



Organized by:
Department for Production
Engineering, Faculty of Mechanical
Engineering, University of Belgrade



The 5th International Conference on
Advanced Manufacturing Engineering and Technologies

DETAILED PROGRAMME

7th – 9th June 2017
Belgrade, Serbia

Patrons/Sponsored by:



Republic of Serbia
Ministry of Education,
Science and
Technological
Development



Springer



Applied Nano Surfaces



AbelaPharm





Organized by:
Department for Production Engineering,
Faculty of Mechanical Engineering,
University of Belgrade



The 5th International Conference on Advanced Manufacturing Engineering and Technologies

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Foreword

The 5th International Conference on Advanced Manufacturing Engineering and Technologies (NEWTECH 2017) is organized and hosted by University of Belgrade, Faculty of Mechanical Engineering, Department for Production Engineering. It brings together experts from academia and industry and represents an excellent occasion for exchange of knowledge, ideas, experiences, research results, and information in the field of manufacturing. Conference topics cover a number of research areas in the field of manufacturing. Programme includes plenary sessions, special sessions, technical presentation, and social events for participants and accompanying persons.

NEWTECH Conference represents the result of international academic cooperation. The first NEWTECH conference was held from 23rd to 25th September in 2009 at Dunarea de Jos University of Galati, Galati, Romania (Conference Founder and Chair was Prof. Dr. Viorel Paunoiu), the second conference was held from 14th to 15th September 2011 at Brno University, Brno, Czech Republic (Conference Chair was Prof. Dr. Miroslav Piska), the third conference was held from 27th to 30th October 2013 at KTH Royal Institute of Technology, Stockholm, Sweden (Conference Chair was Prof. Dr. Cornel Mihai Nicolescu), and the fourth from 16th to 19th September at Wroclaw University of Technology, Poland (Conference Chair was Prof. Dr. Jerzy Jedrzejewski)

Conference Organization:

The working part of NEWTECH 2017 will be over three days. The first day will be dedicated to a series of invited presentations in various areas of manufacturing that will be delivered by top international experts from industry and academia. During the second day a number of invited plenary presentations referring to the recent trends in manufacturing will be offered. In addition, the three parallel sessions (Cyber Physical Manufacturing Systems, Machining Optimization, and Product Design) will be held. Finally the second day will include the technical presentation by Applied Nano Surfaces. The third day includes three parallel sessions (Machine Tools and In-Machine Measurements, Product Lifecycle Management, and Special Session on FabLab), as well as a series of invited presentations referring to Industry 4.0.

Panelists: Invited experts and representatives from EU, USA, and Far East.

Main Topics of Newtech 2017 include:

- Machine tools research and in-machine measurements
- Machine tool error budget and metrology
- Progress in CAD/CAM technologies
- Rapid prototyping and reverse engineering
- Nanomanufacturing machines and processes

- New manufacturing technologies and advanced material processing
- Functional and protective surfaces
- Metrology and integrity of machined surfaces
- Manufacturing systems automation
- Cyber Physical Manufacturing Systems
- Reconfigurable Manufacturing Systems
- Assembly and manufacturing system maintenance
- Monitoring and optimization of manufacturing processes
- Advances in modeling, analysis and simulation of manufacturing machines and processes
- Production planning and control
- Business models in relation to production system
- Sustainable manufacturing systems development
- Resource conservative manufacturing

The greatest value of this year's Conference represents the high—quality contribution of top experts in the field of manufacturing from 16 countries and three continents.

We express our gratitude to Conference Board and International Programme Committee members who kindly refereed the papers. Special gratitude is owed to the Springer and Mr. Pierpaolo Riva for publishing Conference Proceedings within the edition Lecture Notes in Mechanical Engineering. In addition, we highly appreciate the contribution of all authors.

A special acknowledgment is dedicated to the main patron – Government of the Republic of Serbia, Ministry of Education, Science and Technological Development, Serbia as well as to the sponsors: Abela Pharm, Belgrade, Serbia, Carlsberg, Serbia, and Applied Nano Surfaces, Sweden who enabled the the organization of the conference. In addition, we highly appreciate the efforts of all faculty and staff members and M.Sc. students from Faculty of Mechanical Engineering who contributed to the organization of the conference

Welcome to NEWTECH, June 2017, Belgrade!

Belgrade, 24th March, 2017

Prof. Dr. Vidosav D. Majstorovic, Conference Chair
Prof. Dr. Zivana Jakovljevic, Organizing Committee Chair

Main Patron

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Kragujevac, SRB), Prof. M. NESLUSAN (TU Zilina, SLK), Prof. V. OSTASEVICIUS (Kaunas University of Technology, LTU), Prof. G. POPOV (TU Sofia, BUL), Prof. G. POULACHON (ENSAM ParisTech, Cluny, FRA), Prof. J. RECH (Ecole Nation. d'Ingénieurs de Saint-Etienne, FRA), Prof. F. RESTIVO (University of Porto, PRT), Prof. R. ROY (Cranfield University, GBR), Prof. M. SANTOCHI (University of Pisa, ITA), Prof. L. SETTINERI (University of Torino, ITA), Prof. G. SELIGER (Produktionstechnisches Zentrum Berlin, DEU), Prof. E. SHAMOTO (Nagoya University, JPN), Prof. T. SIBALIJA (Metropolitan University, SRB), Prof. W. SIHN (Technical University Vienna, AUT), Prof. M. TAISCH (Politecnico di Milano, ITA), Prof. S. TAKATA (Waseda University, Tokyo, JPN), Prof. T. TOLIO (ITIA-CNR, Milano, ITA), Prof. R. TETI (University of Naples, ITA), Prof. M. TRAJANOVIC (University of Nis, SRB), Prof. R. TUOKKO (Tampere University, FIN), Prof. Dj. VUKELIC (University of Novi Sad, SRB), Dr. J. VANCZA (Hungarian Academy of Science, HUN), Prof. F. Van HOUTEN (University of Twente, NLD), Prof. E. WESTKAEMPER (University of Stuttgart, DEU), Prof. K. YUCEF-TOUMI (MIT, USA), Prof. G.X. ZHANG (Tianjin University, CHN), Prof. S. ZIVANOVIC (University of Belgrade, SER)

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Organized by:



University of Belgrade
Faculty of Mechanical Engineering
Department for Production Engineering

Date: 7 th June, 2017 / Wednesday	Venue: Faculty of Mechanical Engineering, Kraljice Marije 16, Belgrade
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Registration desk: 08:00 – 16:30 Registration (CeNT – first floor)

Time	Event
09:00 - 10:00	<p>NEWTECH Conference and AMP Serbia 2017 <i>Session 1: The Opening Ceremony and Plenary Presentation</i> Opening addresses <u>Opening Plenary Presentation:</u> ADVANCED MANUFACTURING PROGRAM CONFERENCE – Mission, Vision, Strategy Prof. Dr. Jun Ni, University of Michigan, Ann Arbor, USA Hall 211 (Second floor)</p>
10:00 - 11:00	<p>Welcome Cocktail - Club 210 (Second floor)</p>
11:00 - 13:00	<p>NEWTECH Conference and AMP Serbia 2017 <i>Session 2: Plenary Session/Panel 1</i> <u>Plenary Presentations:</u> ADVANCED RESEARCH IN MANUFACTURING – WORLD-WIDE APPROACHES, Part 1 Hall 211 (Second floor)</p>
13:00 - 14:30	<p>Lunch break</p>
14:30 - 16:00	<p>NEWTECH Conference and AMP Serbia 2017 <i>Session 3: Plenary Session/Panel 2</i> <u>Plenary Presentations:</u> ADVANCED RESEARCH IN MANUFACTURING – WORLD-WIDE APPROACHES, Part 2 Hall 211 (Second floor)</p>
16:00 - 16.30	<p>Coffee Break (CeNT – first floor)</p>
16:30 - 18:00	<p>NEWTECH Conference and AMP Serbia 2017 <i>Session 4: Plenary Session/Panel 3</i> <u>Plenary Presentations:</u> ADVANCED RESEARCH IN MANUFACTURING – WORLD-WIDE APPROACHES, Part 3 Hall 211 (Second floor)</p>

Date: 8 th June, 2017 / Thursday	Venue: Faculty of Mechanical Engineering, Kraljice Marije 16, Belgrade
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Registration desk: 08:00 – 16:30 Registration / CeNT (first floor)

Time	Event		
09:00 - 11:00	<i>Session 5: Plenary Session</i> <u>Plenary Presentations:</u> RECENT TRENDS IN MANUFACTURING Hall CeNT (first floor)		
11:00-11:30	Coffee Break (CeNT – first floor)		
11:30-13:30	<i>Session 6:</i> CYBER PHYSICAL MANUFACTURING SYSTEMS Hall CeNT (First floor)	<i>Session 7:</i> MACHINING OPTIMIZATION Room 518 (Fifth floor)	<i>Session 8:</i> PRODUCT DESIGN Room 514 (Fifth floor)
13:30 - 14:30	Lunch Break		
14:30-16:00	<i>Technical presentation:</i> APPLIED NANO SURFACES Hall CeNT (First floor)		
16:00-16:30	Coffee Break (CeNT – first floor)		
16:30-18:30	BELGRADE SIGHTSEEING TOUR		

20:00 Newtech 2017: Conference Dinner (informal dressing)

Date: 9 th June, 2017 / Friday	Venue: Faculty of Mechanical Engineering, str. Kraljice Marije 16, Belgrade
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Registration desk: 08:00 – 10:00 Registration (CeNT – first floor).

Time	Event		
09:00-10:30	<i>Session 9:</i> MACHINE TOOLS AND IN-MACHINE MEASUREMENTS Hall CeNT (First floor)	<i>Session 10:</i> PRODUCT LIFECYCLE MANAGEMENT Room 518 (Fifth floor)	<i>Session 11:</i> FabLab Room 514 (Fifth floor)
10:30-11:00	Coffee Break (CeNT – first floor)		
11:00-13:00	<i>Session 12: Plenary Session</i> <u>Plenary Presentations</u> A ROADMAP TO INDUSTRY 4.0 Hall CeNT (First floor)		
13:00-14:00	Farewell Cocktails in Club CeNT (first floor)		

Date: 7th June, 2017 /
Wednesday

Venue: Faculty of Mechanical Engineering, Kraljice Marije 16, Belgrade

Registration desk: 08:00 – 16:30 Registration (CeNT – first floor).

Time	Event
09:00-10:00	<p>Hall 211 (Second floor) NEWTECH Conference and AMP Serbia 2017 Session 1: The Opening Ceremony and Plenary Presentation Conference/Session Speaker – Mrs Gordana Stijačić, TV Journalist RTS</p> <p><u>Opening addresses:</u></p> <ul style="list-style-type: none"> • Faculty of Mechanical Engineering, Prof. Dr. R. Mitrović, Dean • University of Belgrade, Prof. Dr. V. Bumbasirević, Rector • City of Belgrade, Dr. S. Mali, Mayor • Belgrade Chamber of Commerce, M. Miletić, President • GIZ Belgrade, Dr. S. Heieck, Manager • Main Sponsor-Abela Pharm, MSc. D. J. Korčok, General Manager • Ministry of Economy, G. Knežević, Minister, Opening Conference <p><u>Opening Plenary Presentation:</u></p> <p>ADVANCED MANUFACTURING PROGRAM CONFERENCE – Mission, Vision, Strategy, Prof. Dr. Jun Ni, University of Michigan, Ann Arbor, USA.</p>
10:00-11:00	<p>Welcome Cocktail - Club 210 (Second floor)</p>
11:00-13:00	<p>Hall 211 (Second floor) NEWTECH Conference and AMP Serbia 2017 Session 2: Plenary Session/Panel 1 <u>Plenary Presentations:</u> ADVANCED RESEARCH IN MANUFACTURING – WORLD-WIDE APPROACHES, Part 1</p> <p><u>Session Chairmen:</u></p> <p>Prof. Dr.-Ing. Birgit Vogel-Heuser, Technical University of Munich, Head of Chair and Director of Institute Automation and Information Systems, Munich, Germany. Prof. Dr. Jay Lee, U of Cincinnati and Shanghai Jiao Tong University, Cincinnati, USA. Prof. Dr. Yasuhiro Takaya, Osaka University, Japan. Prof. Dr. Jozsef Vanca, TU Budapest, Hungary; Prof. Dr. Kornel Ehmann, Northwestern University, Evanston, USA. Prof. Dr. Detlef Kochan, TU Dresden, Germany.</p> <p><u>Keynote Speakers:</u></p> <p>1. Prof. Dr. Birgit Vogel-Heuser, Technical University of Munich, Head of Chair and Director of Institute</p>

	<p>Automation and Information Systems, Munich, Germany INDUSTRY 4.0 IN GERMANY</p> <p>2. Prof. Dr. Jay Lee, University of Cincinnati and Shanghai Jiao Tong University, Cincinnati, USA INTELLIGENT MAINTENANCE</p> <p>3. Prof. Dr. Yasuhiro TAKAYA, Osaka University, Japan INTELLIGENT MANUFACTURING METROLOGY</p> <p>4. Prof. Dr. Jozsef Vanca, TU Budapest, Hungary AUTOMATED PLANNING FOR HUMAN-ROBOT ASSEMBLY</p> <p>5. Prof. Dr. Kornel Ehmann, Northwestern University, Evanston, USA; MANUFACTURING OF MICRO AND NANO PRODUCTS</p> <p>6. Prof. Dr. Detlef Kochan, TU Dresden, Germany ADVANCED MANUFACTURING AND INDUSTRIE 4.0 FOR SME</p>
13:00-14:30	Lunch Break
14:30-16:00	<p style="text-align: center;">Hall 211 (Second floor) <i>NEWTECH Conference and AMP Serbia 2017</i> <i>Session 3: Plenary Session/Panel 2</i> <u>Plenary Presentations:</u> ADVANCED RESEARCH IN MANUFACTURING – WORLD-WIDE APPROACHES, Part 2</p> <p><u>Session Chairmen:</u> Prof. Joe Beaman, University of Texas at Austin, USA Dr. James Truchard, Co-founder, President and CEO of National Instruments, Austin, TX, USA Prof. Dr. Sridhar Kotta, University of Michigan, Ann Arbor, MI, USA Dr. Augusta Paci, CNR, Rome, Italy Prof. Dr. Andreas Archenti, KTH Royal Institute of Technology, Stockholm, Sweden Prof. Dr. Miroslav Piska, TU Brno, Brno, Czech Republic</p> <p><u>Keynote Speakers:</u></p> <ol style="list-style-type: none"> Prof. Joe Beaman, University of Texas at Austin, USA ADVANCED MANUFACTURING IN USA Dr. James Truchard, Co-founder, President and CEO of National Instruments, Austin, TX, USA INTELLIGENT INSTRUMENT RESEARCHES Prof. Dr. Sridhar Kotta, University of Michigan, Ann Arbor, MI, USA ADVANCED RESEARCHES AT THE SMART PRODUCTS Dr. Augusta Paci, CNR, Rome, Italy INDUSTRY 4.0 – APPLICATIONS IN ITALY Prof. Dr. Andreas Archenti, KTH Royal Institute of Technology, Stockholm, Sweden; SENSOR-BASED METROLOGY FOR SMART MANUFACTURING SYSTEMS Prof. Dr. Miroslav Piska, TU Brno, Brno, Czech Republic ADVANCED MANUFACTURING IN CZECH REPUBLIC.

16:00-16:30	Coffee Break (CeNT – first floor)
16:30-18:00	<p>Hall 211 (Second floor) <i>NEWTECH Conference and AMP Serbia 2017</i> Session 4: Plenary Session/Panel 3 <u>Plenary Presentations:</u> ADVANCED RESEARCH IN MANUFACTURING – WORLD-WIDE APPROACHES, Part 3</p> <p><u>Session Chairmen:</u> Dr. Lim Ser Yong, Director of the Singapore Institute of Manufacturing Technology, Singapore Prof. Dr. Hideaki Hohonoki, COHO Consulting, Tokyo, Japan Prof. Dr. George Constatin, TU Bucharest, Bucharest, Romania Prof. Dr. Jerzy Jedrezevski, TU Wroclaw, Wroclaw, Poland Prof. Dr. Dusan Šormaz, Ohio University, Department of Industrial and Systems Engineering, Ohio University, Ohio, USA Prof. Dr. Peter Monka, TU Presov, Presov, Slovakia</p> <p><u>Keynote Speakers:</u></p> <ol style="list-style-type: none"> 1. Dr. Lim Ser Yong, Director of the Singapore Institute of Manufacturing Technology, Singapore MANUFACTURING IN SINGAPORE – TRENDS IN RESERACHES 2. Prof. Dr. Hideaki Hohonoki, COHO Consulting, Tokyo, Japan INTELLIGENT MANUFACTURING, ITS TREND AND INFLUENCES IN JAPAN 3. Prof. Dr. George Constatin, TU Bucharest, Bucharest, Romania CONTRIBUTIONS AND RESEARCH DIRECTIONS IN THE FIELD OF MODELING AND SIMULATION OF MACHINES AND SYSTEMS OF MACHINES 4. Prof. Dr. Jerzy Jedrezevski, TU Wroclaw, Wroclaw, Poland INTELLIGENT MACHINE TOOLS 5. Prof. Dr. Dusan Šormaz, Ohio University, Department of Industrial and Systems Engineering, Ohio University, Ohio, USA INTELLIGENT PROCESS PLANNING 7. Prof. Dr. Peter Monka, TU Presov, Presov, Slovakia SLOVAKIA MANUFACTURING TRENDS

Date: 8th June, 2017 / Thursday

Venue: Faculty of Mechanical Engineering, Kraljice Marije 16, Belgrade

Registration desk: 08:00 – 16:30 Registration / CeNT (first floor).

Time	Event
	<p>Hall CeNT (First floor)</p> <p>Session 5: Plenary Session</p> <p><u>Plenary Presentations:</u></p> <p>RECENT TRENDS IN MANUFACTURING</p> <p><u>Session Chairmen:</u></p> <p>Prof. Dr. Viorel Paunoiu, Dunarea de Jos University of Galati, Romania</p> <p>Prof. Dr. Wit Grzesik, Opole University of Technology, Poland</p> <p>Prof. Dr. Miroslav Piska, Brno University of Technology, Czech Republic</p> <p>Prof. Dr. Andreas Archenti, KTH Royal Institute of Technology, Department Production Engineering, Stockholm, Sweden</p> <p>Prof. Dr. Katarina Monkova, Technical University of Košice, Faculty of Manufacturing Technologies, Presov, Slovakia</p> <p><u>Keynote Papers:</u></p>
09:00 - 11:00	<ol style="list-style-type: none"> Viorel Paunoiu, Doina Boazu HYDRO-MULTIPOINT FORMING, A CHALLENGE IN SHEET METAL FORMING Wit Grzesik, Krzysztof Żak HIGH-PRECISION MACHINING OF HARD STEEL PARTS USING SPECIAL ABRASIVE OPERATIONS Miroslav Piska, Petra Ohnistova ON THE ADVANCED MILLING TECHNOLOGY OF THIN-WALLED PARTS FOR AEROSPACE INDUSTRY Károly Szípká, Theodoros Laspas, Andreas Archenti MECHANISTIC APPROACH FOR THE EVALUATION OF MACHINE TOOLS QUASI-STATIC CAPABILITY Katarina Monkova, Peter Monka SOME ASPECTS INFLUENCING PRODUCTION OF POROUS STRUCTURES WITH COMPLEX SHAPES OF CELLS Steven Y. Liang, Zhipeng Pan PROCESS AND MICROSTRUCTURE IN MATERIALS-AFFECTED MANUFACTURING
11:00-11:30	Coffee Break (CeNT – first floor)

11:30-13:30	<p style="text-align: center;">Hall CeNT (First floor) Session 6: CYBER PHYSICAL MANUFACTURING SYSTEMS</p> <p>Session Chairmen: Prof. Dr. Zoran Miljkovic, University of Belgrade, Faculty of Mechanical Engineering, Serbia Prof. Dr. Slavomir Bednar, Technical University of Kosice, Faculty of Manufacturing Technologies, Slovakia Dr. Arvid Hellmich, Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Dresden, Germany Prof. Dr. Zivana Jakovljevic, University of Belgrade, Faculty of Mechanical Engineering, Serbia</p> <p>Papers:</p> <ol style="list-style-type: none"> 1. Slavomir Bednar, Jan Modrak, Zuzana Soltysova ASSESSMENT OF ASSEMBLY PROCESS COMPLEXITY AND MODULARITY IN MASS CUSTOMIZED MANUFACTURING 2. Hajo Wiemer, Arvid Hellmich, Steffen Ihlenfeldt A HOLISTIC APPROACH FOR DEVELOPING AND COMMISSIONING DATA DRIVEN CPPS FUNCTIONALITY IN MANUFACTURING SYSTEMS 3. Johanes Hohmann, Tillmann Schatz and Peter Groche INTELLIGENT WEAR IDENTIFICATION BASED ON SENSORY INLINE INFORMATION FOR A STAMPING PROCESS 4. Milica Petrovic, Zoran Miljkovic BIOLOGICALLY INSPIRED OPTIMIZATION ALGORITHMS FOR FLEXIBLE PROCESS PLANNING 5. Zivana Jakovljevic, Stefan Mitrovic, Miroslav Pajic CYBER PHYSICAL PRODUCTION SYSTEMS-AN IEC 61499 PERSPECTIVE

11:30-13:00	<p style="text-align: center;">Room 518 (Fifth floor) Session 7: MACHINING OPTIMIZATION</p> <p><u>Session Chairmen:</u> Prof. Dr. Nikolaos M Vaxevanidis, School of Pedagogical and Technological Education (ASPETE), Athens, Greece Prof. Dr. Viorel Paunoiu, Dunarea de Jos University of Galati, Romania Prof. Dr. Davorin Kramar, Faculty of Mechanical Engineering, University of Ljubljana, Slovenia Prof. Dr. Ljubodrag Tanovic, University of Belgrade, Faculty of Mechanical Engineering, Serbia</p> <p><u>Papers:</u></p> <ol style="list-style-type: none"> Nikolaos M. Vaxevanidis, N.A. Fountas, G.V. Seretis, C.G. Provatidis, D.E. Manolakos A MULTI-PARAMETER EXPERIMENTAL AND STATISTICAL ANALYSIS OF SURFACE TEXTURE IN TURNING OF A NEW ALUMINUM MATRIX STEEL PARTICULATE COMPOSITE Mitica Afteni, Ion Terecoasa, Cezarina Afteni, Viorel Paunoiu STUDY ON HARD TURNING PROCESS VERSUS GRINDING IN MANUFACTURING SOME BEARING INNER RINGS Branislav Sredanovic, Gordana Globocki Lakic, Davorin Kramar, Janez Kopac STUDY ON THE MACHINABILITY CHARACTERISTICS OF INCONEL 718 SUPER ALLOY DURING MICRO-MILLING Milos Pjevic, Ljubodrag Tanovic, Filip Vucetic EXPERIMENTAL DETERMINATION OF BRITTLE FRACTURING APPEARANCE DURING STATIC INDENTATION OF MATERIALS BASED ON STONE

	<p>Room 514 (Fifth floor) Session 8: PRODUCT DESIGN</p> <p><u>Session Chairmen:</u> Prof. Dr. Virgil Teodor, Dunarea de Jos University of Galati, Department of Manufacturing Engineering, Romania Prof. Dr. Maja Cavic, University of Novi Sad, Faculty of Technical Sciences, Serbia M.Sc. Piotr Jabłoński, Poznan University of Technology, Poland</p> <p><u>Papers:</u></p> <ol style="list-style-type: none"> 1. Florin Susac, Nicușor Baroiu, Bogdan Liviu Marcu, Daniel Ganea, Virgil Teodor PARAMETRIC DESIGN OF AN ELECTRIC DRIVEN REDUCTION GEAR FOR ANCHOR AND MOORING WINCHES 2. Nicușor Baroiu, Virgil Teodor, Florin Susac, Nicolae Oancea HOB MILL PROFILING METHOD FOR GENERATION OF TIMING BELT PULLEY 3. Piotr Jabłoński, Piotr Czajka STRUCTURAL FEM ANALYSIS OF THERMAL SPRAYED COATINGS UNDER CONDITIONS OF CONTACT PRESSURE AND HIGH TEMPERATURE 4. Milan Rackov, Maja Cavic, Marko Pencic, Ivan Knezevic, Miroslav Veres, Milan Tica REDUCING OF SCUFFING PHENOMENA AT HCR SPUR GEARING 5. Maja Cavic, Marko Pencic, Milan Rackov, Ivan Knezevic, M. Zlokolica DYNAMIC OPTIMIZATION OF THE CAM-LEVER MECHANISM FOR THERMOFORMING MACHINE TOOL DRIVING
11:30-13:30	
13:30 - 14:30	Lunch Break
14:30-16:00	<p><i>Technical presentation:</i> APPLIED NANO SURFACES Hall CeNT (First floor)</p>
16:00-16:30	Coffee Break (CeNT – first floor)
16:30-18:30	BELGRADE SIGHTSEEING TOUR

20:00 *Newtech 2017: Conference Dinner (informal dressing)*

Date: 9th June, 2017 / Friday

Venue: Faculty of Mechanical Engineering, str. Kraljice Marije 16, Belgrade

Registration desk: 08:00 – 10:00 Registration (CeNT – first floor).

Time	Event
	<p>Hall CeNT (First floor) Session 9: MACHINE TOOLS AND IN-MACHINE MEASUREMENTS</p> <p><u>Session Chairmen:</u> Prof. Dr. Jozef Peterka, Slovak University of Technology, Trnava, Slovakia Prof. Dr. Virgil Teodor, Dunarea de Jos University of Galati, Department of Manufacturing Engineering, Romania Prof. Dr. Sasa Zivanovic, University of Belgrade, Faculty of Mechanical Engineering, Serbia</p> <p><u>Papers:</u></p>
09:00-10:30	<ol style="list-style-type: none"> Virgil Teodor, Florin Susac, Nicușor Baroiu, Viorel Paunoiu, Nicolae Oancea GRAPHICAL METHOD IN CATIA FOR SIDE MILL TOOL PROFILING USING THE GENERATING RELATIVE TRAJECTORIES Marcel Kuruc, Martin Necpal, Tomáš Vopát, Vladimír Šimna, Jozef Peterka INFLUENCE OF ULTRASONIC ASSISTANCE ON DELAMINATION DURING MACHINING OF CFRP COMPOSITE B.-A. Behrens, A. Bouguecha, C. Bonk, D. Rosenbusch, Nenad Grbic, M. Vucetic INFLUENCE OF THE DETERMINATION OF FLC'S AND FLASC'S AND THEIR APPLICATION FOR DEEP DRAWING PROCESS WITH ADDITIONAL FORCE TRANSMISSION Goran Vasilic, Sasa Zivanovic, Branko Kokotovic MODELLING AND ANALYSIS OF 3-AXIS RECONFIGURABLE HYBRID KINEMATICS MECHANISM WITH TRANSLATORY ACTUATED JOINTS

09:00-10:30	<p style="text-align: center;">Room 518 (Fifth floor) Session 10: PRODUCT LIFECYCLE MANAGEMENT</p> <p><u>Session Chairmen:</u> Prof. Dr. Laurentiu Cicerone Popa, University Politehnica of Bucharest, IMST Faculty, MSP Department, Romania Dr. Gheorghe Popan, INCD Mechatronics & Measurement, Bucharest, Romania</p> <p><u>Papers:</u></p> <ol style="list-style-type: none"> Laurentiu Cicerone Popa and Emil Costel Cotet VIRTUAL MODEL IN MONITORING AND OPTIMIZATION OF A SELECTIVE WASTE COLLECTION INTEGRATED SYSTEM Gheorghe Popan and Dorin Angelescu FLEXIBLE CONTROL SYSTEM USED IN THE NANOTECHNOLOGICAL PRODUCTION FLOW Anca Iuga, Vasile Popa and Luminița Popa INDUSTRIAL PRODUCT LIFE CYCLE STAGES AND LIFECYCLE ECO-DESIGN Mital Chakankar, Cheer Su and Hong Hocheng RECOVERY OF METALS FROM SOLAR CELLS BY BIOLEACHING
09:00-10:30	<p style="text-align: center;">Room 514 (Fifth floor) Session 11: FabLab</p> <p><u>Session Chairmen:</u> Prof. Dr. Milan Lečić, University of Belgrade, Faculty of Mechanical Engineering, Serbia Assist. Prof. Dr. Đorđe Čantrak, University of Belgrade, Faculty of Mechanical Engineering, Serbia Dr. Ivana Gadjanski, University of Belgrade, Faculty of Mechanical Engineering, Innovation Centre, Serbia</p> <p><u>Papers:</u></p> <ol style="list-style-type: none"> Jelena Pejović Simeunović, Ivana Gadjanski, Željko Janićijević, Milica Janković, Marko Barjaktarović, Novica Janković and Đorđe Čantrak MICROFLUIDIC CHIP FABRICATION FOR APPLICATION IN LOW-COST DIY microPIV Borko Jovanović, Ivana Gadjanski, Jela Burazer, Luka Nikolić, Nina Babić, Milan Lečić R&D IN A FAB LAB: EXAMPLES OF PASTE EXTRUSION METHOD Zorana Trivković, Jelena Svorcan, Ognjen Peković and Toni Ivanov MANUFACTURING TECHNOLOGY OF AIRCRAFT AND WIND TURBINE BLADES MODELS, PLUGS AND MOULDS
10:30-11:00	Coffee Break (CeNT – first floor)

	<p>Hall CeNT (First floor) Session 12: Plenary Session <u>Plenary Presentations</u> A ROADMAP TO INDUSTRY 4.0</p> <p><u>Session Chairmen:</u> Prof. Dr. Nikolaos M. Vaxevanidis, School of Pedagogical and Technological Education (ASPETE), Athens, Greece Prof. Dr. Vidosav Majstorovic, University of Belgrade, Faculty of Mechanical Engineering, Serbia Prof. Dr. Djordje Cica, University of Banja Luka, Faculty of Mechanical Engineering</p> <p><u>Keynote Papers:</u></p>
11:00-13:00	<ol style="list-style-type: none"> 1. Zivana Jakovljevic, Vidosav Majstorovic, Slavenko Stojadinovic, Srdjan Zivkovic, Nemanja Gligorijevic, Miroslav Pajic CYBER-PHYSICAL MANUFACTURING SYSTEMS (CPMS) 2. Djordje Cica, Branislav Sredanovic, Stevo Borojevic, Davorin Kramar AN INTEGRATION OF BIO-INSPIRED ALGORITHMS AND FUZZY LOGIC FOR TOOL WEAR ESTIMATION IN HARD TURNING 3. Slavenko Stojadinovic, Vidosav Majstorovic, Numan Durakbasa AN ADVANCED CAI MODEL FOR INSPECTION PLANNING ON CMM 4. Kamlakar Rajurkar RESEARCH ISSUES IN EDM, ECM AND USM AND THEIR HYBRID MACHINING PROCESSES 5. N.A. Fountas, Srdjan Zivkovic, R. Benhadj, C. Stergiou, Vidosav Majstorovic, Nikolaos M. Vaxevanidis INTELLIGENT DUAL CURVE-DRIVEN TOOL PATH OPTIMIZATION AND VIRTUAL CMM INSPECTION FOR SCULPTURED SURFACE CNC MACHINING
13:00-14:00	<p>Farewell Cocktail in Club CeNT (First floor).</p>