

ICMD 2026 – Scientific and Social Programme

Venue: Hotel DUO, Prague, Czech Republic

9 September – 11 September 2026



Conference Information

Please note that the conference program may be subject to minor modifications.

All conference rooms are equipped with a computer, data projector, and presenter.

The computers run on MS Windows, and both PowerPoint and PDF formats are supported.

Presentation times are strictly limited:

- **Plenary sessions:** 20 minutes presentation + 10 minutes discussion
- **Regular sessions:** 10 minutes presentation + 5 minutes discussion

Kindly ensure that you remain within your allocated time slot, as extensions will not be possible.

The dress code for **ICMD 2026** and all conference-related events is **business casual**.

DAY 1 — Wednesday, 9 September 2026

Morning Programme

PLENARY SESSION		
Time	Room:	Chairman: D. Herák
09:00 – 10:00	Registration	
09:30 – 10:00	Coffee Break	
10:00 – 10:30	Official Opening Ceremony	
10:30 – 11:00	Rajesh Mishra - <i>Design and development of fiber based composite machine parts</i>	
11:00 – 11:30	Abraham Kabutey – <i>Utilisation of Biosystems Engineering in Machine Design by Machine Learning</i>	
11:30 – 12:00	Group Photo Session	
12:30 – 13:30	Lunch	

Parallel Sessions A, B, C & D

	SESSION A	SESSION B
Time	Chairman: R. Mishra	Chairman: A. Kabutey
13:30	Marcej Lesniewski (Poland) <i>TCA of Five-Axis-Milled Bevel Gears with Microtopography: Contact Pattern and Transmission Error</i>	Akshat Tegginamath (CZ) <i>Dynamic Loading of Flax/S-Glass Hybrid Polymer Composite Beams for Structures</i>
13:45	Radka Jírová (CZ) <i>Numerical Analysis of Biocomposite Materials</i>	Vigen Arakelyan (France) <i>Design of Energy-Efficient Manipulators with Straight-Line Linkages</i>
14:00	Natthaphon Bunathuek (Thailand) <i>Performance Analysis of Cutting Fluids in MQL Milling: A Case Study of Conventional Coolant and Palm Oil</i>	Gürkan Gürdil (Türkiye) <i>Investigation of Current Deep Learning-Based Image Processing Methods and System Integration for the Developed Autonomous Harvest Robot</i>
14:15	Iwona Żabińska (Poland) <i>On the Carbon Footprint in Micromilling</i>	Marko Mumović (Montenegro) <i>Prototype of a Mandrel for Tube Welding by the FSW Process</i>
14:30	Zbigniew Matuszak (Poland) <i>On Similarity Numbers in Micromilling and Milling</i>	Marcin Matuszak (Poland) <i>Selected Factors Affecting Surface Topography Generation in Micromilling</i>
14:45 – 15:30	Coffee Break	Coffee Break
	SESSION C	SESSION D
Time	Chairman: G. Gurdil	Chairman: O. Dajbych
15:30	Karel Petr (CZ) <i>ISO 22081: A Key to More Unambiguous and Robust Technical Specifications</i>	Tomáš Gajdošík (SK) <i>Design and Experimental Validation of an Intelligent Steering Wheel for Driver Physiological Monitoring</i>
15:45	Josef Hykl (CZ) <i>Innovation of the Equipment for Testing Lock Functionality</i>	Miroslav Nagy (SK) <i>The Impact of Hybridization of Mobile Working Machines on the Installation Space and Energy Transfer</i>
16:00	Martin Sivý (SK) <i>Structural Integrity of a Fire-Damaged Distillation Column</i>	Vitaliy Sizonenko (CZ) <i>Electromechanical Design of the Inner Permanent Magnet Rotor</i>
16:15	Martin Baráth (SK)	Patrik Kósa (SK)

	<i>Effect of Nozzle Temperature on the Mechanical Properties of 3D Printed Materials</i>	<i>Experimental Analysis of the Air Flow under a UAV</i>
16:30	Peter Spišák (SK) <i>Dimensional Accuracy Analysis of a Component Manufactured by Vacuum Casting Technology</i>	Robert Grega (SK) <i>Verification of the Impact of Operation on the Initiation of Bearing Failure</i>
16:45	Adam Novák (CZ) <i>Interfaces in Additively Manufactured Mechanical Systems</i>	Lucia Žul'ová (SK) <i>Redistribution of Vibration Energy in Mechanical Drives</i>
17:00	Jan Flek (CZ) <i>Load Sharing Ratio in Spur Gears with Profile Shift</i>	Jan Kanaval (CZ) <i>Comprehensive Life Cycle Management of Bolted Joints on Rail Vehicles in Accordance with the Newly Introduced Standard ČSN EN 17976</i>
17:15	Roman Protasov (SK) <i>High-Speed FZG Test Rig for Electric Vehicle Transmissions: Regime Justification and Gearbox Concept</i>	Juraj Ondruška (SK) <i>A Study of the 'Stiffness–Resource' Criteria Space as the Distance Between the Spindle Assembly's Rolling Supports Varies</i>

Social Programme

19:00 – 21:00 — Dinner at Hotel DUO

DAY 2 — Thursday, 10 September 2026

Session E

Time	SESSION E	Chairman: P. Hrabě
09:00	Lubomír Pešík (CZ) <i>Control Device for Rollers of a Guide System with a Travel Rail and Rollers for a Suspended Object Carrier</i>	
09:15	Daniel Kozárik (SK) <i>Ceiling-Guided Church Entrance Gate</i>	
09:30	Matúš Vereš (SK) <i>Design of a Segmented Folding Mechanism for an Openable Glazed Interior Roof</i>	
09:45	Miloš Němček (CZ) <i>Experience with the Use of the Innovated ISO 6336 (2019) Standard</i>	
10:00	Ján Šteininger (SK)	

Experimental Comparison of Roller Bearings for Railway Applications in Accordance with STN EN 12082

10:15 Patrik Sniehotta (CZ)

Material Selection for Co₂ Service in Industrial Valve Application

10:30 – 11:15 Coffee Break

11:00 – 12:00 Meeting of the Heads of Departments

12:30 – 13:30 Lunch

Social Programme

18:00–20:00 — Gala Dinner – Vltava River Cruise by Steamboat, Dvořákovo nábreží, molo č.12,
Dvořák Embankment / Na Františku, Pier No. 12, near Na Františku Hospital, Prague 1

DAY 3 — Friday, 11 September 2026

Session F

Time	SESSION F	Chairman: Č. Mizera
09:00	Petr Hrabě (CZ) <i>Mechanical Behaviour of Ensete Ventricosum Fibres under Tensile and Time-Dependent Loading</i>	
09:15	Petr Hnízdl (CZ) <i>Experimental and FEM-Based Analysis of Natural Fiber-Reinforced PLA Filaments for FFF Applications</i>	
09:30	Pavel Srb (CZ) <i>Design of Rubber Hose Defect Testing Equipment</i>	
09:45	Vojtěch Dynybyl (CZ) <i>3D-Printed Parts in the Vehicles</i>	
10:00	Ladislav Ševčík (CZ) <i>The Issue of Calculating and Measuring the Density of Abrasive in Blasting Equipment</i>	
10:15	Eliška Cézová (CZ) <i>Virtual Reality in Education</i>	
10:30 – 11:00	Coffee Break	
11:00 – 11:30	Closing of the Conference	
11:30 – 12:30	Lunch	