### **CONFERENCE TOPICS**

#### MATERIAL PROCESSING 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:

- 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, 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, 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;
- Maintenance, maintenance systems, maintenance managemer
  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,
- map a decided of solutions of s

#### **DEADLINES**

Submission of application by June 30th, 2018. Notification of acceptance by July 10th, 2018. Submission of papers by August 20th. 2018. Review results information by September 5th, 2018. Final programme by September 20th, 2018.

#### 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 Sept. 15, 2018. Conference fee includes conference materials, participation in work and all other activities during the Conference.

#### ACCOMMODATION

Information regarding accommodation will be published on the Conference website.

#### CONFERENCE LANGUAGE

Official language of the Conference is English.

#### DATES and VENUES

The Conference will be held from September 28-29, 2018 at the Central University Building, Dr Zorana Đinđića 1, Novi Sad, Serbia.

#### **INFORMATIONS**

Contact: Miloš Knežev, secretary

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UNIVERSITY OF NOVI SAD



FACULTY OF TECHNICAL SCIENCES

DEPARTMENT OF PRODUCTION ENGINEERING

> NTERNATIONAL SCIENTIFIC CONFERENCE



NOVI SAD SERBIA

SEPTEMBER 28-29, 2018

INFORMATION AND CALL FOR PAPERS

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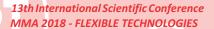
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Zorana Lanc

### **ABOUT THE CONFERENCE**

Continuing a long tradition of more than 40 years, the Department of Production Engineering of the Faculty of Technical Sciences and its Chairs: Chair of machine tools, process planning, flexible manufacturing systems and design processes, Chair of metrology, quality, fixtures, tools and environmental-engineering aspects and Chair for material processing technologies organize an international scientific-expert conference, called:



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.

# MMA 2018

FLEXIBLE TECHNOLOGIES

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