CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE



Faculty of Engineering



Czech University of Life Sciences Prague Faculty of Engineering

Department of Mechanical Engineering

58th International Conference of Machine Design Departments 2017

Proceedings of 58th International Conference of Machine Design Departments – ICMD 2017

September 6th 2017 – September 8th 2017

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58th International Conference of Machine Design Departments 2017 September 6th 2017 – September 8th 2017

ICMD 2017

The 58th International Conference of Machine Design Departments is mainly focused on sharing professional experience and discussing new theoretical and practical findings. The objective of the conference is to identify the current situation, exchange experience, establish and strengthen relationships between universities, companies and scientists from the field of Machine Design.

Conference venue:

Hotel Modrá Stodola, Horoměřice, Czech Republic & Faculty of Engineering, Czech University of Life Sciences Prague, Kamýcká 129, Praha 6, Prague, 16521, Czech Republic

The 58th ICMD conference is organized under the auspices of dean of Faculty of Engineering **prof. Ing. Vladimír Jurča, CSc**

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All manuscripts in conference proceedings have been reviewed by peer review process.

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ICMD 2017

ICMD conference is one of the oldest conferences, dealing with methods and applications in the machine design in Central Europe.

The main aim of the conference is to provide an international forum where experts, researchers, engineers, and also industrial practitioners, managers, and Ph.D. students can meet, share their experiences, and present the results of their efforts in the broad field of machine design and related fields.

Since 1960, when the first conference was organized in Melnik by Brno University of Technology, more than 56 years have passed. The main aim of the conference was providing an opportunity for professional experiences sharing in the field of machine design, gears and transmission mechanisms.

The heads of Mechanical Design Departments decided to organize these conferences annually first at the national and later at the international level and it is evident that the significance of the conference has grown.

Historically, the conferences were organized in different places by different mechanical design departments of Czech and Slovak technical universities.

In this year 2017 conference ICMD was organized by Department of Mechanical Engineering, Faculty of Engineering, Czech University of Life Sciences Prague and it was held in Czech Republic, Hotel Modrá Stodola, which is located on the border of Prague in small town Horoměřice (Horoměřice, Spojovací 918) from 6th September 2017 until 8th September 2017.

Department of Mechanical Engineering,

Faculty of Engineering, Czech University of Life Sciences Prague

The department is aimed at teaching of students in both theoretical and practical engineering related disciplines including technical documentation, applied mechanics, strength of materials, thermo-mechanics, hydromechanics and machine parts. The theoretical knowledge gained by the students enhances their ability to solve practical or technical engineering problems. The students also have the opportunity to study CAD application systems. The Department employees, in the field of science and research activities, focus on mechanical properties of agricultural materials, energy-intensive of agriculture and use of alternative energy sources. The Department Staff are also involved in national and international research projects or cooperation with foreign universities.