



Faculty of Technology and Metallurgy, University of Belgrade
Center for Pulp, Paper, Packaging and Graphics in Serbia

Tehnološko-metalurški fakultet, Univerzitet u Beogradu
Centar celulozno-papirne, ambalažne i grafičke indurstije Srbije

PROGRAM

**24. MEĐUNARODNI SIMPOZIJUM IZ OBLASTI CELULOZE,
PAPIRA, AMBALAŽE I GRAFIKE**
21-22. JUN 2023.,
Privredna komora Srbije, Terazije 23, Beograd,
Velika sala na 2. spratu

**24TH INTERNATIONAL SYMPOSIUM IN THE FIELD OF PULP,
PAPER, PACKAGING AND GRAPHICS**
21-22. JUNE 2023.,
Chamber of Commerce and Industry of Serbia,
Terazije 23, Belgrade, Great Hall on the 2nd floor

CONTRIBUTORS – POKROVITELJI

- **MINISTARSTVO NAUKE, TEHNOLOŠKOG RAZVOJA I INOVACIJA REPUBLIKE SRBIJE, Beograd, Srbija**
- **PRIVREDNA KOMORA SRBIJE, Beograd, Srbija**
- **GRAD BELIŠĆE, Republika Hrvatska**
- **SMURFIT KAPPA AVALA ADA d.o.o., Beograd, Srbija**
- **SMURFIT KAPPA D.O.O. BEOGRAD, Beograd, Srbija**
- **SUPERLAB, Beograd, Srbija**
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- **GRAFOTEX“ d.o.o., Banja Luka, Bosna i Hercegovina**
- **NATRON HAYAT D.D., Maglaj, Bosna i Hercegovina**
- **PULP AND PAPER INSTITUTE, Ljubljana, Slovenia**
- **SCHÄFERROLLS, d.o.o., Kranj, Slovenia**
- **SHP CELEX, A.D., Banja Luka, Bosna i Hercegovina**
- **TASOWHEEL, Tampere, Finland**

PROGRAM OF XXIV SYMPOSIUM CPA&G INDUSTRY – PROGRAM XXIV SIMPOZIJUMA CPA&G INDUSTRIJE

WEDNESDAY, June 21st – SREDA, 21.06.2023.

08:30-10:00 Notification of participants and distribution of materials (PKS, Belgrade, Terazije 23)

Prijava učesnika i podela materijala (PKS, Beograd, Terazije 23)

10:00-10:15 OPENING OF THE XXIV SYMPOSIUM – OTVARANJE XXIV SIMPOZIJUMA

10:15-12:30 Chairman – Predsedavaju: Mirjana Kijevčanin, Mirjana Kostić, Mirjana Stamenić

10:15-10:35 Lecture 1 – Predavanje 1

REGENERACIJA CELULOZE IZ RASTVORA JONSKE TEČNOSTI: NOVI PUT VALORIZACIJE ZA POTPUNO ISKORIŠĆENJE CELULOZE

REGENERATION OF CELLULOSE FROM IONIC LIQUID SOLUTION: A NOVEL VALORIZATION ROUTE FOR FULL POTENTIAL UTILIZATION OF CELLULOSE

Mirjana Kostić¹, Djordje Janačković¹, Petar Uskoković¹, Patrick Gane^{1,2}

¹University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Serbia

²Aalto University, School of Chemical Engineering, Department of Bioproducts and Biosystems, Aalto, Helsinki, Finland

10:35-10:55 Lecture 2 - Predavanje 2

SANDWICH BIOCOMPOSITES STRUCTURES BASED ON FOAM AND CELLULOSE FIBERS INTENDED TO NOISE INSULATION

BIOKOMPOZITNE SENDVIČ STRUKTURE ZASNOVANE NA PENI I CELULOZNIM VLAKNIMA ZA ZVUČNU IZOLACIJU

Petronela Nechita¹, Mihai Seciureanu¹, Maria-Violeta Guiman², Silviu-Marian Nastac^{1,2}, Carmen-Nicoleta Debeleac¹

¹ "Dunarea de Jos" University of Galati, Engineering and Agronomy Faculty in Braila, Romania

² "Transilvania" University of Brasov, Faculty of Mechanical Engineering, Brasov, Romania

10:55-11:15

Lecture 3 - Predavanje 3

**FUNCTIONAL COATINGS BASED ON MODIFIED XYLAN HEMICELLULOSES FOR FOOD PACKAGING PAPERS
FUNKCIONALNI PREMAZI ZASNOVANI NA MODIFIKOVANOJ KSILANSKOJ HEMICELULOZI ZA PAPIRE ZA PAKOVANJE**

Mirela Roman¹, Petronela Nechita², Alina Cantaragiu Ceoromila³, Andreea Veronica (Dediu) Botezatu⁴

¹Doctoral School of Fundamental and Engineering Sciences, Dunărea de Jos University of Galați, Romania

²Department of Environment, Applied Engineering and Agriculture, Dunărea de Jos University of Galați, Romania

³Cross-Border Faculty, Dunărea de Jos University of Galați, Romania

⁴Department of Chemistry Physical and Environment, Dunărea de Jos University of Galați, Romania

11:15-11:35

Lecture 4 – Predavanje 4

**PULP AND PAPER INSTITUTE LJUBLJANA – YOUR PARTNER IN CIRCULAR ECONOMY
INSTITUT ZA CELULOZU I PAPIR LJUBLJANA – VAŠ PATNER U CIRKULARNOJ EKONOMIJI**

David Ravnjak

Pulp and Paper Institute Ljubljana, Ljubljana, Slovenia

11:35-11:55

Lecture 5 – Predavanje 5

**UTICAJ VRSTE SIROVINA NA MEHANIČKA SVOJSTVA PAPIRA IZRAĐENOG OD RECIKLIRANIH VLAKANA
AN INFLUENCE OF THE TYPE OF THE RAW MATERIAL ON MECHANICAL PROPERTIES OF THE PAPER MADE FROM
RECYCLED FIBRES**

Sladana Glišić, Predrag Živković

Univerzitet u Beogradu, Tehnološko-metalurški fakultet, Beograd, Srbija

11:55-12:30

DISKUSIJA I PAUZA ZA KAFU – DISCUSSION AND COFFEE BREAK

12:30-14:10 Chairman – Predsedavaju: Milorad Krgović, Danijela Ošap

12:30-12:50

Lecture 6 – Predavanje 6

**ANDRITZ PRIMEFORM HYBRID FORMER – STATE OF ART FORMING TECHNOLOGY
ANDRITZ PRIMEFORM HIBRID FORMER – “STATE OF ART” FORMING TEHNOLOGIJA**

Saša Srbulov

Andritz AG, Graz, Austria

12:50-13:10

Lecture 7 – Predavanje 7

SLEEVE ROLL, TRANSFORMING FORMING + VACUUM ENERGY SAVING

SLIV CILINDRI, TRANSFORMACIONO FORMIRANJE + UŠTEDA ENERGIJE ZA OSTVARIVANJE VAKUUMA

Gunther Feldmann

Valmet GmbH, Darmstadt, Germany

13:10-13:30

Lecture 8 – Predavanje 8

ASPECTS IN PAPER AND BOARD MACHINE CYLINDER DRYER RUNNABILITY

ASPEKTI POGODNOSTI ZA RAD SUŠNIH CILINDARA U SASTAVU PAPIR MAŠINE

Juha Leimu

Turku University of Applied Sciences, Turku, Finland

Leimu Engineering Oy, Turku, Finland

13:30-13:50

Lecture 9 – Predavanje 9

ACHIEVING OPTIMAL RUNNABILITY AND COST EFFICIENCY IN PAPER MACHINES WITH PROPER MAINTENANCE OF RUNNABILITY COMPONENTS

POSTIZANJE OPTIMALNE STABILNOSTI I EKONOMIČNOSTI U RADU PAPIRNOG STROJA KROZ PRIMJERENO ODRŽAVANJE STABILIZATORA PAPIRNE TRAKE

Nenad Milosavljevic^{1,2}, Ivan Jerbic³, Mario Milosavljevic²,

¹Abo Akademi University, Faculty of Science and Engineering, Laboratory of Process and Systems Engineering, Turku, Finland;

² Sunnea Oy, Consulting&Engineering, Air Systems, Drying & Runnability of Paper, Board and Tissue Machines, Jyskä, Finland;

³ DS Smith Croatia, Belisce, Paper Division, Belisce, Croatia

13:50-14:10

Lecture 10 - Predavanje 10

NELES™ NDX VALVE CONTROLLER - SAVINGS. SAFETY. RELIABILITY.

NELES™ NDX KONTROLER VENTILA - UŠTEDE. SIGURNOST. POUZDANOST.

Alexander Henc

Neles Austria GmbH – Representative Office Belgrade (part of Valmet), Belgrade, Serbia

14:10-15:15

DISKUSIJA I PAUZA ZA RUČAK – DISCUSSION AND LUNCH BREAK

15:15-17:00 Chairman – Predsedavaju: Hrustem Smailhidžić, Nikola Tanasić

15:15-15:35 Lecture 11 - Predavanje 11

CHALLENGES OF GORENJE IN DESIGNING SUSTAINABLE PAPER-BASED PACKAGING FOR LARGE SCALE HOUSEHOLD APPLIANCES PRODUCTION

IZAZOVI GORENJA PRI DIZAJNIRANJU ODRŽIVE AMBALAŽE ZASNOVANE NA PAPIRU ZA PROIZVODNJU VELIKIH KUĆNIH APARATA

Aleš Mihelič¹, Radoje Radojčić¹, Gregor Čepon²

¹Gorenje d. o. o., Velenje, Slovenia, ²University of Ljubljana, Faculty of Mechanical Engineering, Ljubljana, Slovenia

15:35-15:55 Lecture 12 – Predavanje 12

INDUSTRIJA 4.0 USVAJANJE DIGITALNE PROIZVODNJE I NOVI GRAFIČKI PROIZVODI – IZAZOV KOMPANIJAMA DA POBOLJŠAJU PRODUKTIVNOST ILI DA SE ODRŽE I PRAVNI OKVIR

INDUSTRY 4.0 ADOPTING OF DIGITAL PRODUCTION AND NEW GRAPHIC PRODUCTS – A CHALLENGE FOR COMPANIES TO IMPROVE PRODUCTIVITY OR TO SUSTAIN THEMSELVES AND LEGAL FRAMEWORK

Jovan Janković, Miroslav Prerad, Anja Vučanović

„Grafotex“ d.o.o. Banja Luka, Bosna i Hercegovina

15:55-16:15 Lecture 13 – Predavanje 13

KPI NASUPROT SPT SA FOKUSOM NA INDUSTRIJU BRIZGANJA PLASTIKE

KPI VS SPT WITH FOCUS ON THE PLASTIC INJECTION INDUSTRY

Biljana Lazarević¹, Veljko Davidović¹, Lidija Barjaktarović²

¹Casa Forte d.o.o. Beograd, Srbija

²Univerzitet Singidunum, Beograd

16:15-16:35 Lecture 14 - Predavanje 14

DUALNI MODEL OBRAZOVANJA U REPUBLICI SRBIJI

MODEL OF DUAL EDUCATION IN REPUBLIC OF SERBIA.

Aleksandra Milićević

Privredna komora Srbije, Beograd, Srbija

16:35-17:00 DISKUSIJA I PAUZA – DISCUSSION AND BREAK

20:00- CEREMONIAL DINNER – SVEČANA VEČERA

THURSDAY, JUNE 22nd – ČETVRTAK, 22.06.2023.

09:00-11:10 Chairman – Predsedavaju: Predrag Živković, Đurđa Radojević - Čugurović

09:00-09:20 Lecture 15 – Predavanje 15

**PREDVIĐANJE KOMPRESIJE AMERIKAN KUTIJE SIMULACIJSKO NUMERIČKIM MODELIRANJEM
PREDICTING THE AMERICAN BOX COMPRESSION USING NUMERICAL SIMULATION MODELLING**

Aldin Obućina, Ahmed Palić, Amra Tuzović, Marija Garić

Faculty of technical studies, University of Travnik, Travnik, Bosnia i Herzegovina

09:20-09:40 Lecture 16 - Predavanje 16

**RAZVOJ CIRKULARNOG MODELA POSLOVANJA U SEKTORU IZRADE AMBALAŽE – PRIMER KOMPANIJE DETO
DEVELOPMENT OF CIRCULAR PACKAGING BUSINESS MODEL – CASE STUDY DETO COMPANY**

¹Miodrag Ristić, ²Nenad Orlić, ³Vesna Alivojvodić

¹Deto d.o.o., Pančevo, Srbija

²Fakultet organizacionih nauka, Beograd, Srbija

³Akademija tehničkih strukovnih studija Beograd, Srbija

09:40-10:00 Lecture 17 - Predavanje 17

**PRIMERI DOBRE PRAKSE ZA UNAPREĐENJE ENERGETSKE EFIKASNOSTI U INDUSTRIJI PAPIRA
GOOD PRACTICE EXAMPLES FOR IMPROVING ENERGY EFFICIENCY IN THE PAPER INDUSTRY**

Nikola Tanasić¹, Mirjana Stamenić²

¹ The Academy of Applied Technical Studies, Department for Traffic, Mechanical and Protection Engineering, Belgrade, Serbia

² University of Belgrade, Faculty of Mechanical Engineering, Belgrade, Serbia

10:00-10:20

Lecture 18 – Predavanje 18

**ENERGY ECONOMY OF THE HEAT RECOVERY AT THE PAPER MACHINE
USTEDA TOPLINSKE ENERGIJE REKUPERACIJOM TOPLINE NA PAPIRNOM STROJU**

Nenad Milosavljevic^{1,2}, Ivan Jerbic³, Mario Milosavljevic²

¹Abo Akademi University, Faculty of Science and Engineering, Laboratory of Process and Systems Engineering, Turku, Finland;

²Sunnea Oy, Consulting &Engineering, Air Systems, Drying & Runnability of Paper, Board and Tissue Machines, Jyskä, Finland;

³DS Smith Croatia, Paper Division, Belisce, Croatia

10:20-10:40

Lecture 19 – Predavanje 19

**X-RITE INLINE COLOR MEASUREMENT SOLUTIONS FOR PAPER PRODUCTION
REŠENJA KOMPANIJE X-RITE ZA MERENJE BOJE U TOKU PROIZVODNJE PAPIRA**

Haydee Heinze¹, Jon Jordan²

¹X-Rite GmbH, Martinsried, German

²DZS Grafik d.o.o., Ljubljana, Slovenia

10:40-11:10

DISKUSIJA I PAUZA ZA KAFU – DISCUSSION AND COFFEE BREAK

11:10-13:00

Chairman - Predsedavaju: Nenad Milosavljević, Milan Bebić

11:10-11:30

Lecture 20 – Predavanje 20

**REALIZOVANA UNAPREDJENJA FABRIKE KARTONA UMKA U PERIODU OD 2021 –2023
IMPOVEMENTS IN UMKA CARDBOARD FACTORY REALIZED FROM YEAR 2021 TO 2023**

Uroš Mančić

Fabrika kartona Umka, Umka, Srbija

11:30-11:50

Lecture 21 – Predavanje 21

**POSLOVANJE SA SVRHOM - AMBALAŽA SA DUŠOM. PRIMENA MODELA ODGOVORNOG I ODRŽIVOG
POSLOVANJA U SRPSKOJ INDUSTRIJI PROIZVODNJE PAPIRNE I KARTONSKE AMBALAŽE
BUSINESS WITH PURPOSE - PACKAGING WITH SOUL. RESPONSIBLE AND SUSTAINABLE BUSINESS MODEL APPLIED
IN SERBIAN PAPER AND CARDBOARD PACKAGING INDUSTRY.**

Marija Pantelić

Bosis Valjevo, Univerzitet Metropolitan, Fakultet za menadžment i razvoj, Beograd, Srbija

11:50-12:10

Lecture 22 – Predavanje 22

TASOWHEEL QCS AND PROFILERS

QCS I SISTEM ZA PROFILISANJE KOMPANIJE TASOVILS

Mikko Kinnunen, Vassil Valtchev

Tasowheel, Tampere, Finland

12:10-12:30

Lecture 22 – Predavanje 22

KREIRAJMO ZAJEDNO BUDUĆNOST

LET'S CREATE THE FUTURE TOGETHER

Đurđa Radivojević-Čugurović, Njegoš Vidojević

Smurfit Kappa Avala Ada, Beograd

12:30-13:00

DISKUSIJA I PAUZA ZA KAFU – DISCUSSION AND COFFEE BREAK

13:00-15:00

ROUND TABLE – OKRUGLI STO

Moderators: M. Krgović, P. Uskoković, Đ. Janačković, N. Govedarica, M. Milosavljević

- **KRATKO PREDSTAVLJANJE SVIH UČESNIKA**
BRIEF INTRODUCTION OF ALL PARTICIPANTS
- **STANJE U CELULOZNO – PAPIRNOJ, AMBALAŽNOJ I GRAFIČKOJ INDUSTRIJI**
SITUATION IN PULP, PAPER, PACKAGING AND GRAPHIC INDUSTRY

18:00-19:30

CLOSING OF SYMPOSIUM – ZATVARANJE SIMPOZIJUMA

18:00-19:30

EXCURSION: CRUISE – GET TO KNOW BELGRADE FROM THE RIVERS

IZLET: KRSTARENJE – UPOZNAJTE BEOGRAD SA REKA



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BROD HORIZONT

ČETVRTAK, 22.06.2023. 18:00 - 19:30
UPOZNAJTE BEOGRAD SA REKA

THURSDAY, JUNE 22nd 18:00 - 19:30
GET TO KNOW BELGRADE FROM THE RIVERS

