



COMAT 2026 Recent trends in structural materials

CONFERENCE PROGRAMME

9th International Conference on Recent Trends in Structural Materials

September 8 - 10, 2026, Vienna House Easy by Wyndham, Pilsen, CZ, EU



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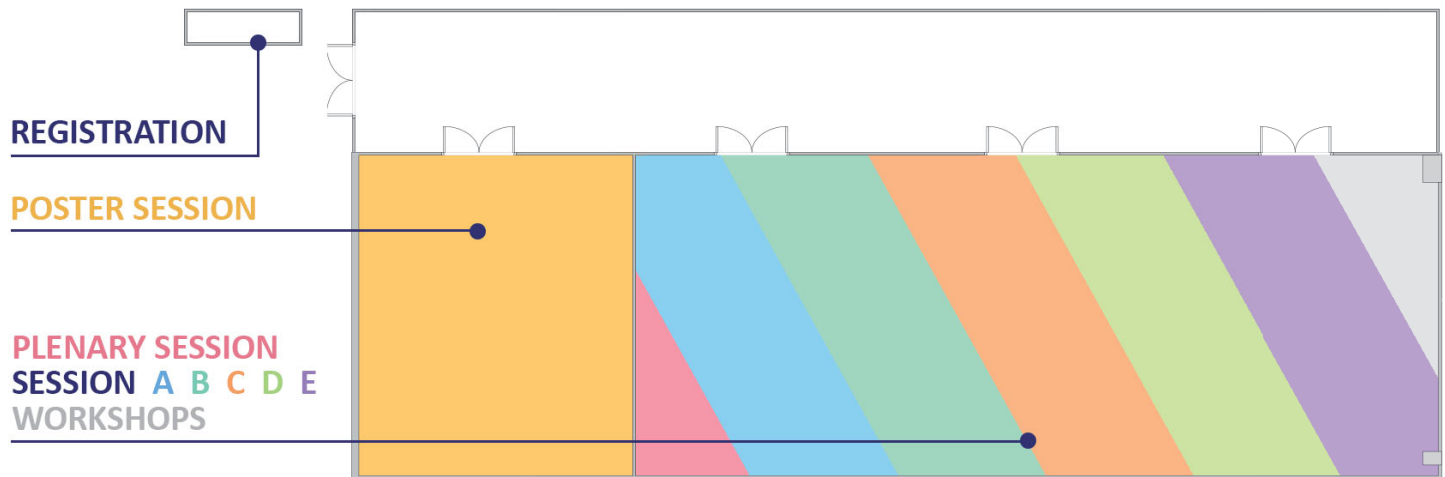
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PLENARY SPEAKERS

Prof. Dr.-Ing. Jan SEHRT	Wohlers Associates / Ruhr University Bochum, Germany, EU
Prof. Dr. E-Wen HUANG	National Yang Ming Chiao Tung University (NYCU), Taiwan
Dr. Brad L. BOYCE	Sandia National Laboratories/ Johns Hopkins University, USA
Prof. Dr. Ján MINÁR	NTC, University of West Bohemia, Pilsen, Czech Republic, EU

Time	TUESDAY Sep 8	WEDNESDAY Sep 9		THURSDAY Sep 10
8:00	REGISTRATION 8:00 - 15:30	REGISTRATION 8:00 - 11:00		WORKSHOP III 8:00 - 10:00
9:00	CONFERENCE OPENING	PLENARY LECTURE 8:30 - 10:00		
	PLENARY LECTURE 9:10 - 10:40			
10:00	COFFEE BREAK 10:40 - 11:00	COFFEE BREAK 10:00 - 10:20		COFFEE BREAK 10:00 - 10:20
11:00	SESSION A 11:00 - 12:00	SESSION C 10:20 - 12:10		SESSION E 10:20 - 11:50
12:00	LUNCH 12:00 - 13:30			CONFERENCE FAREWELL
13:00	LUNCH 12:00 - 13:30	LUNCH 12:10 - 13:30		LUNCH 12:00 - 13:30
14:00	WORKSHOP I 13:30 - 15:30	POSTER SESSION 13:30 - 15:30	WORKSHOP II 13:30 - 15:30	
15:00	COFFEE BREAK 15:30 - 15:50	COFFEE BREAK 15:30 - 15:50		
16:00	SESSION B 15:50 - 17:20	SESSION D 15:50 - 17:30		
17:00				
18:00				
19:00		SOCIAL EVENING SALOON ROUDNA RESTAURANT 19:00 - 23:00		



09:00 CONFERENCE OPENING / PLENARY SESSION

09:10 PS1 State of the Additive Manufacturing Industry **INVITED LECTURE**
45' **SEHRT Jan**
 Wohlers Associates / Ruhr University Bochum, Germany

09:55 PS2 High-Throughput Synchrotron X-Ray-Based Combinatorial Stoichiometry & Microstructure Hardness Mapping via
45' Machine Learning-Assisted Prediction & Validation of Advanced Alloys **INVITED LECTURE**
HUANG E-Wen
 National Yang Ming Chiao Tung University, Hsinchu City, Taiwan

10:40 - 11:00 COFFEE BREAK

SESSION A
ADDITIVE & HYBRID MANUFACTURING

11:00 A1 Mastering Hybrid Manufacturing: Wire Laser Metal Deposition Process Control **COMMERCIAL PRESENTATION**
STEJSKAL Petr
 MCAE Systems, s.r.o. , Kuřim, Czech Republic, EU

11:20 A2 Morphing Shield Technology for Chamber-Free LW-DED in Open Atmosphere
HALLER Han-Zu - LabAM24 Inc., Daejeon, Republic of Korea

11:40 A3 Additive Technologies for Nuclear Industry
LINHART Stanislav - ALVEL, a.s., Prague, Czech Republic, EU

12:00 - 13:30 LUNCH

13:30 WORKSHOP I.

15:30 PROJECT 3DWIRE
W1 Development of Specialized Wire Feedstocks for Welding and 3D Printing



15:30 - 15:50 **COFFEE BREAK**

SESSION B

SURFACE ENGINEERING & MATERIALS

- 15:50 **B1** Advanced Coating Technologies for Brake and Clutch Systems to Reduce Particulate Emissions
HOUDKOVÁ Šárka
Research Centre Řež, Husinec, Czech Republic, EU **INVITED LECTURE**
- 16:20 **B2** Advanced Synthesis and Direct Ink Writing of Molybdenum-Based Composite Powders
TKACHENKO Serhii - Brno University of Technology - CEITEC, Brno, Czech Republic, EU
- 16:40 **B3** 42SiCr Steel Microstructure Development under Presumed Cooling Paths during HMGH with Integrated QP Process
DLOUHÝ Jaromír - COMTES FHT a.s., Dobřany, Czech Republic, EU
- 17:00 **B4** The Impact of Surface Treatment on Residual Stresses of Hot-Rolled Bainitic-Martensitic 960 Mpa Steel
KAJALAINEN Antti - University of Oulu, Oulu, Finland, EU

WEDNESDAY 9th SEPTEMBER

PLENARY SESSION

- 08:30 **PS3** Mitigating Fatigue Failure at the Nanoscale
45' **BOYCE Brad**
Sandia National Labs, Albuquerque, United States **INVITED LECTURE**
- 09:15 **PS4** Quantum Materials: Emergent Properties and Future Technologies
45' **MINAR Jan**
University of West Bohemia in Pilsen, Pilsen, Czech Republic, EU **INVITED LECTURE**

10:00 - 10:20 **COFFEE BREAK**

AMP
ADVANCED METAL POWDERS S.R.O.



SESSION C

BIOMATERIALS & ACTIVE SYSTEMS

- 10:20 **C1** Advancing Active Medical Devices: Shape Memory, Superelasticity, and the Potential of Additively Manufactured Nitinol
DANIEL Matej INVITED LECTURE
Czech Technical University in Prague, Prague, Czech Republic, EU
- 10:50 **C2** High-Temperature Mechanical Behavior of Alloy 709 under Low-Cycle Fatigue–Creep Loading: Effects of Dwell Time and Test Temperature
MÁRA Vladimír
Czech Technical University in Prague, Prague, Czech Republic, EU
- 11:10 **C3** Evaluation of Hot Deformation Behaviour of Beta-C Titanium Alloy
ŠLEBODA Tomasz
AGH University of Krakow, Cracow, Poland, EU
- 11:30 **C4** Study on Copper Precipitation in Strain Assisted Tempering 54SiCr6 Steel Using Electrical Resistance Measurements
GOKHMAN Alexander
South Ukrainian National Pedagogical University, Odessa, Ukraine
- 11:50 **C5** Assessment of Corrosion Damage and Fracture Behaviour of Prestressing Steel from a Road Bridge
HORNÍK Jakub
Czech Technical University in Prague, Prague, Czech Republic, EU

12:10 - 13:30 **LUNCH**

13:00 **EXCURSION TO COMTES FHT a.s.**



X SIGHT
OPTICAL EXTENSOMETERS & DIC SYSTEMS

13:30
-
15:30

POSTER SESSION

Poster presentation

13:30
-
15:30

W2

WORKSHOP II.

BICEPS PROJECT

Bioinspired Cellular Actuator-Additive manufacturing of multi-materials that work like muscles

15:30 - 15:50 **COFFEE BREAK**

SESSION D PROCESSING, MICROSTRUCTURE & TESTING

- 15:50 **D1** Gatan- Edax Recent Developments for SEM Applications
KRENTIK Rudolf **COMMERCIAL PRESENTATION**
Ametek GmbH, Meerbusch, Germany, EU
- 16:10 **D2** Microstructure Analysis and Micro-Mechanical Properties of Cu-based Metallic Glass between Different Scanning Strategies by Laser Powder Bed Fusion
LIN Hsuan Min
National Sun Yat-sen University, Kaohsiung, Taiwan
- 16:30 **D3** Tensile and Creep Behavior of AlSi7Mg0.6 Alloy Prepared by Laser Powder Bed Fusion and Conventional Methods
DYMÁČEK Petr
Institute of Physics of Materials, Czech Academy of Sciences, Brno, Czech Republic, EU
- 16:50 **D4** Fatigue Strength Assessment of Epoxy Resin by Pneumatic Drive Small Disk Bending Fatigue Test
KOMAZAKI Shin-ichi
Kagoshima University, Kagoshima, Japan
- 17:10 **D5** Fatigue Behaviour and Biological Properties of Porous Pure Titanium Produced by Extrusion Additive Manufacturing
MONTUFAR Edgar B.
CEITEC - Brno University of Technology, Brno, Czech Republic, EU

19:00 **SOCIAL EVENING**

23:00

**STEAK RESTAURANT
SALOON ROUDNÁ**



20:00 **BEST POSTER CONTEST**

SALOON ROUDNÁ

Announcement of the winner

08:00 **WORKSHOP III**

10:00

W3

PROJECT BIODEGRADABLE

Platform for modern implantology - Reserach of individualizedh biodegradabile materials

10:00 - 10:20 **COFFEE BREAK**

SESSION E

MATERIALS FOR ENERGY & EXTREME ENVIRONMENTS

- 10:20 **E1** High-Entropy Alloys for Energy Applications: From Hydrogen Storage to High-Temperature Service
KUČEROVÁ Ludmila INVITED LECTURE
University of West Bohemia in Pilsen, Pilsen, Czech Republic, EU
- 10:50 **E2** Thermodynamic Prediction of the Sorption Properties of a 3D-Printed CrNbTi Alloy for Hydrogen Storage
HÁJKOVÁ Pavlína
Czech Technical University in Prague, Prague, Czech Republic, EU
- 11:10 **E3** Study of Cladded Bimetals Combinations for H2 Storage and Transport in High-Pressure H2 Applications
OSTROUSHKO Dmytro
University of West Bohemia in Pilsen, Pilsen, Czech Republic, EU
- 11:30 **E4** Manufacturing of ultra-high-strength steel tubular components by bending, roll forming and induction welding: a strategy for process parameter determination
CLAUSMEYER Till
Professorship Forming Technology, Chemnitz University of Technology, Chemnitz, Germany, EU

11:50 **CONFERENCE FAREWELL**

We look forward
to meeting you
at COMAT 2028



Zwick / Roell

12:00 - 13:30 **LUNCH**

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