energy)? Does the energy cooperative in the use of biomass have a future in Serbia?

Ovo međunarodno savetovanje je uvek bilo i omiljena tribina na kojoj su stručnjaci sa univerziteta, naučnih instituta i privrede, iz zemlje i sveta, izlagali svoje naučne rezultate i diskutovali o njima, od kojih su oni koji su prolazili recenzentsku proceduru objavljivani u našem poznatom naučnom časopisu „**ENERGIJA, EKONOMIJA, EKOLOGIJA**“ i drugim visoko rangiranim svetskim naučnim časopisima. Tako će biti i ovaj put, a očekuje se da će dominirati naučni prilozi u sledećim **oblastima**:

1. *strateško planiranje razvoja energetike i energetska politika,*
2. *razvoj i primena metoda veštačke inteligencije i analitičkih metoda i alata u energetske sistemima,*
3. *široko korišćenje obnovljivih izvora energije (hidroenergije, solarne energije i vetroenergije, šumske i poljoprivredne biomase, tečnih biogoriva, biogasa, geotermalnih izvora, toplotnih pumpi, vodonika, komunalnog otpada, industrijske otpadne toplote,...),*
4. *zaštita životne sredine i energetska efikasnost kao poluge u dostizanju optimalnog energetskog miksa*
5. *savremeni tehničko-tehnološki izazovi vezani za industrijski razvoj, odnosno za razvoj novih energetskih tehnologija kao novi stub privrednog rasta regiona sa posebnim naglaskom na digitalizaciji sektora, skladištenju energije, sprezanju različitih sektora, distribuiranoj proizvodnji,...*
6. *korišćenje nuklearne energije (nove male modularne elektrane, radioaktivni otpad, socijalni aspekti,...),*
7. *tehnike sakupljanja, skladištenja i korišćenja ugljenika,*
8. *cirkularna ekonomija u energetskom i drugim sektorima,*
9. *razvoj i korišćenje energetski efikasnih hibridnih i električnih vozila,*
10. *energetska tržišta i tržišta emisija,*
11. *pametne prenosne i elektrodistributivne mreže,*
12. *obrazovanje i kadrovi za održivi razvoj koji će biti spremi da nas vode ka energetici bez ugljenika (permanently usavršavanje znanja jer su pred energetikom stalna preispitivanja i prilagođavanja).*

U okviru Međunarodnog savetovanja **ENERGETIKA 2024** planiraju se uvodna pozivna predavanja, oralne prezentacije, poster prezentacije, promotivno-marketinške prezentacije i izložbe o dostignućima u energetici, industriji, komunalnim sistemima, saobraćaju, zgradarstvu, obnovljivim i novim izvorima energije, studentski akademski projekti kao i nekoliko okruglih stolova sa aktuelnim temama.

Posebna pažnja biće usmerena na inovacije u energetici gledano očima mladih (ovo zbog toga jer SAVEZ ENERGETIČARA smatra da je priprema i uvođenje mladih u istraživačke, privredne i društvene tokove od presudnog značaja za razvoj Srbije, pa ćemo nastojati da podstaknemo energetske kompanije da na ovom Savetovanju započnu sa formiranjem „**BERZE POSLOVA ZA MLADE ENERGETIČARE**“).

Na savetovanju **ENERGETIKA 2024** biće svečano uručena priznanja za naučno-istraživačke doprinose i diplome sa novčanim nagradama za studentska ostvarenja.

Kopredsednici organizaciono-programskog odbora.

S poštovanjem,

**Prof. dr inž. Milun J. Babić**

Predsednik skupštine Saveza energetičara

**Prof. dr inž. Nikola Rajaković**

Predsednik Saveza energetičara

These are the questions that, according to the logic of things, will dominate the discussions that will be held at the **ENERGY 2024** international conference, and the development of the energy sector in the region will significantly depend on the answers to these questions. The narrow field of application of the latest technologies in Serbia is private initiatives and investments in solar and wind power plants, with all the risks of applying the mechanism of state auctions, while other sectors of the economy, energy cooperatives and households are less in focus and thus in an even more difficult position.

This international conference has always been a favorite forum where experts from universities, scientific institutes and businesses, from the country and the world, presented their scientific results and discussed them, of which those who passed the review procedure were published in our famous scientific journal. "**ENERGY, ECONOMY, ECOLOGY**" and other highly ranked world scientific journals. It will be the same this time, and scientific contributions in the following areas are expected to dominate:

1. *strategic planning of energy development and energy policy,*
2. *development and application of artificial intelligence methods and analytical methods and tools in energy systems,*
3. *wide use of renewable energy sources (hydropower, solar energy and wind energy, forest and agricultural biomass, liquid biofuels, biogas, geothermal sources, heat pumps, hydrogen, municipal waste, industrial waste heat...),*
4. *environmental protection and energy efficiency as levers in reaching the optimal energy mix*
5. *modern technical-technological challenges related to industrial development, i.e. to the development of new energy technologies as a new pillar of the region's economic growth with a special emphasis on digitization of the sector, energy storage, connection of different sectors, distributed production...*
6. *use of nuclear energy (new small modular power plants, radioactive waste, social aspects...),*
7. *carbon collection, storage and use techniques,*
8. *circular economy in energy and other sectors,*
9. *development and use of energy-efficient hybrid and electric vehicles,*
10. *energy markets and emission markets,*
11. *smart transmission and power distribution networks,*
12. *education and personnel for sustainable development who will be ready to lead us towards energy without carbon (permanent improvement of knowledge because energy is faced with constant reviews and adjustments).*

As part of the **ENERGY 2024** International Conference, introductory invited lectures, oral presentations, poster presentations, promotional-marketing presentations and exhibitions on achievements in energy, industry, communal systems, traffic, building, renewable and new energy sources, student academic projects, as well as several round tables with current topics.

Special attention will be focused on innovations in energy seen through the eyes of young people (this is because the ASSOCIATION OF ENERGY WORKERS believes that the preparation and introduction of young people into research, economic and social streams is of crucial importance for the development of Serbia, so we will try to encourage energy companies to start with the formation of the "**JOB EXCHANGE FOR YOUNG ENERGY WORKERS**").

At the ENERGETIK 2024 consultation, awards for scientific and research contributions and diplomas with cash prizes for student achievements will be presented.

Co-presidents of the organizational and program committee.

Yours sincerely,



**Milun Babić**

President of the Assembly of the Association of  
Energy Specialists



**Nikola Rajaković,**

President of the Association of Energy Specialists

## OBLASTI OD INTERESA

- (1) OBNOVLJIVI IZVORI ENERGIJE (SUNCE, VETAR, VODA, BIOMASA, BIOGAS, GEOTERMALNA ENERGIJA...);
- (2) KONVENCIONALNA ENERGETIKA I NJENO SUOČAVANJE SA ENERGETSKOM TRANZICIJOM;
- (3) POVEZIVANJE ELEKTROENERGETSKOG SEKTORA SA SEKTORIMA GREJANJA, TRANSPORTA I INDUSTRIJE;
- (4) ELEKTROENERGETSKE MREŽE I TRŽIŠTA U ENERGETICI;
- (5) ENERGETSKA EFIKASNOST (DOMAĆINSTVA, KOMUNALNI SEKTOR, INDUSTRIJA, ZGRADARSTVO...);
- (6) NOVE TEHNOLOGIJE U ENERGETICI;
- (7) MULTISEKTORSKI ZADACI U OBLASTI UNAPREĐENJA ŽIVOTNE SREDINE NA PUTU REPUBLIKE SRBIJE PREMA EU;
- (8) EKONOMSKA I REGULATORNO-RAZVOJNA PITANJA ENERGETSKOG SEKTORA.

## ORGANIZACIONO – PROGRAMSKO – NAUČNI ODBOR

### Kopredsednici organizaciono-programsko-naučnog odbora:

**Prof. dr Milun Babić**, Predsednik Skupštine Saveza energetičara

**Prof. dr Nikola Rajaković**, Predsednik Saveza energetičara

### Sekretarijat organizaciono-programsko-naučnog odbora:

**Dr Ilija Batas Bijelić**, naučni saradnik, član Upravnog odbora Saveza energetičara

**Prof. dr Dušan Gordić**, Glavni i odgovorni urednik časopisa "Energija"

**Sandra Alagić**, Generalni sekretar Saveza energetičara

**Marko Popović**, Direktor BBN Congress Management doo

### Članovi:

**Prof. dr Neven Duić**, Fakultet strojarstva i brodogradnje, Sveučilište u Zagrebu, Hrvatska

**Prof. dr Peter Virtič**, Faculty of Energy Technology, University of Maribor, Slovenija

**Prof. dr Mirza Kušljugić**, Fakultet elektrotehnike, Univerzitet Tuzla, Bosna i Hercegovina

**Prof. dr Adriana Sida Manea**, Politehnica-University of Timisoara, Rumunija

**Prof. dr Vladimir Terzija**, Center for Energy Science and Technology, Skolkovo Institute of Science and Technology, Rusija

**Dr Dejan Ostojić**, Član Nadzornog odbora, JP Elektroprivreda Srbije, Srbija

**Prof. dr Radoje Vujadinović**, Mašinski fakultet, Univerzitet Crne Gore

**Prof. dr Željko Đurišić**, Elektrotehnički fakultet, Univerzitet u Beogradu, Srbija

**Prof. dr Jovan Mikulović**, Elektrotehnički fakultet, Univerzitet u Beogradu, Srbija

**Prof. dr Željko Despotović**, Institut "Mihajlo Pupin", Elektrotehnički fakultet, Univerzitet u Beogradu, Srbija

**Prof. dr Petar Đukić**, Tehnološko-metalurški fakultet, U Univerzitet u Beogradu, Srbija

**Prof. dr Kledi Xhaxhiu**, Faculty of Natural Sciences, University of Tirana, Albanija

**Dr Iñigo Capellán-Pérez**, Research Group on Energy, Economy and System Dynamics - University of Valladolid, Španija

**Dr Nataša Markovska**, Macedonian Academy of Sciences and Arts, Skopje (MANU), R. Severna Makedonija

**Dr Čedomir Zeljković**, Elektrotehnički fakultet, Univerzitet u Banja Luci, Bosna i Hercegovina

**Angel Nikolaev**, Black Sea Energy Research Center (BSERC), Bugarska

## AREAS OF INTEREST

- (1) RENEWABLE ENERGY SOURCES (SUN, WIND, WATER, BIOMASS, BIOGAS, GEOTHERMAL ENERGY, ...);
- (2) CONVENTIONAL ENERGY AND ITS CONNECTIONS WITH ENERGY TRANSITION.
- (3) CONNECTING THE ELECTRICITY SECTOR WITH THE HEATING, TRANSPORT, AND INDUSTRY SECTORS.
- (4) ELECTRICITY NETWORKS AND ENERGY MARKETS.
- (5) ENERGY EFFICIENCY (HOUSEHOLDS, PUBLIC SECTOR, INDUSTRY, BUILDINGS...);
- (6) ENERGY STORAGE TECHNOLOGIES.
- (7) MULTISECTORAL TASKS IN THE FIELD OF ENVIRONMENTAL IMPROVEMENTS ON THE ROAD OF THE REPUBLIC OF SERBIA TOWARDS THE EU;
- (8) ECONOMIC AND REGULATORY-DEVELOPMENT ISSUES OF THE ENERGY SECTOR.

## ORGANIZATIONAL - PROGRAM - SCIENTIFIC COMMITTEE

### Co-presidents of the organizational-program-scientific committee:

**Prof. Dr. Milun Babić**, President of the Assembly of the Association of Energy Engineers

**Prof. Dr. Nikola Rajaković**, President of the Energy Association

### Secretariat of the organizational-program-scientific committee:

**Dr. Ilija Batas Bijelić**, research associate, member of the Board of Directors of the Energy Association

**Prof. Dr. Dušan Gordić**, Editor-in-chief of the magazine "Energy"

**Sandra Alagić**, General Secretary of the Energy Association

**Marko Popović**, Director of BBN Congress Management doo

### Members:

**Prof. Dr. Neven Duić**, Faculty of Mechanical Engineering and Shipbuilding, University of Zagreb, Croatia

**Prof. Dr. Peter Vrtič**, Faculty of Energy Technology, University of Maribor, Slovenia

**Prof. Dr. Mirza Kušljugić**, Faculty of Electrical Engineering, University of Tuzla, Bosnia and Herzegovina

**Prof. Dr. Adriana Sida Manea**, Polytechnic-University of Timisoara, Romania

**Prof. Dr. Vladimir Terzija**, Center for Energy Science and Technology, Skolkovo Institute of Science and Technology, Russia

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**Prof. Dr. Jovan Mikulović**, Faculty of Electrical Engineering, University of Belgrade, Serbia

**Prof. Dr. Željko Despotović**, Faculty of Electrical Engineering, University of Belgrade, Serbia

**Prof. Dr. Petar Đukić**, Faculty of Technology and Metallurgy, University of Belgrade, Serbia

**Prof. Dr. Kledi Xhaxhiu**, Faculty of Natural Sciences, University of Tirana, Albania

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**Dr. Nataša Markovska**, Macedonian Academy of Sciences and Arts, Skopje (MANU), R. North Macedonia

**Dr. Čedomir Zeljković**, Faculty of Electrical Engineering, University of Banja Luka, Bosnia and Herzegovina

**Angel Nikolaev**, Black Sea Energy Research Center (BSERC), Bulgaria



## Utorak, 25. jun 2024 / Tuesday, June 25, 2023

17:00 REGISTRACIJA UČESNIKA / REGISTRATION

18:30 **Koktel dobrodošlice / Welcome cocktail – sponzor / sponsored by**ENERGETEHNIKA  
JUŽNA BAČKA  
Znanje u službi kvaliteta.

## Sreda, 26. jun 2024 / Wednesday, June 26, 2024

08:30 REGISTRACIJA UČESNIKA / REGISTRATION

09:00 – 10:00 Svečano otvaranje Savetovanja / Opening ceremony

Predsedavajući / Chairman: Nikola Rajaković

Govornici / Speakers: **Dušan Živković**, EPS; **Jovica Vlatković**, ERS; **Miro Vračar**, EPCG; **Dejan Popović**, AERS; **prof. dr Vladimir Katić**, IEEE Srbija i Crna Gora; **Nebojša Petrović**, EMS/CIGRE Srbija; **Saša Stefanović**, ODS, CIRED Srbija / Dušan Živković, EPS; Luka Petrović, ERS; Milutin Đukanović, EPCG; Dejan Popović, AERS; prof. dr Vladimir Katić, IEEE Serbia and Montenegro; Nebojša Petrović, EMS/CIGRE Serbia; Saša Stefanović, ODS, CIRED Serbia10:00 – 10:30 Prezentacija Generalnog sponzora / General sponsor presentation – **Elnos Group**10:30 – 11:00 *Kafe pauza / Coffee break*

11:00 – 13:00 Panel 1

**Visokoškolska nastava i naučni rad u kontekstu savremene energetike****Higher education and reserch with modern energy context**

Sala / Hall - Zlatni Bor

Predsedavajući / Chairman: Prof. dr Milun Babić, Prof. dr Nikola Rajaković

Panelisi / Panelists: Prof. dr Dejan Gvozdić, Prof. dr Petar Uskoković, Prof. dr Vladimir Popović, Prof. dr Vladan Kuzmanović, Prof. dr Goran Janevski, Prof. dr Slobodan Savić

13:00 – 14:30 *Pauza za ručak / Lunch break*

14:30 – 16:00 Paralelne sesije / Parallel Sessions

Sesija / Session 1 - OBNOVLJIVI IZVORI ENERGIJE (SUNCE, VETAR, VODA, BIOMASA, BIOGAS, GEOTERMALNA ENERGIJA,...)

**RENEWABLE ENERGY SOURCES (SUN, WIND, WATER, BIOMASS, BIOGAS, GEOTHERMAL ENERGY...)**

Predsedavajući / Chairman: dr Iva Batić

Sala / Hall - Zlatni Bor

Sesija / Session 2 - KONVENCIONALNA ENERGETIKA I NJENO SUOČAVANJE SA ENERGETSKOM TRANZICIJOM; POVEZIVANJE ELEKTROENERGETSKOG SEKTORA SA SEKTORIMA GREJANJA, TRANSPORTA I INDUSTRIJE; MULTISEKTORSKI ZADACI U OBLASTI UNAPREĐENJA ŽIVOTNE SREDINE NA PUTU REPUBLIKE SRBIJE PREMA EU

**CONVENTIONAL ENERGY AND ITS DEALING WITH THE ENERGY TRANSITION; CONNECTING ENERGY SYSTEMS WITH HEATING, TRASNPORTATION AND INDUSTRY SECTORS; MULTISECTORAL TASKS IN THE FIELD OF ENVIRONMENTAL IMPROVEMENT ON THE ROAD OF THE REPUBLIC OF SERBIA ACCORDING TO THE EU**

Predsedavajući / Chairman: dr Boban Pavlović

Sala / Hall - Crni Bor

16:00 – 16:30 *Kafe pauza / Coffee break*16:30 – 16:45 Prezentacija Zlatnog sponzora / Golden sponsor presentation – **MT-Komex**16:45 – 17:00 Prezentacija Zlatnog sponzora / Golden sponsor presentation – **Siemens d.o.o. Beograd**

17:00 – 18:30 Panel 2

**Perspektive energetske sigurnosti u regionu / Perspectives of energy safeness in the region**

Sala / Hall - Zlatni Bor

Predsedavajući / Chairman: Sandra Alagić

Panelisi / Panelists: dr Dejan Ostojić, Jovan Kasalica, Jovica Vlatković, Srđan Srđanović, Ivan Radović, Miodrag Milenković, Dejan Stojčevski, Aca Marković

Gosti NO EPS a.d. / Guests Supervisory Board EPS JSC: Oluf Ulset, Vladan Živanović, Per Sanderud, Hilde Baken, Igor Petković, Miodrag Ranković

21:00

**Korporativna žurka / Corporate party – sponsor / sponsored by**



Četvrtak, 27. jun 2024 / Thursday, June 27, 2024

08:30 REGISTRACIJA UČESNIKA / REGISTRATION

09:00 – 10:30 Paralelne sesije / Parallel Sessions

Sesija / Session 3 - POVEZIVANJE ELEKTROENERGETSKOG SEKTORA SA SEKTORIMA GREJANJA, TRANSPORTA I INDUSTRIJE

**CONNECTING THE ELECTRIC POWER SECTOR WITH THE HEATING, TRANSPORT AND INDUSTRY SECTORS**

Predsedavajući / Chairman: dr Bojan Ivanović

Sala / Hall - Zlatni Bor

Sesija / Session 4 - ELEKTROENERGETSKE MREŽE I TRŽIŠTA U ENERGETICI

**ELECTRIC POWER NETWORKS AND MARKETS IN ENERGY**

Predsedavajući / Chairman: Prof. Dr. Darko Šošić

Sala / Hall - Crni Bor

10:30 – 11:00 *Kafe pauza / Coffee break*

11:00 – 13:00 Panel 3

**Nuklearne tehnologije – da li smo na pragu novog početka?**

**Nuclear technologies – are we at the doorstep of the new beginning?**

Sala / Hall - Zlatni Bor

Predsedavajući / Chairman: Željko Marković

Panelisi / Panelists: Prof. dr Koviljka Stanković, dr Đorđe Lazarević, Tihomir Hrnjak, Prof. dr Dušan Gordić, Nebojša Petrović, Prof. dr Petar Đukić, dr Goran Đukić

13:00 – 14:30 *Pauza za ručak / Lunch break*

14:30 – 16:30 Panel 4

**Nove tehnologije energetske tranzicije / New technologies of energy transition**

Sala / Hall – Zlatni Bor

Predsedavajući / Chairman: dr Jelena Stojković Terzić

Panelisi / Panelists: Prof. dr Vladimir Đurđević, Prof. dr Luka Strezoski, Bojana Mihić, dr Tomislav Rajić, Miloš Mitrović, Milan Čakarević, dr Jovan Vujašinović

16:30 – 17:00 *Kafe pauza / Coffee break*

17:00 – 18:30 Paralelne sesije / Parallel Sessions

Sesija / Session 5 - ENERGETSKA EFIKASNOST (DOMAĆINSTVA, KOMUNALNI SEKTOR, INDUSTRIJA, ZGRADARSTVO...)

*ENERGY EFFICIENCY (HOUSEHOLDS, UTILITY SECTOR, INDUSTRY, CONSTRUCTION...)*

Predsedavajući / Chairman: Prof. dr Vladimir Vukašinović

Sala / Hall - Zlatni Bor

Sesija / Session 6 - NOVE TEHNOLOGIJE U ENERGETICI

*NEW TECHNOLOGIES IN ENERGY*

Predsedavajući / Chairman: dr Tomislav Rajić

Sala / Hall - Crni Bor

20:30

**Svečana večera / Gala Dinner – sponzor / sponsored by**

Life Is On

**Schneider**  
Electric

Petak, 28. jun 2024 / Friday, June 28, 2024

09:00 – 10:30 Paralelne sesije / Parallel Sessions

Sesija / Session 7 - MULTISEKTORSKI ZADACI U OBLASTI UNAPREĐENJA ŽIVOTNE SREDINE NA PUTU REPUBLIKE SRBIJE PREMA EU

*MULTISECTORAL TASKS IN THE FIELD OF ENVIRONMENTAL IMPROVEMENT ON THE ROAD OF THE REPUBLIC OF SERBIA TO THE EU*

Predsedavajući / Chairman: Nikola Stanković

Sala / Hall - Zlatni Bor

Sesija / Session 8 - EKONOMSKA I REGULATORNO-RAZVOJNA PITANJA ENERGETSKOG SEKTORA

*ECONOMIC AND REGULATORY AND DEVELOPMENT ISSUES OF THE ENERGY SECTOR*

Predsedavajući / Chairman: dr Mladen Josijević

Sala / Hall - Crni Bor

10:30 – 11:00 *Kafe pauza / Coffee break*

11:00 – 13:00 Sesija za stručno-tehničko usavršavanje: **Od projektovanja do realizacije fotonaponske elektrane na industrijskom objektu u privatnom vlasništvu**

*Sesija obuhvata:* praktične aspekte sprovođenja projekta, tehničke probleme koji mogu nastati i kako su rešeni, eksperimentalna testiranja sa rezultatima, puštanje u probni rad, monitorisanje, prikaz ostvarenih ušteda energije i smanjivanja troškova el. energije na osnovu merenja.

Predsedavajući / Chairman: **Prof. dr Željko V. Despotović, dr Miodrag Vuković**

Sala / Hall - Zlatni Bor

13:00 – 14:00 ZAVRŠNA SESIJA / CLOSING SESSION / Sala / Hall - Zlatni Bor

Predsedavajući / Chairman: Milun Babić

Govornici / Speakers: **prof. dr Nikola Rajaković**, predsednik Saveza energetičara; **Dubravka Đedović Handanović**, ministarka rudarstva i energetike Repulike Srbije / **prof. dr Nikola Rajaković**, president of the Association of Energy Specialists; **Dubravka Đedović Handanović**, Minister of Mining and Energy of Republic of Serbia

## RASPORED RADOVA / PAPERS SCHEDULE

Sreda, 26. jun 2024 / Wednesday, June 26, 2024

14:30 – 16:00

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1. OBNOVLJIVI IZVORI ENERGIJE (SUNCE, VETAR, VODA, BIOMASA, BIOGAS, GEOTERMALNA ENERGIJA,..)  
*RENEWABLE ENERGY SOURCES (SUN, WIND, WATER, BIOMASS, BIOGAS, GEOTHERMAL ENERGY...)*  
Predsedavajući / Chairman: **dr Iva Batić**

Sala / Hall – Zlatni bor

- 1.1. #338 UPOREDNA ANALIZA I MOGUĆNOSTI UNAPREĐENJA POLOŽAJA KUPACA-PROIZVOĐAČA U CRNOJ GORI I REPUBLICI SRBIJI  
*COMPARATIVE ANALYSIS AND POSSIBILITIES OF IMPROVING THE STATUS OF PROSUMERS IN MONTENEGRO AND THE REPUBLIC OF SERBIA*  
*Dunja Grujić, Dušan Vučić, Miloš Kuzman*
- 1.2. #337 UPOTREBA CENOVNIH SIGNALA U CILJU UBRZANJA ENERGETSKE TRANZICIJE  
*THE USE OF PRICE SIGNALS TO ACCELERATE THE ENERGY TRANSITION*  
*Dunja Grujić, Miloš Kuzman, Željko Đurišić*
- 1.3. #328 POSTUPAK KO-/DIGESTIJE: PRIMERI, POSTAVKE I EKSPERIMENTALNO IZVOĐENJE  
*CO-/DIGESTION PROCEDURE: EXAMPLES, SETTINGS AND EXPERIMENTAL PERFORMANCE*  
*Nikola Rakić; Vanja Šušteršič; Natalija Aleksić; Nebojša Jurišević; Dušan Gordić*
- 1.4. #291 IZRADA ENERGETSKE MAPE RASPOLOŽIVIH BIOMASNIH SIROVINA U GEOGRAFSKOM INFORMACIONOM SISTEMU (GIS)  
*CREATION OF AN ENERGY MAP OF AVAILABLE BIOMASS RAW MATERIALS IN A GEOGRAPHIC INFORMATION SYSTEM (GIS)*  
*Srećko Ćurčić; Aleksandar Peulić*
- 1.5. #290 RASPOLOŽIVI ENERGETSKI POTENCIJALI BIOMASE SA DEFINISANE TERITORIJE OKO PLJEVALJA KOJI MOGU DA SE KORISTE U ENERGETSKE SVRHE  
*AVAILABLE ENERGY POTENTIAL OF BIOMASS FROM THE DEFINED TERRITORY AROUND PLJEVLJA THAT CAN BE USED FOR ENERGY PURPOSES*  
*Srećko Ćurčić; Ivan Šaranović; Zoran Šljukić*
- 1.6. #286 IDEJNO REŠENJE POSTROJENJA ZA ANAEROBNU DIGESTIJU ZA PROIZVODNJU BIOGASA OD RASPOLOŽIVIH SIROVINA U ČAČKU  
*CONCEPTUAL SOLUTION OF AN ANAEROBIC DIGESTION PLANT FOR THE PRODUCTION OF BIOGAS FROM AVAILABLE RAW MATERIALS IN ČAČAK*  
*Srećko Ćurčić; Miloš Milovančević; Igor Mladenović; Dragan Milićević*

2. KONVENCIONALNA ENERGETIKA I NJENO SUOČAVANJE SA ENERGETSKOM TRANZICIJOM; POVEZIVANJE ELEKTROENERGETSKOG SEKTORA SA SEKTORIMA GREJANJA, TRANSPORTA I INDUSTRIJE; MULTISEKTORSKI ZADACI U OBLASTI UNAPREĐENJA ŽIVOTNE SREDINE NA PUTU REPUBLIKE SRBIJE PREMA EU  
*CONVENTIONAL ENERGY AND ITS DEALING WITH THE ENERGY TRANSITION; CONNECTING ENERGY SYSTEMS WITH HEATING, TRANSPORTATION AND INDUSTRY SECTORS; MULTISECTORAL TASKS IN THE FIELD OF ENVIRONMENTAL IMPROVEMENT ON THE ROAD OF THE REPUBLIC OF SERBIA ACCORDING TO THE EU*

Predsedavajući / Chairman: **dr Boban Pavlović**

Sala / Hall – Crni bor

- 2.1. #296 MODIFIKOVANI RANKINE-OV CIKLUS PARNE TURBINE BEZ ODBACIVANJA TOPLOTE KONDENZACIJE CIKLUSA, POKRETAN TERMOKOMPRESOROM U OBLASTI VLAZNE PARE  
*MODIFIED STEAM-TURBINE RANKINE CYCLE WITHOUT REJECTION OF THE CYCLE CONDENSATION HEAT, DRIVEN BY A WET-VAPOR-REGION THERMOCOMPRESSOR*  
*Branko Stankovic*
- 2.2. #331 ANALIZA UTICAJA RAZLIČITIH VRSTA GORIVA NA POTROŠNJU I IZDUVNE EMISIJE BRODSKOG DVOTAKTNOG DIZEL MOTORA  
*ANALYSIS OF THE IMPACT OF DIFFERENT FUEL TYPES ON FUEL CONSUMPTION AND EXHAUST EMISSIONS OF A TWO-STROKE MARINE DIESEL ENGINE*  
*Draško Kovač; Sead Cvrk; Đorđe Nedeljkov*
- 2.3. #304 INOVATIVNA TEHNIČKO TEHNOLOŠKA REŠENJA NA BLOKU 3 TE KOSTOLAC B  
*INNOVATIVE TECHNICAL SOLUTIONS AT BLOCK 3 OF THE KOSTOLAC B THERMAL POWER PLANT*  
*Gordan Rajković*
- 2.4. #327 REGULISANI POGON RADNOG ELEMENTA BAGERA VEDRIČARA ERS710  
*CONTROLLED WORKING ELEMENT DRIVE OF THE BUCKET-CHAIN EXCAVATOR ERS710*  
*Neša Rašić; Aleksandra Grujić; Ivana Vlajić-Naumovska; Milan Ivezić; Milan Bebić*
- 2.5. #305 UTICAJ INDIVIDUALNIH LOŽIŠTA NA BIOMASU NA ZAGAĐENOST VAZDUHA U URBANIM SREDINAMA  
*THE IMPACT OF BIOMASS-FIRED STOVES ON AIR POLLUTION IN URBAN AREAS*  
*Vladimir Vukašinović; Dušan Gordić; Jelena Nikolić; Mladen Josijević; Davor Končalović*
- 2.6. #284 ENERGETSKA TRANZICIJA U DOMAĆINSTVIMA: ANALIZA USAGLAŠENOSTI SRBIJE SA PAKETOM "ČISTA ENERGIJA ZA SVE EVROPLJANE"  
*ENERGY TRANSITION IN HOUSEHOLDS: ANALYSIS OF SERBIA'S COMPLIANCE WITH THE "CLEAN ENERGY FOR ALL EUROPEANS" PACKAGE*  
*Boban Pavlović; Aleksandar Madžarević; Marija Živković; Dejan Ivezić; Dušan Mojić*

Četvrtak, 27. jun 2024 / Thursday, June 27, 2024

09:00 – 10:30

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3. POVEZIVANJE ELEKTROENERGETSKOG SEKTORA SA SEKTORIMA GREJANJA, TRANSPORTA I INDUSTRIJE  
*CONNECTING THE ELECTRIC POWER SECTOR WITH THE HEATING, TRANSPORT AND INDUSTRY SECTORS*  
Predsedavajući / Chairman: **dr Bojan Ivanović**

Sala / Hall – Zlatni bor

- 3.1. #311 PRIMENA VEŠTAČKIH NEURONSKIH MREŽA ZA PREDIKCIJU SNAGE NA IZLAZU HIDROELEKTRANE  
*THE APPLICATION OF ARTIFICIAL NEURAL NETWORKS FOR PREDICTING THE POWER OUTPUT OF A HYDROELECTRIC POWER PLANT*  
*Stefan Čubonović; Aleksandar Ranković; Marko Krstić*

- 3.2. #299 REŠAVANJE ZAGONETKE ENERGETSKE TRANZICIJE SRBIJE: VOŽNJA ELEKTRIČNIM VOZILIMA DOVODI DO VEĆE EMISIJE SO<sub>2</sub> NEGO VOŽNJA TRADICIONALNIH VOZILA SA MOTOROM UNUTRAŠNJEG SAGOREVANJA  
*UNRAVELING THE SERBIAN ENERGY TRANSITION PUZZLE: DRIVING AN ELECTRIC VEHICLE RESULTS IN HIGHER CO<sub>2</sub> EMISSIONS THAN DRIVING A TRADITIONAL INTERNAL COMBUSTION ENGINE COUNTERPARTY*  
*Dušan Stanar; Sergey Fominykh*
- 3.3. #333 ODREĐIVANJE LANČANICE NADZEMNIH STRUJNIH VODOVA PRIMENOM GEODETSKIH METODA MERENJA  
*CATENARY OF POWER LINES DETERMINATION BY GEODETIC METHODS OF MEASUREMENTS UTILIZATION*  
*Žarko Nestorović; Petar Nikolić; Dragan Marinović; Bojan Rakić; Goran I. Jovanović*
- 3.4. #336 PLANIRANJE I RAD ELEKTROENERGETSKOG SISTEMA U USLOVIMA VELIKE PROIZVODNJE ELEKTRIČNE ENERGIJE IZ SOLARNIH ELEKTRANA  
*POWER SYSTEM PLANNING AND OPERATION IN CASE OF HIGH ELECTRICITY PRODUCTION IN SOLAR POWER PLANTS*  
*Bojan Ivanović; Ilija Batas Bjelić; Nikola Rajaković; Tomislav Rajić*
- 3.5. #307 PRENAPONSKA ZAŠTITA OBJEKATA PRIKLJUČENIH NA NISKONAPONSKU MREŽU  
*OVERVOLTAGE PROTECTION FOR OBJECTS CONNECTED TO THE LOW-VOLTAGE NETWORK*  
*Nikola Tanasković; Iva Batić; Tomislav Rajić*
- 3.6. #332 OBNOVLJIVI IZVORI ENERGIJE I ENERGETSKA EFIKASNOST U INDUSTRIJI  
*RENEWABLE ENERGY SOURCES AND ENERGY EFFICIENCY IN INDUSTRY*  
*Saša Đorđević*

4. ELEKTROENERGETSKE MREŽE I TRŽIŠTA U ENERGETICI  
*ELECTRIC POWER NETWORKS AND MARKETS IN ENERGY*  
Predsedavajući / Chairman: Prof. Dr. Darko Šošić

Sala / Hall – Crni bor

- 4.1. #312 PROCJENA MOGUĆNOSTI PRIKLJUČENJA FOTONAPONSKOG SISTEMA NA SREDNJEAPONSKU DISTRIBUTIVNU MREŽU PRIMJENOM SEKVENCIJALNE MONTE CARLO SIMULACIJE  
*ASSESSING THE POSSIBILITY OF PV INTEGRATION TO THE MEDIUM VOLTAGE DISTRIBUTION NETWORK BY USING SEQUENTIAL MONTE CARLO SIMULATION*  
*Predrag Mršić; Čedomir Zeljković; Predrag Stefanov*
- 4.2. #329 UTICAJ OBNOVLJIVIH IZVORA ENERGIJE NA POTREBAN NIVO IZGRADNJE ELEKTROENERGETSKOG SISTEMA  
*THE IMPACT OF RENEWABLE ENERGY SOURCES ON THE LEVEL OF POWER SYSTEMS CONSTRUCTION*  
*Slobodan Milić*
- 4.3. #295 MOGUĆNOSTI SMANJENJA UTICAJA OBNOVLJIVIH IZVORA ENERGIJE NA ELEKTROENERGETSKI SISTEM  
*POSSIBILITIES OF REDUCING THE IMPACT OF RENEWABLE ENERGY SOURCES ON POWER SYSTEM*  
*Mia Lešić Aganović; Mugdin Agić; Majda Tešanović; Izudin Kapetanović; Tatjana Konjić*
- 4.4. #298 MOGUĆNOSTI UČEŠĆA OIE U REGULACIJI NAPONA U PRENOSNOJ MREŽI SRBIJE  
*POSSIBILITIES OF RES PARTICIPATION IN VOLTAGE CONTROL IN THE TRANSMISSION GRID OF SERBIA*  
*Miroslav Žerajić; Todor Šiljegović; Pavle Gorašević; Đorđe Lazović; Bojana Škrbić; Željko Đurišić*
- 4.5. #323 ISPITIVANJE ODRŽIVOSTI RAZLIČITIH STRUKTURA KATEGORIJE KUPAC-PROIZVOĐAČ  
*EXPLORING THE PROFITABILITY OF DIFFERENT STRUCTURES OF THE CONSUMER-PRODUCER CATEGORY*  
*Darko Šošić; Goran Dobrić; Mileta Žarković*
- 4.6. #292 UTICAJ SOLARNIH PANELA SA SKLADIŠTENJEM ELEKTRIČNE ENERGIJE NA GUBITKE U NISKONAPONSKOJ MREŽI  
*INFLUENCE OF SOLAR PANELS WITH ELECTRICITY STORAGE ON LOSSES IN THE LOW-VOLTAGE NETWORK*  
*Siniša Spremić; Aleksandar Antonić*

5. ENERGETSKA EFIKASNOST (DOMAĆINSTVA, KOMUNALNI SEKTOR, INDUSTRIJA, ZGRADARSTVO...)  
*ENERGY EFFICIENCY (HOUSEHOLDS, UTILITY SECTOR, INDUSTRY, CONSTRUCTION...)*  
Predsedavajući / Chairman: dr Vladimir Vukašinović

Sala / Hall – Zlatni bor

- 5.1. #288 STAMBENA ZAJEDNICA U ULOZI KUPCA-PROIZVOĐAČA  
*RESIDENTIAL COMMUNITY IN THE ROLE OF PROSUMER*  
*Dunja Grujić; Miloš Kuzman*
- 5.2. #308 ODRŽAVANJE KOMPENZACIJE REAKTIVNE ENERGIJE ELEKTRODISTRIBUCIJE SRBIJE U CILJU  
SMANJENJA FINANSIJSKIH GUBITAKA I ENERGETSKE EFIKASNOSTI  
*MAINTENANCE OF REACTIVE ENERGY COMPENSATION OF ELEKTRODISTRIBUCIJA SRBIJE IN ORDER TO  
REDUCE FINANCIAL LOSSES AND ENERGY EFFICIENCY*  
*Aleksandar Milojković; Radomir Todorović; Dušan Vukotić; Goran Radovanović; Milorad Šarić; Vladimir  
Ostraćanin; Draško Vičić; Saša Kordić*
- 5.3. #330 OPTIMIZACIJA ENERGETSKOG SISTEMA ZGRADE FAKULTETA U KOTORU  
*OPTIMIZATION OF THE ENERGY SYSTEM OF THE FACULTY BUILDING IN KOTOR*  
*Draško Kovač; Đorđe Nedeljkov; Martin Čalasan; Aleksandar Anđelković*
- 5.4. #339 MODELIRANJE UTICAJA MAGNETNOG ZASIĆENJA NA ELEKTROMAGNETNU SILU VIBRACIONOG  
AKTUATORA  
*MODELING OF THE INFLUENCE OF MAGNETIC SATURATION ON THE ELECTROMAGNETIC FORCE OF THE  
VIBRATION ACTUATOR*  
*Uroš Ilić, Željko V. Despotović*
- 5.5. #324 POSTUPAK ODREĐIVANJA ENERGETSKE KARAKTERISTIKE ZGRADE PREMA ISO 52016-1  
*DETERMINATION OF ENERGY PERFORMANCE OF BUILDINGS ACCORDING TO ISO 52016-1*  
*Sandra Kovačević; Miloš Banjac*
- 5.6. #315 REALIZACIJA SISTEMA ZA ISPITIVANJE KOMPRESORSKIH MOTORA SPECIJALNE NAMENE  
BAZIRANOG NA PRIMENI FREKVENTNO REGULISANOG ELEKTROMOTORNOG POGONA  
*REALIZATION OF A SYSTEM FOR TESTING SPECIAL-PURPOSE COMPRESSOR MOTORS BASED ON THE  
APPLICATION OF A FREQUENCY CONTROLLED AC DRIVE*  
*Željko V. Despotović; Vladimir Kvrđić*
- 5.7. #316 PROJEKTOVANJE I REALIZACIJA FOTONAPONSKE ELEKTRANE IZLAZNE SNAGE 1500KW NA KROVU  
FABRIKE „FLASH“-APATIN  
*DESIGN AND REALIZATION OF A PHOTOVOLTAIC POWER PLANT WITH AN OUTPUT POWER OF 1500 KW  
ON THE ROOF OF THE "FLASH"-APATIN FACTORY*  
*Marko Đurović; Željko V. Despotović; Arsenije Ćirić*
- 5.8. #294 KORIŠĆENJE OTPADNE TOPLOTE U PREHRAMBENOJ INDUSTRIJI PRIMENOM KOMPRESORSKE  
TOPLOTNE PUMPE  
*USE OF WASTE HEAT IN THE FOOD INDUSTRY USING A COMPRESSOR HEAT PUMP*  
*Mladen Josijević, Vanja Šušteršič, Vladimir Vukašinović, Dušan Gordić, Dubravka Živković, Jelena Nikolić*

6. NOVE TEHNOLOGIJE U ENERGETICI / *NEW TECHNOLOGIES IN ENERGY*  
Predsedavajući / Chairman: dr Tomislav Rajić

Sala / Hall – Crni bor

- 6.1. #281 U SUSRET REVITALIZACIJI TURBINA HE ĐERDAP 2: MERENJE RASPOREDA VEKTORA BRZINA NA  
ULAZIMA TURBINA  
*PREPARING FOR REVITALIZATION OF THE TURBINES OF THE HE ĐERDAP 2: MEASUREMENT OF VELOCITY  
DISTRIBUTION AT TURBINE INLETS*  
*Dušan Prodanović; Damjan Ivetić; Predrag Vojt; Milan Ćušić*

- 6.2. #289 ESTIMACIJA STANJA U ELEKTROENERGETSKOM SISTEMU SA PMU UREDJAJIMA I MALICIOZNI NAPAD INJEKTIRANJEM LOŠIH MERENJA I NJEGOVA DETEKCIJA STATE ESTIMATION IN THE POWER SYSTEM WITH PHASOR MEASUREMENT UNITS AND MALICIOUS ATTACKS THROUGH INJECTION OF INACCURATE MEASUREMENTS AND ITS DETECTION  
*Vladimir Bečejac; Miloš Đorđević; Nemanja Jelenić; Mihajlo Marković; Miloš Mosurović*
- 6.3. #317 DETEKCIJA I KONTROLA STRUJE CURENJA SOLARNIH INVERTORA  
*DETECTION AND CONTROL OF LEAKAGE CURRENT OF PV INVERTERS*  
*Željko V. Despotović; Miodrag Vuković*
- 6.4. #314 PRIMENA I REALIZACIJA ĆUKOVOG DC/DC ENERGETSKOG PRETVARAČA U PRAĆENJU TAČKE MAKSIMALNE SNAGE SOLARNOG PANELA  
*APPLICATION AND REALIZATION OF ĆUK'S DC/DC POWER CONVERTER IN MPPT OF THE PHOTOVOLTAIC PANEL*  
*Željko V. Despotović; Boban Đorđević*
- 6.5. #306 METODE ODABIRA KABLOVA U OKVIRU VETROPARKA UZ POMOĆ SOFTVERA  
*THE CABLE SELECTION METHODS IN WIND FARMS USING SOFTWARE*  
*Mina Stefanović; Iva Batić; Tomislav Rajić*
- 6.6. #279 UTICAJI REFLEKSIJA I DIFRAKCIJA TALASA I MODELOVANOG IZVORA I UHF DAVAČA PRI LOCIRANJU PARCIJALNIH PRAŽNENJA U ENERGETSKOM TRANSFORMATORU  
*INFLUENCES OF REFLECTIONS AND DIFFRACTIONS OF WAVES AND THE MODELLED SOURCE AND UHF SENSORS WHEN LOCATING PARTIAL DISCHARGES IN A POWER TRANSFORMER*  
*Đorđe Dukanac*
- 6.7. #280 ANALIZA ISPUNJENOSTI USLOVA ZA MERNU NESIGURNOST SISTEMA ZA KONTROLU PAMETNIH BROJILA I SMANJENJE VREMENA PROVERE REGISTRA  
*ANALYSIS OF FULFILMENT OF CONDITIONS FOR MEASUREMENT UNCERTAINTY OF THE SMART METER CONTROL SYSTEM AND REDUCTION OF REGISTER CHECK TIME*  
*Đorđe Dukanac*
- 6.8. #303 ADAPTIVNI MODELI ZA POBOLJŠANE SISTEME PUNJENJA BATERIJA  
*ADAPTIVE MODELS FOR IMPROVED BATTERY CHARGING SYSTEMS*  
*Danijel Pavković; Sandra Stanković; Karlo Kvaternik; Nikolina Sitar; Mihael Cipek*

Petak, 28. jun 2024 / Friday, June 28, 2024

09:00 – 10:30

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7. MULTISEKTORSKI ZADACI U OBLASTI UNAPREĐENJA ŽIVOTNE SREDINE NA PUTU REPUBLIKE SRBIJE PREMA EU  
*MULTISECTORAL TASKS IN THE FIELD OF ENVIRONMENTAL IMPROVEMENT ON THE ROAD OF THE REPUBLIC OF SERBIA TO THE EU*

Predsedavajući / Chairman: Nikola Stanković

Sala / Hall – Zlatni bor

- 7.1. #293 MOŽE LI VEŠTAČKA INTELIGENCIJA DA DOPRINESE PRAVEDNOJ ENERGETSKOJ TRANZICIJI?  
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*Miroslav Parović*

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## MESTO ODRŽAVANJA / VENUE



**Zlatibor** je već godinama najposećenija planina u Srbiji. Ovaj planinski masiv nalazi se na putu ka *Jadranskom moru*, na samo 230 km od Beograda. Sa čak *220 sunčanih dana godišnje* predstavlja idealno mesto za odmor i sportske aktivnosti, uključujući i zimske sportove. Ovaj planinski biser Srbije je dobio svoje ime po svojim zlatnim pašnjacima i prostranstvima grandioznih borovih šuma. Turizam na Zlatiboru počeo je da se razvija dolaskom kralja

Aleksandra Obrenovića i njegovom posetom izvoru Kulaševac. Od tog trenutka, imućniji ljudi tog vremena počeli su da grade vile i letnjikovce, i na taj način započeli dugogodišnju tradiciju Zlatibora kao turističkog centra. Najviši vrh ovog parka prirode je *Tornik (1496m)*, iznad kog se rascvetala *ruža vetrova* koja ovu planinu čini jedinstvenom oazom zdravlja. Zlatibor je planina koja godinama širi svoje ruke svima onima koji žele da uživaju u njenim prirodnim, istorijskim i kulturnim bogatstvima.

*Zlatibor is a mountain of exceptional beauty, with the altitude of 700-1500 m, in southwestern Serbia, located 235 km away from Belgrade and the nearest airport. It is featured by mild climate conditions, spacious glades and lush pastures intersected with mountain brooks and colored by torrential pine trees that this mountain was named after. It is at this very place that mountain air currents collide with marine air currents to improve pulmonary and cardiac conditions, in particular those related to thyroid gland and anemia. On the outskirts of the Zlatibor central area, you can set out for an adventure – you can explore the beauty and vividness of both the nature and cultural & historical heritage. We sincerely hope you will have time to reveal the Zlatibor of your own.*



**Hotel Zlatibor Resort** nalazi se u samom centru Zlatibora i idealan je spoj udobnog, komfortnog i relaksirajućeg smeštaja sa duhom tradicije i sjajem savremenog luksuza, uz sve čari planinskog ambijenta. Pored idealne lokacije na kojoj se hotel nalazi, dodatnu lepotu uživanja vam pruža ogromna mogućnost izbora hotelskih soba i apartmana, koji su dizajnirani tako da svako pronađe idealan prostor za sebe i svoj savršen odmor.

Četiri različita tipa soba i apartmana, dizajnirani su tako da svaki tip priča svoju priču i daje dozu luksuza ambijentu u kom se nalazi. Pogled na centar Zlatibora i čist vazduh planine oko Vas, doprinose potpunom komforu kroz upotrebu najmodernijih tehnologija izgradnje i dizajna.

Magnesium Spa & Fitness centar predstavlja raj na 4000 kvadratnih metara. Ovo je mesto koje balansira prirodu, tradiciju i savremene trendove brige o telu.



*Hotel Zlatibor Resort is located in the very center of Zlatibor and is an ideal combination of cozy, comfortable and relaxing accommodation with the spirit of tradition and the splendor of modern luxury, with all the charms of the mountain environment. In addition to the ideal location where the hotel is*



*located, the additional beauty of enjoyment is provided by the huge choice of hotel rooms and suites, which are designed so that everyone can find the ideal space for themselves and their perfect vacation.*

*Four different types of rooms and suites, designed so that each type tells its own story and gives a touch of luxury to the environment in which it is located. The view of the center of Zlatibor and the clean mountain air around you contribute to complete comfort through the use of the most modern construction and design technologies.*

*The Magnesium Spa & Fitness Center is a paradise on 4000 square meters. This is a place that balances nature, tradition and modern body care trends.*

## KONTAKT I INFORMACIJE / CONTACT AND INFO

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