







# Day 1 — July 23, 2026

3rd Global Summit on Materials Science and Engineering

 **Venue: Rainer's Hotel Vienna**

TIME	PRESENTATION TITLE
08:00 - 09:00	Registrations & Opening Remarks
<b>Plenary Talks</b>	
09:00 - 09:30	 <b>Metal catalyzed water oxidation is a key step in artificial photosynthesis</b> <i>Prof. Abul Kasem Fazlur Rahman, Oklahoma School of Science and Mathematics, USA</i>
09:30 - 10:00	 <b>Critical metals extraction from secondary sources; Valorization of Critical Elements recovery from post-industrial waste</b> <i>Prof. Maria Holuszko, University of British Columbia, Canada</i>
10:00 - 10:30	<b>Networking Break + Group Photo</b>
<b>Keynote Talks</b>	
10:30 - 11:00	 <b>Synthesis of a Cobalt Cube: A Potential Catalyst for Water Oxidation</b> <i>Prof. Abul Kasem Fazlur Rahman, Oklahoma School of Science and Mathematics, USA</i>
11:00 - 11:30	 <b>Flexible Porous Organic Polymers with Well-Defined Structures via Bottom-up Strategy for Precious Metal Recovery and Gases Separations</b> <i>Prof. Mu-Hua Huang, Beijing Institute of Technology, China</i>
<b>11:30 - 13:00 Technical Session-I</b>	
11:30 - 11:55	 <b>Automated thermal desorption-gas chromatography/mass spectrometry for rapid screening of hazardous chemicals in clothing and other textiles</b> <i>Prof. Ulrika Nilsson, Stockholm University, Sweden</i>
11:55 - 12:20	 <b>Advanced Oxygen Carrier Materials for Clean H<sub>2</sub> Production and CO<sub>2</sub> Separation in Chemical Looping Processes</b> <i>Dr. Julien Göthel, Rouge H2 Engineering AG, Germany</i>

**12:20 - 12:45**



**Correlation between electrical conductivity and deformation of polymeric composites**

*Prof. Ivan Chodak, Polymer Institute SAS, Slovakia*

**12:45 - 13:10**



**Engineering Nuclearity in Vanadium Assemblies: From metallocsupramolecular isomerism to Tunable Oxidation Catalysis**

*Dr. Visnja Vrdoljak, University of Zagreb, Croatia*

**13:10 - 14:00**

**Lunch @ Restaurant**

### Technical Session-II

**14:00 - 14:25**



**Non-halogenated flame retardants for various applications in advanced materials**

*Dr. Katarzyna Zielińska, Institute of Heavy Organic Synthesis, Blachownia, Poland*

**14:25 - 14:50**



**Performance of Carbon Fiber-Reinforced Date Palm Midrib Composites**

*Dr. Mohammad Hassan Mazaherifar, Transilvania University of Braşov, Romania*

**14:50 - 15:15**



**Molecular Representation and Modeling of Renewable Diesel Processing with Canola Oil**

*Dr. Harry Z. Ha, Fluor Canada Ltd, Canada*

**15:15 - 15:40**



**Towards a safe and sustainable recycling of elastane-containing textiles**

*Dr. Tim Åström, Stockholm University, Sweden*

**15:40 - 16:10**

**Poster Presentations + Refreshment Break**

### Poster Session

**Poster - 1**



**Structural and morphological tuning of CuO thin films for enhanced ethanol gas sensing**

*Mr. Leonardo Andres Vergara, UTFSM, Chile*

**Poster - 2**



**Spintronic potential of Co/Cr<sub>2</sub>O<sub>3</sub> interfaces: oxidation and exchange bias effects**

*Mr. Fernando Alvarez Asencio, UTFSM, Chile*

**Poster - 3**



**TBA**

*Prof. Maria Clara Goncalves, Instituto Superior Técnico, Portugal*

**Poster - 4**



**Development of Titanium Dioxide-Free Drotaverine 80 mg Film-Coated Tablets and Validation of HPLC Methods for Assay and Impurity Determination**

*Dr. Magdalena Strzebońska, AGH University of Krakow, Poland*

**Session Continues**

**16:10 - 16:35**



**To be announced soon**

*Dr. Fahimeh Zare, Instituto Superior Técnico, Portugal*

**16:35 - 17:00**



**Towards Standard-free Quantitative Profiling of RNA Modifications Using Mass Spectrometry**

*Prof. Norman H. L. Chiu, University of North Carolina Greensboro, USA*

**17:00 - 17:25**



**Comparison of the interactions of 18-membered lanthanide macrocycles with G-quadruplexes**

*Mr. Ernest Ewert, Adam Mickiewicz University, Poland*

**17:25 - 17:50**



**Microbial reduction of selenite with the formation of Se(0) nano-structures**

*Prof. Alexander A. Kamnev, Saratov Federal Scientific Centre of the Russian Academy of Sciences, Russian Federation*

**17:50 - 18:10**



**Synthesis of Sugar Beet Pulp-Derived Activated Carbon for CO<sub>2</sub>/CH<sub>4</sub> Separation from H<sub>2</sub>-Rich Syngas**

*Mr. Salahaldeen M. A. Aljafreh, Eskisehir Technical University, Turkey*

*Day 1 Concludes*