# ICMD 2026 – Scientific and Social Programme

**Venue:** Hotel DUO, Prague, Czech Republic

**9 September – 11 September 2026**

Technická fakulta

**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

| Time | **PLENARY SESSION** | **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 - *Design and development of fiber based composite machine parts*** | |
| **11:00 – 11:30** | **Abraham Kabutey – *Utilisation of Biosystems Engineering in Machine Design by Machine Learning*** | |
| **11:30 – 12:00** | **Group Photo Session** | |
| **12:30 – 13:30** | **Lunch** | |

Parallel Sessions A, B, C & D

| Time | SESSION A<br>Chairman: R. Mishra | SESSION B<br>Chairman: A. Kabutey |
|---|---|---|
| **13:30** | **Marcej Lesniewski (Poland)**<br>*TCA of Five-Axis-Milled Bevel Gears with Microtopography: Contact Pattern and Transmission Error* | **Akshat Tegginamath (CZ)**<br>*Dynamic Loading of Flax/S-Glass Hybrid Polymer Composite Beams for Structures* |
| **13:45** | **Radka Jírová (CZ)**<br>*Numerical Analysis of Biocomposite Materials* | **Vigen Arakelyan (France)**<br>*Design of Energy-Efficient Manipulators with Straight-Line Linkages* |
| **14:00** | **Natthaphon Bunathuek (Thailand)**<br>*Performance Analysis of Cutting Fluids in MQL Milling: A Case Study of Conventional Coolant and Palm Oil* | **Gürkan Gürdil (Türkiye)**<br>*Investigation of Current Deep Learning-Based Image Processing Methods and System Integration for the Developed Autonomous Harvest Robot* |
| **14:15** | **Iwona Żabińska (Poland)**<br>*On the Carbon Footprint in Micromilling* | **Marko Mumović (Montenegro)**<br>*Prototype of a Mandrel for Tube Welding by the FSW Process* |
| **14:30** | **Zbigniew Matuszak (Poland)**<br>*On Similarity Numbers in Micromilling and Milling* | **Marcin Matuszak (Poland)**<br>*Selected Factors Affecting Surface Topography Generation in Micromilling* |
| **14:45 –15:30** | **Coffee Break** | **Coffee Break** |

| Time | SESSION C<br>Chairman: G. Gurdil | SESSION D<br>Chairman: O. Dajbych |
|---|---|---|
| **15:30** | **Karel Petr (CZ)**<br>*ISO 22081: A Key to More Unambiguous and Robust Technical Specifications* | **Tomáš Gajdošík (SK)**<br>*Design and Experimental Validation of an Intelligent Steering Wheel for Driver Physiological Monitoring* |
| **15:45** | **Josef Hykl (CZ)**<br>*Innovation of the Equipment for Testing Lock Functionality* | **Miroslav Nagy (SK)**<br>*The Impact of Hybridization of Mobile Working Machines on the Installation Space and Energy Transfer* |
| **16:00** | **Martin Sivý (SK)**<br>*Structural Integrity of a Fire-Damaged Distillation Column* | **Vitaliy Sizonenko (CZ)**<br>*Electromechanical Design of the Inner Permanent Magnet Rotor* |

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| **16:15** | **Martin Baráth (SK)**<br>*Effect of Nozzle Temperature on the Mechanical Properties of 3D Printed Materials* | **Martin Mazač (CZ)**<br>*Passenger car rear axle crash test* |
| **16:30** | **Peter Spišák (SK)**<br>*Dimensional Accuracy Analysis of a Component Manufactured by Vacuum Casting Technology* | **Robert Grega (SK)**<br>*Verification of the Impact of Operation on the Initiation of Bearing Failure* |
| **16:45** | **Adam Novák (CZ)**<br>*Interfaces in Additively Manufactured Mechanical Systems* | **Lucia Žuľová (SK)**<br>*Redistribution of Vibration Energy in Mechanical Drives* |
| **17:00** | **Jan Flek (CZ)**<br>*Load Sharing Ratio in Spur Gears with Profile Shift* | **Jan Kanaval (CZ)**<br>*Comprehensive Life Cycle Management of Bolted Joints on Rail Vehicles in Accordance with the Newly Introduced Standard ČSN EN 17976* |

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)**<br>*Control Device for Rollers of a Guide System with a Travel Rail and Rollers for a Suspended Object Carrier* | |
| **09:15** | **Daniel Kozárik (SK)**<br>*Ceiling-Guided Church Entrance Gate* | |
| **09:30** | **Matúš Vereš (SK)**<br>*Design of a Segmented Folding Mechanism for an Openable Glazed Interior Roof* | |
| **09:45** | **Miloš Němček (CZ)**<br>*Experience with the Use of the Innovated ISO 6336 (2019) Standard* | |
| **10:00** | **Ján Šteininger (SK)**<br>*Experimental Comparison of Roller Bearings for Railway Applications in Accordance with STN EN 12082* | |
| **10:15** | **Patrik Sniehotta (CZ)**<br>*Material Selection for $Co_2$ Service in Industrial Valve Application* | |
| **10:30 – 11:15** | **Coffee Break** | |

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