

CONFERENCE TOPICS

MATERIAL REMOVAL TECHNOLOGIES

- Cutting Technology – improvement and application of existing cutting processes; progressive, advanced, precision and environmentally friendly processes;
- Fundamentals of cutting process – machinability, cutting characteristics, database of machining, intelligent machining processes;
- Monitoring, modelling and optimization of machining processes – development of the procedures and their practical implementation;
- Non-conventional and hybrid technologies – research and application in contemporary industry.

MACHINE TOOLS AND AUTOMATIC FLEXIBLE TECHNOLOGICAL SYSTEMS, CAx AND CIM PROCEDURES AND SYSTEMS

- Development and prediction of trends in development of machine tools and complex manufacturing systems;
- New concepts of machine tools;
- Development of machine tool and manufacturing system components; development of control, drive, measuring and manipulation systems;
- Machine tool design; new methods in design and construction;
- Behavior testing of machine tools and components; modern methods and results;
- Exploitation, modernization and maintenance of machine tools as means to an increased productivity and cost efficiency, methods, procedures and solutions;
- Automatic flexible technological structures; conceptual solutions, developed solutions, exploitation characteristics;
- Procedures and systems for automated designing, construction and calculation - product design;
- Procedures and systems for automated programming of NC machine tools, manipulation systems, measurement machines and complex technological systems;
- Complex technological systems, Systems for computer integrated manufacturing; conceptual solutions, achievements in development;
- Techno-economical aspects of practice of CAD, CAM, CAQ, ..., CIM systems;
- New approaches and methods in designing and production (systems of artificial intelligence, expert systems, mechatronics, concurrent engineering, reverse engineering, rapid prototyping, virtual prototype,...).

METROLOGY, ASSURANCE, CUTTING TOOLS, FIXTURES AND TRIBOLOGY

- Legal metrology, standardization;
- Measurement and instrumentation, measurement methods, measurement techniques;
- Precision engineering, calibration, CAQ/CAI;
- 3D-Digitization, reverse engineering, CAD Inspection;
- Quality tools, quality control;
- Total quality management, six sigma, manufacturing management;
- Maintenance, maintenance systems, maintenance management;
- Technical diagnostics, diagnostics methods, diagnostics techniques;
- Fixtures layout optimization, fixtures design, fixtures analysis;
- Flexible fixture systems, fixtures management;
- Cutting tool materials, cutting tool design;
- Modular tooling, cutting tool management;
- Surface topography, friction, wear, lubricants, coatings;
- Triboanalysis, tribomonitoring, tribometry, biotribology.

PROCESS PLANNING, OPTIMIZATION, LOGISTICS AND INTERNET TECHNOLOGIES IN PRODUCTION ENGINEERING

- Processes planning; Group technology; Integrated CAPP systems;
- Technoeconomical optimization; Optimization methods; Multi-criteria decision-making;
- Design for manufacturing and assembly-DfMA; Product manufacturability; Production cost and time
- Production logistics; Production planning, scheduling and control; Modeling, simulation and optimization of manufacturing and production processes;
- Collaborative engineering; Cloud manufacturing; Smart manufacturing;
- Manufacturing cyber physical systems; Internet of things in manufacturing.

MATERIALS, METAL FORMING, CASTING AND WELDING

- Materials in production engineering;
- Metal forming technologies;
- Casting technologies;
- Welding technologies;
- Heat treatment technologies, nanotechnologies and surface engineering technologies;
- Plastics shaping technologies;

MECHANICAL ENGINEERING AND ENVIRONMENTAL PROTECTION

- Cleaner production;
- Recycling, zero waste technologies;
- Environmental management;
- Eco-design and Life Cycle Assessment (LCA) of products and processes.

BIO-MEDICAL ENGINEERING

- Application of advanced engineering methods in development of biomedical products (3D digitization, reverse engineering, rapid prototyping, virtual design...);
- Application of advanced manufacturing technologies in production of biomedical products (CAD/CAM, 3D printing, rapid tooling...);
- Modern approaches in quality control of biomedical products

ADDITIVE MANUFACTURING TECHNOLOGIES

- Reliability, quality, and performance of the AM processes and the main challenges for their commercialization and utilization in advanced applications

DEADLINES

Submission of application by **May 15th, 2021**.

Notification of acceptance by **June 1st, 2021**.

Submission of papers by **July 15th, 2021**.

Review results information by **August 25th, 2021**.

Final programme by **September 10th, 2021**.

PAPER APPLICATION and CONFERENCE FEES

Paper application should contain: author(s) name(s), paper title, abstract in English (150 words) and mailing address. Abstracts and papers should be submitted to the site system for receiving papers: [Registration and Paper submission](#) Conference fee is €100 for one paper and €50 for the participants without paper. Fee payment should be made until September 05th, 2021. Conference fee includes conference materials, participation in work and all other activities during the Conference.

ACCOMMODATION and CONFERENCE LANGUAGE

Information regarding accommodation will be published on the Conference website. Official language of the Conference is English.

DATES and VENUES

The Conference will be held from **September 23-25, 2021** in Novi Sad, Serbia.

INFORMATIONS

Contact: **Nenad Kulundžić, Secretary**
FACULTY OF TECHNICAL SCIENCES
Department of Production Engineering
Trg Dositeja Obradovica 6, 21000 Novi Sad, Serbia
Tel.: (+381 21) 485 23 24 Fax: (+381 21) 454 495
E-mail: mma2021@uns.ac.rs
www.mma.ftn.uns.ac.rs



UNIVERSITY OF
NOVI SAD

FACULTY OF
TECHNICAL
SCIENCES

DEPARTMENT OF
PRODUCTION
ENGINEERING

14TH
INTERNATIONAL
SCIENTIFIC
CONFERENCE

MMA
2021
FLEXIBLE
TECHNOLOGIES

NOVI SAD
SERBIA
SEPTEMBER 23-25, 2021

INFORMATION
AND
CALL FOR PAPERS

INTERNATIONAL SCIENTIFIC COMMITTEE

Milenko **Sekulić**, Chairman, University of Novi Sad, SRB
Bojan **Ačko**, University of Maribor, SVN
Boris **Agarski**, University of Novi Sad, SRB
Sergei **Alexandrov**, Russian Academy of Sciences, RUS
Aco **Antić**, University of Novi Sad, SRB
Jan C. **Aurich**, Technical University Kaiserslautern, GER
Bojan **Babić**, University of Belgrade, SRB
Sebastian **Baloš**, University of Novi Sad, SRB
Dana Livia **Beju**, Lucian Blaga University of Sibiu, ROU
Konstantinos D. **Bouzakis**, Aristotle University of Thessaloniki, GRE
Miran **Brezočnik**, University of Maribor, SVN
Erhan **Budak**, Sabanci University, TUR
Igor **Budak**, University of Novi Sad, SRB
Emanuele **Carpanzano**, Un. of App. Sci. and Arts of S. Switzerland, CHE
Robert **Čep**, Technical University of Ostrava, CZE
Ilija **Čosić**, University of Novi Sad, SRB
Predrag **Čosić**, University of Zagreb, CRO
Joao Paulo **Davim**, University of Aveiro, PRT
Goran **Devedžić**, University of Kragujevac, SRB
Lubomir **Dimitrov**, Technical University of Sofia, BGR
Cristian **Doicin**, Polytechnica University of Bucharest, ROU
Rade **Doroslovački**, University of Novi Sad, SRB
Miroslav **Dovica**, University of Kosice, SVK
Viorel Mircea **Drăgoi**, Transilvania University of Braşov, ROU
Igor **Drstvenšek**, University of Maribor, SLO
Numan M. **Durakbasa**, Vienna University of Technology, AUT
Kornel **Ehmann**, Northwestern University, USA
Sabahudin **Ekinović**, University of Zenica, BIH
Luigi Maria **Galantucci**, Politecnico di Bari, ITA
Adam **Gaska**, Cracow University of Technology, POL
Valentina **Gecevsk**, Ss. Cyril and Methodius University, MKD
Gordana Globočki **Lakić**, University of Banja Luka, BIH
Šefket **Goletić**, University of Zenica, BIH
Dušan **Golubović**, University of East Sarajevo, BIH
Marin **Gostimirović**, University of Novi Sad, SRB
Miodrag **Hadžistević**, University of Novi Sad, SRB
František **Holešovský**, Tomas Bata University, CZE
Predrag **Janković**, University of Niš, SRB
Jerzy **Jędrzejewski**, Wrocław Univ. of Science and Technology, POL
Zoran **Jurković**, University of Rijeka, CRO
Snežana Čirić **Kostić**, University of Kragujevac, SRB
Peter **Krajnik**, Chalmers University of Technology, SWE
Davorin **Kramar**, University of Ljubljana, SVN
Janos **Kundrak**, University of Miskolc, HUN
Ivan **Kuric**, University of Zilina, SVK
Mikolaj **Kuzinovski**, Ss. Cyril and Methodius University, MKD
Dejan **Lukić**, University of Novi Sad, SRB
Ognjan **Lužanin**, University of Novi Sad, SRB
Miodrag **Manić**, University of Niš, SRB
Ildikó **Maňková**, Technical University of Kosice, SVK
Dorian **Marjanović**, University of Zagreb, CRO
Mijodrag **Milošević**, University of Novi Sad, SRB
Mladomir **Milutinović**, University of Novi Sad, SRB
Zoran **Miljković**, University of Belgrade, SRB
Radivoje **Mitrović**, University of Belgrade, SRB

Slobodan **Morača**, University of Novi Sad, SRB
Dimitris **Mourtzis**, University of Patras, GRE
Bogdan **Nedić**, University of Kragujevac, SRB
Duško **Pavletić**, University of Rijeka, CRO
Darko **Petković**, University of Zenica, BIH
Petar B. **Petrović**, University of Belgrade, SRB
Franci **Pušavec**, University of Ljubljana, SVN
Radovan **Puzović**, University of Belgrade, SRB
Dragan **Rajnović**, University of Novi Sad, SRB
Biserka **Runje**, University of Zagreb, CRO
Borislav **Savković**, University of Novi Sad, SRB
Antun **Stoić**, University of Osijek, CRO
Tibor **Szalay**, Budapest University of Technology and Economics, HUN
Tomislav **Šarić**, University of Slavonki Brod, CRO
Mladen **Šercer**, University of Zagreb, CRO
Leposava **Šidanić**, University of Novi Sad, SRB
Goran **Šimunović**, University of Osijek, CRO
Branko **Škorić**, University of Novi Sad, SRB
Lubomir **Šooš**, Slovak University of Technology, SVK
Dušan **Šormaz**, Ohio University, USA
Slobodan **Tabaković**, University of Novi Sad, SRB
Branko **Tadić**, University of Kragujevac, SRB
Ljubodrag **Tanović**, University of Belgrade, SRB
Radoslav **Tomović**, University of Montenegro, MNE
Nicolae **Ungureanu**, North University of Baia Mare, ROU
Đorđe **Vukelić**, University of Novi Sad, SRB
Lihui **Wang**, KTH Royal Institute of Technology, SWE
Wojciech **Zebala**, Cracow University of Technology, POL
Milan **Zeljko**, University of Novi Sad, SRB
Aleksandar **Živković**, University of Novi Sad, SRB

HONORARY COMMITTEE

Slavko **Arsovski**, University of Kragujevac, SRB
Pavao **Bojanić**, University of Belgrade, SRB
Franc **Čuš**, University of Maribor, SLO
Dragan **Domazet**, Metropolitan University, SRB
Milenko **Jovičić**, University of Belgrade, SRB
Vid **Jovišević**, University of Banja Luka, BIH
Milisav **Kalajdžić**, University of Belgrade, SRB
Janez **Kopač**, University of Ljubljana, SLO
Pavel **Kovač**, University of Novi Sad, SRB
Miodrag **Lazić**, University of Kragujevac, SRB
Ljubomir **Lukić**, University of Kragujevac, SRB
Vidosav **Majstorović**, University of Belgrade, SRB
Vučko **Mečanin**, University of Kragujevac, SRB
Dragoje **Milikić**, University of Novi Sad, SRB
Dragan **Milutinović**, University of Belgrade, SRB
Ratko **Mitrović**, University of Kragujevac, SRB
Miroslav **Radovanović**, University of Niš, SRB
Sava **Sekulić**, University of Novi Sad, SRB
Mirko **Soković**, University of Ljubljana, SLO
Bogdan **Sovilj**, University of Novi Sad, SRB
Velimir **Todić**, University of Novi Sad, SRB
Dragiša **Vilotić**, University of Novi Sad, SRB

ORGANIZING COMMITTEE

Borislav **Savković**, Chairman
Anđelko **Aleksić**
Miroslav **Dramićanin**
Miloš **Knežev**
Zorana **Lanc**
Ivan **Matin**
Milana I. **Mičunović**
Cvijetin **Mlađenović**
Nenad **Kulundžić**, Secretary
Miloš **Ranisavljev**
Dragan **Rodić**
Željko **Santošić**
Mario **Šokac**
Branko **Štrbac**
Marko **Zagoričnik**

ABOUT THE CONFERENCE

Continuing a long tradition of more than 45 years, the Department of Production Engineering of the Faculty of Technical Sciences and its Chairs: **Chair of machining, Chair of machine tools, process planning, flexible manufacturing systems and design processes and Chair of metrology, quality, fixtures, tools and environmental-engineering aspects** organize an international scientific-expert conference, called:

**14th International Scientific Conference
MMA 2021 - FLEXIBLE TECHNOLOGIES**

The conference will cover current issues in the field of production engineering as well as multidisciplinary fields of mechanical engineering, information technologies, environmental engineering, biomedical engineering and other related engineering fields. The scientific-expert conference MMA, with its long tradition and regular organization since 1976, aims to gather and exchange experience of researchers and experts from faculties, institutes and industry, and thus wants to contribute to more intensive scientific and economic development.

With desire to improve scientific and expert meeting with joint efforts and results, we invite you to contribute to achieving these goals with your papers and your presence.

A certain number of papers that successfully pass the review process and will also be presented at the conference, will be published in Journal of Production Engineering (ISSN: 1821-4932) and Journal of Advanced Technologies and Materials (ISSN: 2620-0325).

MMA 2021
FLEXIBLE TECHNOLOGIES

14TH INTERNATIONAL SCIENTIFIC CONFERENCE
NOVI SAD, SERBIA, SEPTEMBER 23-25, 2021