



FIRST ANNOUNCEMENT PRVO OBAVEŠTENJE

**24th INTERNATIONAL SYMPOSIUM IN THE FIELDS
OF PULP, PAPER, PACKAGING AND GRAPHICS**
June, 16th -19th 2020.

**Chamber of Commerce and Industry of Serbia,
Belgrade, Serbia**

**24. MEĐUNARODNI SIMPOZIJUM IZ OBLASTI
CELULOZE, PAPIRA, AMBALAŽE I GRAFIKE**
16-19. jun 2020. godine

Privredna komora Srbije, Beograd, Srbija

Official languages: English and Serbian **Službeni jezici:** engleski i srpski

Scientific Board of Symposium - Naučni odbor simpozijuma

Prof. Slobodan Jovanovic, Ph. D., Faculty of Technology and Metallurgy, (TMF) Belgrade, Serbia, chairman
Prof. Petar Uskokovic, Ph. D., TMF, Belgrade, Serbia
Prof. Lothar Götttsching, Ph. D., University of Technology, Darmstadt, Germany
Prof. Paul H. Wilson, Ph. D., TAPPI Pulp & Paper Safety Committee, Norcross, Georgia, USA
Prof. Valentin I. Popa, Ph. D., Faculty of Chemical Industry, Iassi, Romania
Prof. Stanka Nedeva, Ph. D., Pulp and Paper Institute, Sofia, Bulgaria
Daven Chamberlain, Ph. D., Paper Industry Technical Association - PITA, Lancashire, United Kingdom
Prof. Vilko Ziljak, Ph. D., Faculty of Graphic Arts of the University of Zagreb, Zagreb, Croatia
Prof. Ivana Ziljak Stanimirovic, Ph. D., Faculty of Graphic Arts of the University of Zagreb, Zagreb, Croatia
Prof. Juha Leimu, Ph. D., Turku University of Applied Sciences, Turku, Finland
Prof. Nenad Milosavljevic, Ph. D., Faculty of Chemical Engineering, Åbo Academy University, Turku, Finland
Prof. Predrag Zivkovic, Ph. D., TMF, Belgrade, Serbia
Prof. Djordje Janackovic, Ph. D., TMF, Belgrade, Serbia
Prof. Ivanka Popovic, Ph. D., TMF, Belgrade, Serbia
Prof. Melina Kalagasidis Kruscic, Ph. D., TMF, Belgrade, Serbia
Prof. Mirjana Kijevcanin, Ph. D., TMF, Belgrade, Serbia
Prof. Zorica Knezevic-Jugovic, Ph. D., TMF, Belgrade, Serbia
Prof. Boris Loncar, Ph. D., TMF, Belgrade, Serbia
Prof. Zeljko Kamberovic, Ph. D., TMF, Belgrade, Serbia
Prof. Mirjana Kostic, Ph. D., TMF, Belgrade, Serbia
Prof. Vladimir Valent, Ph. D., TMF, Belgrade, Serbia
Prof. Srecko Nikolic, Ph. D., TMF, Belgrade, Serbia
Prof. Goran Janke, Ph. D., Faculty of Mechanical Engineering, Belgrade, Serbia
Prof. Milos Djukic, Ph. D., Faculty of Mechanical Engineering, Belgrade, Serbia
Branko Dunjic, Ph. D., Cleaner Production Centre of Serbia, TMF, Belgrade
Prof. Borislav Jeftenic, Ph. D., Faculty of Electrical Engineering, Belgrade, Serbia
Prof. Milan Bebic, Ph. D., Faculty of Electrical Engineering, Belgrade, Serbia
Marko Jagodic, BSc, DITP-Pulp and Paper Engineers and Technicians Association, Ljubljana, Slovenia
Mateja Mesl, Mr. Sci., ICP - Pulp and Paper Institute, Ljubljana, Slovenia
Prof. Hrustem Smailhodzic, Ph. D., Faculty of Technical Studies, Travnik, Bosnia & Herzegovina
Prof. Salim Ibrahimfendic, Ph. D., Faculty of Technical Studies, Travnik, Bosnia & Herzegovina
Prof. Diana Gregor Svetec, Ph. D., Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia
Prof. Klementina Mozina, Ph. D., Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia
Prof. Sefkija Bottonjic, Ph. D., Faculty of Metallurgy and Technology, Zenica, Bosnia & Herzegovina
Prof. Milorad Krgovic, Ph. D., TMF, Belgrade, Serbia



Organizacioni odbor - Organization Board

Milorad Krgovic, Faculty of Technology and Metallurgy, Belgrade, chairman
Predrag Zivkovic, TMF, Belgrade
Marina Krsikapa, Center CPA&G, TMF, Belgrade
Mijodrag Mилоjevic, KAPPA STAR GROUP, Belgrade
Dejan Eric, KAPPA STAR GROUP, Belgrade
Milos Ljusic, UMKA, Umka
Milan Markovic, SMURFIT KAPPA BELGRADE, Belgrade
Djurdja Radivojevic Cugurovic, SMURFIT KAPPA AVALA ADA, Belgrade
Stanisa Lukic, UMKA, Umka
Danijela Osap, UMKA, Umka
Tatjana Mladenovic, SMURFIT KAPPA BELGRADE, Belgrade
Mirko Stanic, NATRON HAYAT, Maglaj, Bosnia & Herzegovina
Zoran Lazarevic, VIBAC BALCANI, Jagodina
Mirjana Vasic, INTER PAPIR, Belgrade
Zoran Petkovic, KARTONVAL, Belgrade
Josif Cosic, MAGNETIC, Cacak
Zoran Devic, PROGRES, Belgrade
Natasa Govedarica, Chamber of commerce and industry of Serbia, Belgrade
Biljana Lazarevic, CASA FORTE, Belgrade
Constantin Secara, SC CEPROHART SA Braila, Romania
Tibor Kiss, HUNTHAI LOGISTICS, Bangkok, Thailand
Klemen Mozina, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia
Milos Petrovic, TMF, Belgrade
Darko Radosavljevic, TMF, Belgrade
Nadezda Borna, TMF, Belgrade
Slobodan Jovanovic, TMF, Belgrade, Belgrade



24th International symposium in the field of pulp, paper, packaging and graphics will be held in Belgrade, Chamber of Commerce and Industry of Serbia, June 16th - 19th 2020.

Symposium is organized by Center for pulp, paper, packaging and graphics industry of Serbia and Faculty of technology and metallurgy in Belgrade, under the patronage of Ministry of Education, Science and Technological Development of Republic Serbia and Chamber of Commerce and Industry of Serbia.

THE MAIN GOAL OF THIS SYMPOSIUM IS:

- To gather experts engaged in pulp, paper, packaging and graphic industry, as well as representatives of academic institutions and, with assistance of foreign lecturers (representatives of international companies), to deliver information about new technologies and new operations and processes in existing technologies, which could enable price cuts and quality improvement of products, followed by better preservation of environment.
- To give chance to our experts to present results they have achieved in their recent work, as well as to review the possibilities to create quality products demanded by world market with small investment in existing equipment and improved organization of their companies.

TOPICS OF SYMPOSIUM ARE:

- New technologies and trends in production processes in pulp and paper industry in order to increase business efficiency;
- New materials, technologies and methods in packaging and graphics industry;
- Standards and regulations in paper, cardboard and packaging industry;
- International ecological standards and certifications;
- Waste management and waste recycling plans;
- Waste paper as a strategic raw material;
- Renewable energy sources;
- Saving energy in technological processes;
- Energy efficiency and energy management in pulp, paper, packaging and graphic industry: Energy - Efficiency - Ecology - Economy;
- Examples of good practice and existing solutions in the industry;
- Education for pulp, paper, packaging and graphic industry - needs and opportunities.

SYMPOSIUM PROGRAM CONSISTS OF:

- Plenary lectures (20+5 minutes for discussion)
- Other lectures (15+5 minutes for discussion)
- Promotions of technology and products of local and foreign companies (as agreed)
- Round table - discussions on selected present themes.

The papers presented on symposium will be printed in the Proceedings, in their original shape, without lecturing.

Invited lectures should include up to 10 A4 pages, other lectures up to 8 of typed text, including pictures and other attachments. Authors will be provided with: video projector, computer, sound system and screen. Should the authors have some special requests, they are asked to note it in advance. Works must be delivered as camera-ready Microsoft Word files.

Please prepare your papers according to following instructions:

A4 format, all margins 2,54 cm, font Times New Roman, single spacing, first line of each text paragraph indented by 1,27 cm.

Apply the styles in following order:

MAIN TITLE (capital letter, 16 pt, bold); authors (12 pt); company / institution name followed by city and country (12 pt); abstract (up to 7 lines, 12 pt, italic); key words (12 pt, bold italic); numbered chapter title (12 pt, bold). For example: INTRODUCTION, 12 pt, bold; text of the paper (12 pt); references (12 pt). Please insert all illustrations and tables into document, at appropriate places, with figure captions below pictures, and table titles above tables.

Photographs should be converted to grayscale with minimum resolution of 200 dpi for final size, and saved as tiff or jpg (without compression-maximum quality). Drawings should be saved as "1-bit" tiff with minimum resolution of 600 dpi for final size. All illustration should be imported into document by Inset-Picture command.

At the end of the document state name(s) and full postal and e-mail address of corresponding / presenting author.

Please send us Microsoft Word files to following e-mail: peca@tmf.bg.ac.rs

Accepted papers will be printed in Proceedings.

Time limit for application of your work is **March 30th 2020**.

If you want your work to be published in official Publication, you should send it before **May 1st 2020**.

The membership for symposium is mandatory for all participants and is **150 EUR**, and it includes the participation in the symposium, Proceedings and the accompanying materials, refreshments during breaks and excursion.

Official languages are Serbian and English, and the simultaneous translation will be provided.

Should there be min. 20 Russian-speaking participants, simultaneous translation to Russian will also be organized.

For additional information contact:

Marina Krsikapa, Tel/fax: +381 11 4081 002, Mobil: +38160 399 8777; e-mail: m.krsikapa@gmail.com.

XXIV međunarodni simpozijum iz oblasti celuloze, papira, ambalaže i grafike,
održaće se u Beogradu, u Privrednoj komori Srbije, od 16. do 19. juna 2020.

Simpozijum organizuju Centar za celulozu, papir, ambalažu i grafiku Srbije i Tehnološko-metalurški fakultet
(Katedra za grafičko inženjerstvo) iz Beograda, pod pokroviteljstvom
Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije i Privredne komore Srbije.

CILJ ORGANIZATORA SIMPOZIJUMA JE:

- Da na jednom mestu okupi stručnjake koji rade u industriji celuloze, papira, ambalaže i grafike, kao i sa odgovarajućih visokoškolskih ustanova i da im pruži informacije o novim tehnologijama i o novim operacijama i procesima u već postojećim tehnologijama, koji omogućavaju sniženje cene i poboljšanje kvaliteta proizvoda, uz zaštitu životne sredine.
- Da omogući našim stručnjacima da svojim kolegama izlože rezultate do kojih su došli u dosadašnjem radu, kao i da kritički sagledaju mogućnosti da sa malim investicijama u postojeću opremu i poboljšanom organizacijom rada u svojim firmama, ostvare kvalitetne proizvode kakve zahteva svetsko tržište.

TEME SIMPOZIJUMA SU:

- Nove tehnologije i trendovi u procesu proizvodnje u celulozno - papirnoj industriji u cilju ekonomičnijeg poslovanja;
- Novi materijali, tehnologije i metode u ambalažnoj i grafičkoj industriji;
- Standardi i propisi u vezi sa papirom, kartonom i ambalažom;
- Međunarodni ekološki standardi i sertifikati;
- Upravljanje otpadom i planovi za reciklažu otpada;
- Stari papir kao strateška sirovina;
- Obnovljivi izvori energije;
- Štednja energije u tehnološkim procesima;
- Energetska efikasnost i energetski menadžment u CPAG industriji: Energetika - Efikasnost - Ekologija - Ekonomija;
- Primeri dobre prakse i izvedenih rešenja u industriji;
- Školovanje kadra za CPAG industriju, potrebe i mogućnosti.

PROGRAM SIMPOZIJUMA OBUHVATA:

- Plenarna predavanja (20 + 5 minuta za diskusiju)
- Ostala predavanja (15 + 5 minuta za diskusiju)
- Promocije tehnologija i proizvoda stranih i domaćih firmi (prema dogovoru)
- Organizovanje Okruglog stola - diskusije o odabranim aktuelnim temama.

Radovi koji budu uvršteni u program Simpozijuma biće štampani u Zborniku, u originalnom obliku, bez lekture i korekture. Za predavanja po pozivu je predviđeno do 10 stranica formata A4, za ostala predavanja do 8 stranica kucanog teksta, zajedno sa slikama i priložima.

Autori će imati na raspolaganju: video projektor, računar, ozvučenje i platno. Ukoliko autori imaju posebne tehničke zahteve, mole se da ih naznače unapred.

Radove treba dostaviti u obliku Microsoft Word dokumenata, spremnih za štampanje (camera-ready), složenih prema sledećem uputstvu: format A4, sve margine po 2,54 cm, font TimesNewRoman, prored "single", prvi red svakog pasusa uvučen za 1,27 cm.

Redosled pisanja: naslov rada na srpskom i engleskom (velika slova, 16 pt, bold), imena autora (12 pt), naziv i organizacije sa imenom grada i države, (12 pt), izvod rada na srpskom i engleskom (do sedam redova, 12 pt, italic), ključne reči (12 pt, bold italic), numerisan naslov poglavlja (12 pt, bold). Na primer: 1.UVOD, 12 pt, bold; tekst rada, 12 pt; literatura, 12 pt.

U rad treba uvrstiti sve ilustracije i tabele na odgovarajuća mesta, sa potpisom ispod svake slike i naslovom iznad svake tabele.

Fotografije pre ubacivanja u dokument treba pretvoriti u "grayscale" (crno-belu fotografiju) sa rezolucijom u konačnoj veličini od najmanje 200 dpi i snimiti kao tif ili jpg (maksimalni kvalitet – bez kompresije). Crteže snimiti kao "1-bit" tif sa rezolucijom od najmanje 600 dpi u konačnoj veličini. Sve ilustracije ubaciti u dokument primenom komande "Insert-Picture".

Na kraju navesti ime i punu poštansku adresu i adresu elektronske pošte autora za korespondenciju/autora koji će prezentovati rad.

Molimo da rad u elektronskom obliku dostavite na e-mail: peca@tmf.bg.ac.rs

Prihvaćeni radovi biće objavljeni u Zborniku radova.

Rok za prijavljivanje radova je **30. mart 2020.** godine, a da bi radovi bili objavljeni u Zborniku radova, treba ih poslati najkasnije do **01. maja 2020.**

Kotizacija za učešće u radu Simpozijuma je obavezna za sve učesnike i iznosi **15.000 din**, a njome su obuhvaćeni: Zbornik radova i ostali materijali, osveženje u pauzama i izlet.

Službeni jezici skupa su srpski i engleski, i biće obezbeđen i simultani prevod. Ako se prijavi najmanje 20 učesnika koji govore ruski, biće organizovano i simultano prevođenje i na ruski jezik.

Kontakt osoba za sve dodatne informacije:

- Marina Kršikapa, tel/fax:+381-11-4081-002; mobil:+381-60-399-8-777; e-mail: m.krsikapa@gmail.com

PRELIMINARY PROGRAM - PRELIMINARNI PROGRAM

TUESDAY, June 16th
UTORAK, 16.06.2020.

19:00-21:00 REGISTRATION OF PARTICIPANTS AND DISTRIBUTION OF MATERIALS
PRIJAVA UČESNIKA I PODELA MATERIJALA

WEDNESDAY, 17th
SREDA, 17.06.2020.

08:00-09:00 REGISTRATION OF PARTICIPANTS AND DISTRIBUTION OF MATERIALS
PRIJAVA UČESNIKA I PODELA MATERIJALA
09:00 - 09:15 OFFICIAL OPENING OF SYMPOSIUM – ZVANIČNO OTVARANJE SIMPOZIJUMA
09:15 - 13:00 WORKING SESSION – RADNA SEKCIJA
13:00 - 15:00 BREAK (LUNCH) – PAUZA (RUČAK)
15:00 - 18:00 WORKING SESSION – RADNA SEKCIJA

THURSDAY, June 18th
ČETVRTAK, 18.06.2020.

08:30 -12:00 WORKING SESSION – RADNA SEKCIJA
12:00 - 14:00 ROUND TABLE – OKRUGLI STO
14:00 - 14:15 ZVANIČNO ZATVARANJE SIMPOZIJUMA – OFFICIAL SYMPOSIUM CLOSING
15:00 - 18:00 EXCURSION – IZLET:
20:30 – CEREMONIAL DINNER – SVEČANA VEČERA

INVITATION TO INDUSTRY:

The success of XXIV International Symposium in pulp, paper, packing and graphic, greatly depends on generous help of industry and financial support of your company which years back had been participating in organization of this event, and we are mostly thankful to it.

We are hoping that you are as also satisfied with our cooperation and participation at these gatherings until now.

We are asking you to extend your help in this year and to request to be provided with the **options for financial support and participation of your company** in the activities of our Symposium.

We will emphasize that there are various possibilities for presentation of your company, products or technologies, such as: using **exhibition area** placed in front of congress hall during whole Symposium; **presentation or lecture** inserted into program of Symposium; as well as the status chosen from your side to correspond you mostly (**Patron, Contributor or Sponsor**).

POZIV INDUSTRIJI ZA PODRŠKU:

Uspeh ovog našeg i Vašeg simpozijuma u velikoj meri zavisi od velikodušne pomoći industrije i finansijske podrške Vaših firmi koje zajedno sa nama, godinama unazad, učestvuju u organizaciji ovog simpozijuma, na čemu Vam se najsrdačnije zahvaljujemo.

Nadamo se da ste i Vi zadovoljni dosadašnjom saradnjom i učešćem na ovim našim zajedničkim skupovima.

Molimo Vas da nam i ove godine pomognete, i da tražite od nas da Vam posaljemo **moćnosti finansijske podrške i učešća Vaše firme u radu ovog simpozijuma**. Da naglasimo da imate više mogućnosti predstavljanja Vaše firme, proizvoda i tehnologija, i to: u toku čitavog trajanja simpozijuma korišćenjem izložbenog prostora-**štandova**, koji će biti smešteni u holu ispred kongresne sale, **prezentacijom** - predavanjem uvrštenim u program simpozijuma, kao i kroz odgovarajući **status** koji odaberete, a koji Vam najviše odgovara (**Pokrovitelj, Pomagač ili Sponsor**).

Time limits:

Time limit for application of your work is **March 30th 2020**, and for publishing in official Publication, you should send it before **may 1st 2020**.

For additional information contact:

Marina Krsikapa
tel/fax: +381 11 4081 002; Mobil: +381 60 399 8777;
e-mail: m.krsikapa@gmail.com.

Rokovi:

Rok za prijavljivanje radova je **30. mart 2020.** godine, a da bi radovi bili objavljeni u Zborniku, treba ih poslati najkasnije do **1. maja 2020.**

Kontakt osoba za sve dodatne informacije:

Marina Kršikapa
tel/fax: +381-11-4081-002; mobilni: +381 60 399 8777;
e-mail: m.krsikapa@gmail.com.