




UNIVERZITET U ZENICI / UNIVERSITY OF ZENICA
Mašinski fakultet / Faculty of Mechanical Engineering
Bosna i Hercegovina / Bosnia and Herzegovina

6. KONFERENCIJA / 6TH CONFERENCE

ODRŽAVANJE 2020

MAINTENANCE 2020

Finalni program
Final program



Novembar / November 20-21, 2020
ZENICA, Bosna i Hercegovina / Bosnia and Herzegovina
Institut "Kemal Kapetanović"



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- > Čedomir Duboka (Serbia)
- > Nasuf Hadžiahmetović (B&H)
- > Tome Jolevski (Macedonia)
- > Vehbi Ramaj (Kosovo*)
- > Ljubodrag Tanović (Serbia)
- > Mihael Aurel Titu (Romania)



CILJEVI KONFERENCIJE

Ciljevi Konferencije su:

- > okupljanje stručnjaka koji se bave održavanjem sredstava za rad iz različitih aspekata i njihovo strukturno organizovanje,
- > saopštavanje rezultata istraživanja na području održavanja, kako teorijskih tako i praktičnih,
- > razmjena iskustava iz praktičnih aktivnosti održavanja,
- > transfer znanja iz područja održavanja

TEMATIKA SKUPA

Konferencija će raditi na slijedeći način: plenarna sjednica (uvodni i pozivni radovi za globalne teme), simpozij (radovi po temama skupa) i po potrebi workshops (radni sastanci).

Konferencija obuhvata slijedeće tematske oblasti:

1. Tehnologije održavanja
2. Pouzdanost i održavanje
3. Logistika u održavanju
4. Kvalitet i održavanje
5. Nadzor i dijagnostika
6. Menadžment i održavanje
7. Informacijski sistemi održavanja
8. Nove tehnologije u održavanju
9. Obrazovanje za održavanje
10. Dualno obrazovanje u sektoru održavanja
11. Ljudski resursi u održavanju
12. Asset management
13. Facility Management
14. Outsourcing
15. Upravljanje rizicima
16. Ekologija i održavanje
17. Upravljanje zalihama
18. Troškovi održavanja
19. Zaštita na radu
20. Pokazatelji uspješnosti održavanja
21. Trendovi u održavanju

PREZENTACIJE

Prezentacije su ograničene na **5 minuta**. Autori – prezentatori za prezentacije mogu koristiti Power point aplikaciju.

VRIJEME I MJESTO ODRŽAVANJA SKUPA

Skup će se održati od 20. do 21. novembra 2020. godine u organizaciji Mašinskog fakulteta Univerziteta u Zenici u Čitaonici Instituta 'Kemal Kapetanović', Travnička cesta 7, Zenica. Obavezno je poštivanje svih higijensko-epidemioloških mjera i preporuka nadležnih kriznih štabova. Učesnici će moći pratiti i učestvovati u radu konferencije i preko on-line platforme.



CONFERENCE OBJECTIVES

Conference objectives are:

- > Gathering of experts engaged in maintenance funds for the operation of various aspects and their structural organization,
- > Communication of the results of research in the field of maintenance, as theoretical and practical,
- > Exchange of experiences from practical maintenance activities,
- > Transfer of knowledge in the field of maintenance.

CONFERENCE TOPICS

The Conference will be performed as follows: plenary session (Key papers concerned global topics), symposium (papers according to the conference topics) and workshops, when needed.

The conference includes the following thematic areas:

1. Technology maintenance
2. Reliability and maintenance
3. Logistics in the maintenance
4. Quality and maintenance
5. Monitoring and Diagnostics
6. Management and maintenance
7. Information systems maintenance
8. New technologies in the maintenance
9. Education Maintenance
10. Dual education in the sector of Maintenance
11. Human resources in maintaining
12. Asset management
13. Facility Management
14. Outsourcing
15. Risk Management
16. Ecology and Maintenance
17. Inventory Management
18. Cost of maintenance
19. Safety at work
20. Performance indicators of maintenance
21. Trends in maintenance

PAPER PRESENTATION

Presentation is limited to **5 minutes**. Presenters can use PowerPoint slide shows.

CONFERENCE DATE AND VENUE

The conference will be held from 20th to 21st November 2020 in Zenica, organized by Faculty of Mechanical Engineering of University of Zenica in the Reading room of Institute 'Kemal Kapetanović', Travnička cesta 7, Zenica. It is obligatory to respect all hygienic-epidemiological measures and recommendations of the competent crisis headquarters. Participants will be able to follow and participate in the conference through an online platform.



RASPORED DOGAĐAJA / SCHEDULE OF EVENTS

ČETVRTAK – THURSDAY **Novembar/November 19th**

18.00 – 19.00 Registracija učesnika (Mašinski fakultet UNZE)
Registration of Conference Participant

19.00 – 20.00 Piće dobrodošlice - Welcome drink

PETAK – FRIDAY **Novembar/November 20th**

09.00 – 10.00 Registracija učesnika (čitaonica Instituta i on-line)
Registration of Conference Participants (reading room and on-line)

10.00 – 10.15 Otvaranje Skupa - Conference Opening

10.15 – 11.30 Uvodni referati - Keynote Paper Presentations

11.30 – 12.00 Kafe pauza - Coffee Break

12.00 – 13.15 Sekcija 1 – Presentacija radova
Section 1 – Presentation of papers

13.15 – 13.30 Kafe pauza - Coffee Break

13.30 – 14.30 Sekcija 2 – Presentacija radova
Section 2 – Presentation of papers

14.30 – 15.30 Pauza za ručak - Lunch Break

15.30 – 16.30 Sekcija 3 – Presentacija radova
Section 3 – Presentation of papers

16.30 – 16.45 Kafe pauza - Coffee Break

16.45 – 17.45 Sekcija 4 – Presentacija radova
Section 4 – Presentation of papers

17.45 – 18.00 Zatvaranje radnog dijela i zaključci
Closing the work part and conclusions

*****Paralelno sa radom sekcija održaće se okrugli stol (Multimedijalni centar MMC)

Okrugli sto na temu „POTENCIJALI I MOGUĆNOSTI ZA DUALNO OBRAZOVANJE INŽENJERA U OBLASTI ODRŽAVANJA“ (učesnici ERASMUS+ projekta DUALSCI) – paralelno sa radom sekcija

12.00 – 14.00 Round table on the topic „POTENTIALS AND OPPORTUNITIES FOR DUAL EDUCATION OF ENGINEERS IN THE FIELD OF MAINTENANCE“ (participants of ERASMUS + project DUALSCI) - in parallel with the work of the section



Okrugli sto sa učesnicima konferencije izvan UNZE o potencijalnim mogućnostima projektne saradnje u domenima nastave i NIR-a sa Mašinskim fakultetom UNZE i predstavljanje novih infrastrukturnih i istraživačkih potencijala MF UNZE (Sala za sjednice MF UNZE)

10.00 – 12.00 Round table with conference participants outside the University of Zenica on potential opportunities for project cooperation in the fields of teaching and research with the Faculty of Mechanical Engineering UNZE and presentation of new infrastructural and research potentials of the MoF UNZE (Meeting room of the MoF UNZE)

12.00 – 12.30 Zaključci konferencije i zatvaranje
Conclusions of conference and closing ceremony



10.00 – 10.15 Otvaranje Skupa - Conference Opening

10.15 – 11.30 Uvodni referati - Keynote Paper Presentations

Predsjedavajući / Chairmen: **Dr. D. Petković**

1. NATO KODIFIKACIONI SISTEM KAO GLOBALNI ALAT ZA NABAVKU REZERVNIH DIJELOVA / NATO CODIFICATION SYSTEM AS A GLOBAL TOOL FOR THE PROCUREMENT OF SPARE PARTS, **Marinko Aleksić (Montenegro)**
2. POUZDANOST I ŽIVOTNI CIKLUS KORISNIČKE MREŽNE OPREME ZA PRUŽANJE TELEKOMUNIKACIJSKIH USLUGA / RELIABILITY AND LIFECYCLE OF USER NETWORK EQUIPMENT FOR PROVISION OF TELECOMMUNICATION SERVICES, **Ivan Grgurević, Ivan Jovović, Mateja Jasak, Allen Brodarić (Croatia)**

12.00 – 13.15 Sekcija 1 – Presentacija radova
Section 1 – Presentation of papers

Predsjedavajući / Chairmen: **Dr. F. Klisura, Dr. S. Jašarević**

1. DETEKCIJA PARAZITNE POTROŠNJE ELEKTRO SUSTAVA OSOBNOG AUTOMOBILA / DETECTION OF PARASITIC CONSUMPTION OF PERSONAL CAR ELECTRIC SYSTEM, **Leonard Balukčić, Hrvoje Glavaš, Držislav Vidaković (Croatia)**
2. REKONSTRUKCIJA TOVARNOG SANDUKA DAMPERA CAT 777-D U CISTERNU ZA VODE / THE RECONSTRUCTION OF CARGO BOX OF TIPPER TRUCK CAT 777-D INTO WATER TANK, **Kasim Bajramović, Irfan Bajramović, Admir Muslija (Bosnia and Herzegovina)**
3. PREGLED I ODRŽAVANJE PUMPNOG AGREGATA FLYGT 2125.181 / INSPECTION AND MAINTENANCE OF THE PUMP UNIT FLYGT 2125.181, **Kasim Bajramović, Mustafa Hadžalić, Dino Tica (Bosnia and Herzegovina)**
4. MODELING AND MAINTENANCE OPTMIZATION / MODELIRANJE I OPTIMIZACIJA ODRŽAVANJA, **Bogdan Marić, Vlado Medaković (Bosnia and Herzegovina)**
5. UTICAJ UVOĐENJA TEHNOLOGIJE ZATVORENOG LIVENJA NA KVALITET UGLJENIČNOG ČELIKA / THE INFLUENCE OF THE INTRODUCTION OF CLOSED CASTING TECHNOLOGY ON THE QUALITY OF CARBON STEEL, **Aida Imamović, Fuad Klisura, Mirsada Oruč (Bosnia and Herzegovina)**
6. POTREBA I ZNAČAJ REVITALIZACIJE MOTORNIH I PRIKLJUČNIH VOZILA ZA TRANSPORT TEČNIH ZAPALJIVIH MATERIJA / THE NEED AND SIGNIFICANCE OF REVITALIZATION OF MOTOR AND TRAILER VEHICLES FOR TRANSPORT OF LIQUID FLAMMABLE SUBSTANCES, **Vojislav Krstić (Serbia)**
7. PRIMENE FLEET BAORD SISTEMA PRI ODRŽAVANJU I EKSPLOATACIJI MOTORNIH VOZILA / FLEET BAORD SYSTEM APPLICATION BY MAINTENANCE AND EXPLOITATION OF MOTOR VEHICLES, **Nikola Krstić (Serbia)**
8. UZROCI I MANIFESTACIJE OTKAZA MOTORA SUS I NAČINI NJIHOVOG OTKLANJANJA / CAUSES AND MANIFESTATIONS OF MOTORCYCLE DISCUSSION AND WAYS OF THEIR EMISSION, **Vojislav Krstić (Serbia)**

9. MONTAŽA U DRVOPRERADI I PROIZVODNJI NAMJEŠTAJA / ASSEMBLY IN WOODPROCESSING AND FURNITURE PRODUCTION, **Ismar Alagić (Bosnia and Herzegovina)**
10. PRIMJENA SMED-a U ODRŽAVANJU / APPLICATION OF SMED CONCEPT IN MAINTENANCE, **Ismar Alagić (Bosnia and Herzegovina)**
11. SISTEMI ZA UPRAVLJANJE TOKOM MATERIJALA I PRIMJERI PRIMJENE U INDUSTRIJI / MATERIAL MANAGEMENT SYSTEMS AND THEIR APPLICATION IN INDUSTRIAL CONDITIONS, **Ismar Alagić (Bosnia and Herzegovina)**

PETAK – FRIDAY Novembar/November 20th

13.30 – 14.30 Sekcija 2 – Presentacija radova
Section 2 – Presentation of papers

Predsjedavajući / Chairmen: **Dr. M. Imamović, Dr. M. Hadžalić**

1. AKTUALIZACIJA / ACTUALIZATION, **Suad Sućeska (Bosnia and Herzegovina)**
2. UTICAJ VRSTE GORIVA I REŽIMA RADA NA IZDUVNU EMISIJU GLAVNOG BRODSKOG DIZEL MOTORA / INFLUENCE OF FUEL TYPE AND OPERATING MODE ON EXHAUST EMISSIONS OF MAIN MARINE DIESEL ENGINE, **Sead Cvrk, Zdravko Božičković, Nikola Manojlović (Montenegro, Bosnia and Herzegovina)**
3. MJERE PRIPREME I ODRŽAVANJA KOD IZGRADNJE I SANACIJA ZGRADA / MEASURES OF PREPARATION AND MAINTENANCE IN THE CONSTRUCTION AND REHABILITATION OF BUILDINGS AND ROADS, **Aleksandar Jurić, Držislav Vidaković, Krunoslav Minažek, Ivan Damjanović (Croatia)**
4. ODRŽAVANJE OPREME U ORGANIZACIJI S LEAN POSLOVANJEM / EQUIPMENT MAINTENANCE IN ORGANIZATIONS OPERATING ON THE LEAN PRINCIPLE, **Držislav Vidaković, Matej Martić, Hrvoje Glavaš (Croatia)**
5. WHAT USERS SHOULD KNOW ABOUT ERP SYSTEMS MAINTENANCE?, **Dražena Gašpar (Bosnia and Herzegovina)**
6. REMONT ŠKOLSKOG BRODA JADRAN – STUDIJA SLUČAJA / OVERHAUL OF TRAINING SHIP „JADRAN“ CASE STUDY, **Aleksić Marinko, Sead Cvrk, Darko Petković (Montenegro, Bosnia and Herzegovina)**
7. SAVREMENA TEHNIKA I LJUDSKA PRAVA / MODERN TECHNOLOGY AND HUMAN RIGHTS, **Faruk Kozić (Bosnia and Herzegovina)**
8. FORMIRANJE VIBRACIJSKOG SIGNALA I NJEGOVE OSOBINE KOJE ODREĐUJU NEISPRAVNOST / VIBRATION SIGNAL FORMATION AND ITS FAULT DIAGNOSIS ABILITIES, **Davorka Šaravanja, Darko Petković (Bosnia and Herzegovina)**
9. CONTINUOUS ANALOG MONITORING OF HYDRAULIC RETURN-LINE FILTER PRESSURE, **Vito Tič, Darko Lovrec (Slovenia)**
10. DIJAGNOSTIKA STANJA I PRIJEDLOG MJERA SANACIJE DŽAMIJE TABAČICA U MOSTARU / CONDITION DIAGNOSTICS AND PROPOSED MEASURES FOR THE REMEDIATION OF THE TABAČICA MOSGUE IN MOSTAR, **Faris Trešnjo, Azra Mahinić, Marko Čeček, Amra Šarančić – Logo, Merima Šahinagić – Isović (Bosnia and Herzegovina)**

15.30 – 16.30 Sekcija 3 – Presentacija radova
Section 3 – Presentation of papers

Predsjedavajući / Chairmen: **Dr. Darko Petković, Dr. Marinko Aleksić**

1. DETERMINATION OF VALVE WEAR BASED ON CHARACTERISTICS MEASUREMENT, **Darko Lovrec, Vito Tič (Slovenia)**
2. INSTALACIJA I ODRŽAVANJE CLOUD SERVERA ZA BACKUP PODATAKA / INSTALATION AND MAINTENANCE OF CLOUD SERVER FOR DATA BACKUP, **Pavelić Krešimir, Kurilj Krunoslav, Vidaković Držislav (Croatia)**
3. RIZICI, ZAHTJEVI I STANDARDI SA ASPEKTA SIGURNOSTI U ZAVARIVAČKIM PROCESIMA / RISKS, REQUIREMENTS AND STANDARDS FROM THE SECURITY ASPECT IN WELDING PROCESSES, **Emir Đulić (Bosnia and Herzegovina)**
4. RELIABILITY AND AVAILABILITY OF MECATRONIC SYSTEMS OF MOTOR VEHICLES, **Krstić Stefan, Krstić Nikola, Krstić Vojislav (Serbia)**
5. OUTSOURCING U ODRŽAVANJU – ISKUSTVA IZ DRVNE INDUSTRIJE BIH / OUTSOURCING IN MAINTENANCE-EXPERIENCE FROM THE B&H WOOD INDUSTRY, **Sanin Hasanić, Emina Brkić, Amina Pandžo (Bosnia and Herzegovina)**
6. PRIMJENA PRINTANIH 3D MODELA U PROCESU LIVENJA REZERVNIH DIJELOVA / APPLICATION OF 3D PRINTED MODELS IN THE CASTING PROCESS OF SPARE PARTS, **Baručija Anel, Kačmarčik Josip, Hadžalić Mustafa Mujagić Derviš (Bosnia and Herzegovina)**
7. PERIODIČNI PREGLEDI, STATIČKO I DINAMIČKO PROBNO ISPITIVANJE DIZALICA / PERIODIC INSPECTIONS, STATIC AND DYNAMIC TRIAL EXAMINATION OF CRANES, **Adnan Panjević (Bosnia and Herzegovina)**
8. PREDIKTIVNO ODRŽAVANJE PROCESNIH VENTILATORA VELIKIH SNAGA / PREDICTIVE MAINTENANCE OF HIGH POWER PROCESS FANS, **Safet Brdarević, Senad Alić, Sabahudin Jašarević (Bosnia and Herzegovina)**
9. POSTUPAK CENTRIRANJA PROCESNIH VENTILATORA / PROCEDURE OF CENTERING PROCESS FANS AS A PART OF THEIR PREDICTIVE MAINTENANCE, **Safet Brdarević, Senad Alić, Demil Lušija (Bosnia and Herzegovina)**
10. PRIMJENA FREKVENTNIH PRETVARAČA U RUKOVANJU I ODRŽAVANJU ISTOVARNIH STANICA – VIPER / APPLICATION OF FREQUENCY CONVERTERS IN HANDLING AND MAINTENANCE OF UNLOADING STATIONS – VIPER, **Senad Alić, Senad Džidić, Emir Đulić (Bosnia and Herzegovina)**



16.45 – 17.45 Sekcija 4 – Presentacija radova
Section 4 – Presentation of papers

Predsjedavajući / Chairmen: **Dr. Fuad Hadžikadunić, Dr. Kasim Bajramović**

1. UTICAJ METEOROLOŠKIH USLOVA NA KONCENTRACIJE SO₂ U ZRAKU ZENIČKE KOTLINE / INFLUENCE OF METEOROLOGICAL CONDITIONS ON SO₂ CONCENTRATIONS IN THE AIR OF THE ZENICA VALLEY, **Vehid Birdahić, Nusret Imamović, Šefket Goletić (Bosnia and Herzegovina)**
2. METODOLOGIJA REALIZACIJE REMONTNIH AKTIVNOSTI PREMA PRINCIPIMA PROJEKTOG MENADŽMENTA / METHODOLOGY OF REALIZATION OVERHAUL ACTIVITIES ACCORDING TO THE PRINCIPLES OF PROJECT MANAGEMENT, **Emir Đulić, Mustafa Imamović (Bosnia and Herzegovina)**
3. PRIMJENA SCHUBERTOVE FUNKCIONALNO-INDIKATORSKE METODE ZA ODREĐIVANJE USPJEŠNOSTI ODRŽAVANJA / APPLICATION OF SCHUBERT'S FUNCTIONAL-INDICATOR METHOD FOR DETERMINING SUCCESS OF MAINTENANCE IN COAL MINING FACTORY WITH UNDERGROUND EXPLOATATION, **Tarik Karalić, Sabahudin Jašarević (Bosnia and Herzegovina)**
4. ODRŽAVANJE GRAĐEVINSKIH OBJEKATA U INDUSTRIJI / MAINTENANCE OF CONSTRUCTION FACILITIES IN INDUSTRY, **Mustafa Imamović, Fuad Hadžikadunić, Emir Đulić (Bosnia and Herzegovina)**
5. ISTRAŽIVANJE MOGUĆNOSTI ZBRINJAVANJA ISKORIŠTENIH ULJNIH FILTERA NA PODRUČJU ZENIČKO-DOBOJSKOG KANTONA / RESEARCH OF THE POSSIBILITY OF DISPOSAL OF USED OIL FILTERS ON AREA OF ZENICA-DOBOJ CANTON, **Muvedet Šišić, Vehid Birdahić, Nusret Imamović, Šefket Goletić (Bosnia and Herzegovina)**
6. KONSTRUKCIJA ULAZNE HAUBE FILTERA ZA PREČIŠĆAVANJE PLINOVA / DESIGN OF GAS PURIFICATION INLET HOOD, **Nedeljko Vukojević, Muamer Terzić, Hasan Halilović, Nedeljko Babić (Bosnia and Herzegovina)**
7. TRENDOVI U ORGANIZACIJI SISTEMA ODRŽAVANJA U PREDUZEĆIMA DRVNE INDUSTRIJE U BIH / TRENDS IN ORGANIZING MAINTENANCE SYSTEMS IN WOOD INDUSTRY ENTERPRISES IN B&H, **Alan Lisica (Bosnia and Herzegovina)**
8. TEHNIČKA REGULATIVA I ODRŽAVANJE OPREME POD PRITISKOM / TECHNICAL REGULATION AND MAINTENANCE OF PRESSURE EQUIPMENT, **Zlatan Ištvančić, Tintor Vukašin (Bosnia and Herzegovina)**
9. TEHNIČKA DIJAGNOSTIKA DIZALIČNIH SISTEMA U KONTEKSTU ODRŽAVANJA PREMA EVROPSKIM STANDARDIMA / TECHNICAL DIAGNOSIS OF CRANE SYSTEMS IN THE CONTEXT OF MAINTENANCE ACCORDING TO EUROPEAN STANDARDS, **Amel Tuka, Fuad Hadžikadunić, Elvir Halilčević, Admir Muslija (Bosnia and Herzegovina)**

