WORKSHOP 2021 20.06. - 26.06.2021, Koszalin University of Technology

9th International Workshop on Surface Engineering and 5th International Workshop on Applied and Sustainable Engineering

Monday 21.06.2021

Chairman: prof. Błażej Bałasz

10:00 - 10:10 Workshop Opening - prof. Danuta Zawadzka (Rector of Koszalin University of Technology), **prof. Dariusz Lipiński** (Head of the Doctoral School KUT), **prof. Krzysztof Rokosz** (Faculty of Mechanical Engineering KUT)

10:10 - 10:30 Prof. Giorgi Baghaturia, Some problems for partial differential equations of mixed type, Georgian Technical University, Faculty of Civil Engineering, Tbilisi, Georgia

10:30- 10:50 MSc Eng. Dušan Marko, Simulation of mobile robot navigation in vineyard row in Matlab, Slovak University of Agriculture in Nitra, Nitra, Slovakia

10:50 - 11:10 MSc. Eng. Damian Grzesiak, Influence of rolling direction of 0H18N9 grade sheet on welding distortions, Koszalin University of Technology, Faculty of Mechanical Engineering, Koszalin, Poland

11:10 - 11:30 MSc. Eng. Monica K. Gonzalez, *Experimental identification of the position-dependent dynamics of an industrial manipulator*, KTH Royal Institute of Technology, Department of Production Engineering, Stockholm, Sweden

11:30 - 11:50 MSc. Eng. Kamil Banaszek, Analysis of grinding process with the use of multilayer grinding wheels with abrasive aggregates, Koszalin University of Technology, Doctoral School, Koszalin, Poland

11:50 - 12:10 MSc. Eng. Nikolas A. Theissen, Measurement and identification of stiffness matrices on machine tools and industrial manipulators under movement, KTH Royal Institute of Technology, Department of Production Engineering, Stockholm, Sweden 12:10 - 12:30 MSc. Eng. Maciej Bik, Raman spectroscopy as a powerful tool for the determination of phase composition of multi-layered complex systems investigated in the high-temperature corrosion conditions, AGH University of Science and Technology in Cracow, Faculty of Materials Science and Ceramics, Poland

Tuesday 22.06.2021

Chairman: prof. Tomasz Rydzkowski

10:00 - 10:20 Prof. Shaban Buza, The impact of modern technologies in engineering design with focus on their implementation during the pandemic period, University of Prishtina, Faculty of Mechanical Engineering, Prishtina, Kosovo

10:20 - 10:40 MSc. Eng. Elżbieta Kopczyńska, *Challenges on graphene oxide film in the food package system*, Koszalin University of Technology, Faculty of Mechanical Engineering, Koszalin, Poland

10:40 - 11:00 MSc. Eng. Patryk Hara, Extracts from Artemisia vulgaris L. in Potato cultivation - preliminary research on biostimulating effect, Koszalin University of Technology, Faculty of Mechanical Engineering, Koszalin, Poland

11:00 - 11:20 MSc. Eng. Malvina Roci, Circular Manufacturing Systems: Modelling and simulation for enhanced decision-making, KTH Royal Institute of Technology, Department of Production Engineering, Stockholm, Sweden
11:20 - 11:40 MSc. Eng. Joanna Kornacka, Modification of polymeric materials with diamond nanostructures for packaging applications, Koszalin University of Technology, Faculty of Mechanical Engineering, Koszalin, Poland
11:40 - 12:00 MSc. Eng. Anna Górska, Surface modification of glassy carbon electrodes – possibilities and applications, Faculty of Materials Science and Ceramics, AGH University of Science and Technology in Cracow, Poland
12:00 - 12:20 MSc. Eng. Radosław Porada, Morphological and electrochemical characterization of working electrodes in voltammetry, Faculty of Materials Science and Ceramics, AGH University of Science and Technology in Cracow, Poland

Wednesday 23.06.2021

Chairman: prof. Anna Zawada-Tomkiewicz

10:00 - 10:20 Ph. D. Patric Chapon, Optics & Plasma for material characterisation, HORIBA FRANCE SAS, France
10:20 - 10:40 MSc. Eng. Zeyu Lin, Evaluating the electron beam spot size of electron beam melting for additive manufacturing, KTH Royal Institute of Technology, Department of Production Engineering, Stockholm, Sweden
10:40 - 11:00 MSc. Eng. Dorota Laskowska, Shaping the mechanical and surface properties of elements produced in additive manufacturing from metal powders, Koszalin University of Technology, Doctoral School, Koszalin, Poland
11:00 - 11:20 MSc. Eng. Paweł Roszyk, Influence of duplex plastic working on the technological properties of the Ti-6Al-4V alloy surface layer, Koszalin University of Technology, Doctoral School, Koszalin, Poland
11:20 - 11:40 MSc. Eng. Piotr Zmuda-Trzebiatowski, Influence of metal powder addition on PET-G material properties in FDM technology, Koszalin University of Technology, Doctoral School, Koszalin, Poland
11:40 - 12:00 MSc. Eng. Justyna Lipińska, Plasma enhanced chemical vapor deposition as a method of surface modification of working electrodes, Department of Analytical Chemistry, AGH University of Science and Technology, Kraków, Poland
12:00 - 12:20 MSc. Eng. Nikola Lenar, High electrical capacity materials for potentiometric sensors - the comparison, Faculty of Materials Science and Ceramics, AGH University of Science and Technology in Cracow, Poland
12:20 - 12:30 Workshop Closing - prof. Błażej Bałasz (Vice-rector for Research of Koszalin University of Technology), prof. Witold Gulbiński (Faculty of Mechanical Engineering KUT)

Erasmus+







WORKSHOP 2021 20.06. - 26.06.2021, Koszalin University of Technology

9th International Workshop on Surface Engineering and 5th International Workshop on Applied and Sustainable Engineering

Monday 21.06.2021 13.00 - 14.00

Poster session

ROOM 1: DEVELOPMENT OF THE ELECTROCHEMICAL SENSOR FOR HIGHLY SENSITIVE LEVODOPA DETERMINATION, Anna Górska, Department of Materials Science and Ceramics, AGH University of Science and Technology in Cracow, Poland

ROOM 2: THIN LAYERS AS A WAY OF MODIFICATION OF WORKING ELECTRODES IN VOLTAMMETRY, Justyna Lipińska, Department of Analytical Chemistry, AGH University of Science and Technology, Kraków, Poland

ROOM 3: ELECTRICAL CAPACITY AS SIGNIFICANT PARAMETER DETERMINIG THE PERFORMANCE OF SOLID-CONTACT ION-SELECTIVE ELECTRODES, Nikola Lenar, Department of Materials Science and Ceramics, AGH University of Science and Technology in Cracow, Poland

ROOM 4: VOLTAMMETRIC ANALYSIS OF DIETARY SUPPLEMENTS, Radosław Porada, Department of Materials Science and Ceramics, AGH University of Science and Technology in Cracow, Poland

ROOM 5: GREEN CHEMISTRY - VOLTAMMETRIC FOOD PROFILING WITHOUT SUPPORTING ELECTROLYTE, Szymon Wójcik, Department of Materials Science and Ceramics, AGH University of Science and Technology in Cracow, Poland

ROOM 6: STRATEGY OF IMPLEMENTATION OF INNOVATIVE IMPREGNATED GRINDING WHEELS FOR GRINDING HARD-TO-CUT MATERIALS, Emilia Burchardt, Faculty of Mechanical Engineering, Department of Production Engineering, Koszalin University of Technology, Poland

ROOM 7: ELECTROCHEMICAL BEHAVIOR OF AUSTENITIC STAINLESS STEELS IN DIFFERENT CHLORIDE SOLUTIONS, Krzysztof Rokosz, Gregor Mori, Grzegorz Solecki, Koszalin University of Technology, Poland

ROOM 8: ASSESSMENT OF THE IMPACT OF THE AIR STREAM GENERATED BY THE MOVEMENT OF THE DRONE'S PROPELLERS ON THE VERTICAL DEPOSITION OF THE SPRAYED LIQUID, Aleksandra Pachuta, Faculty of Mechanical Engineering, Koszalin University of Technology, Poland

ROOM 9: SIMULATION OF MOBILE ROBOT NAVIGATION IN VINEYARD ROW IN MATLAB, Ing. Dušan Marko, prof. Ing. Dušan Hrubý PhD., Department of Electrical Engineering, Automation and Informatics, Faculty of Engineering, Slovak University of Agriculture in Nitra, Slovakia

