

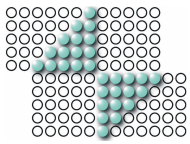
13th International Conference on

## STRUCTURAL MATERIALS

October 26, 2021 – Bratislava, Slovakia

### Final Program

8:30 – 9:00 AM	Registration
9:00 – 9:10 AM	Introduction
9:10 – 10:40 AM	<p><b>Keynote Lectures</b> <span style="float: right;">Session Chair: J. Jerz</span></p> <p><b>(KL-1) Mechanical and physical properties of selected Mg composites and nanocomposites</b> Zdeněk Drozd, Zuzanka Trojanová, and Pavel Lukáč Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic</p> <p><b>(KL-2) Alternative methods of aluminum alloys recycling in solid and semisolid state</b> Jure Krolo, and Branimir Lela Faculty of Electrical Engineering, Mechanical Engineering, and Naval Architecture, University of Split, Croatia</p> <p><b>(KL-3) Textile reinforced silicate composites – challenge and opportunity</b> Petr Hájek<sup>1</sup>, Tomáš Vlach<sup>1,2</sup>, Jakub Řepka<sup>1,2</sup>, Richard Fůrst<sup>1,2</sup>, and Jakub Hájek<sup>1,2</sup> <sup>1</sup>Faculty of Civil Engineering, Czech Technical University in Prague, Czech Republic <sup>2</sup>University Center for Energy Efficient Buildings, Czech Technical University in Prague, Czech Republic</p>
10:40 – 11:00 AM	Tee/Coffee Break
11:00 AM – 1:00 PM	<p><b>Keynote Lectures</b> <span style="float: right;">Session Chair: Z. Drozd</span></p> <p><b>(KL-4) Research of steel preheat temperature and molten casting alloy AlSi9Cu3(Fe) impact speed on wear of X38CrMoV5-1 steel in high pressure</b> Zvonimir Dadić, Dražen Živković, and Nikša Čatipović Faculty of Electrical Engineering, Mechanical Engineering, and Naval Architecture, University of Split, Croatia</p> <p><b>(KL-5) Examples of research activity of laboratory of non-destructive testing IFTR PAS, Warsaw Poland</b> Zbigniew Ranachowski Institute of Fundamental Technological Research PAS, Warsaw, Poland</p> <p><b>(KL-6) Processes of degradation in glass textolite subjected to discharge currents action</b> Przemysław Ranachowski<sup>1</sup>, Zbigniew Ranachowski<sup>1</sup>, Piotr Papliński<sup>2</sup>, and Stanislav Kúdela Jr.<sup>3</sup> <sup>1</sup>Institute of Fundamental Technological Research PAS, Warsaw, Poland <sup>2</sup>Institute of Power Engineering – Research Institute, Warsaw, Poland <sup>3</sup>Institute of Materials &amp; Machine Mechanics SAS, Bratislava, Slovakia</p> <p><b>(KL-7) Advanced characterization by Neutron Beam Techniques in the medical and industrial fields</b> Massimo Rogante Rogante Engineering Office, Civitanova Marche, Italy</p>
1:00 – 2:00 PM	Lunch Break & Lab Tour
2:00 – 2:50 PM	<p><b>FIT-4-NMP Project Session</b> (<a href="http://www.fit-4-nmp.eu">www.fit-4-nmp.eu</a>) <span style="float: right;">Session Chair: K. Iždinský</span></p> <p><b>Project:</b> Strategic and targeted support to incentivise talented newcomers to NMP (Nanosciences, Nanotechnologies, Materials and New Production Technologies) projects under Horizon Europe (akronym: FIT-4-NMP)</p> <p><b>FIT-4-NMP Support Service</b> Giles Brandon Managing Director of Intelligentsia Consultants, Luxembourg (Coordinator of FIT-4-NMP)</p> <p><b>How to start in Horizon Europe with NMP research</b> Lina Smovziuk Intelligentsia Consultants, Luxembourg</p>



2:50 – 3:10 PM	Tee/Coffee Break
3:10 – 4:30 PM	<p><b>Oral Lectures</b> <span style="float: right;">Session Chair: Z. Dadić</span></p> <p><b>(OL-1) Microstructure and fatigue performance of additively manufactured AlSi10Mg</b> Tibor Varmus<sup>1</sup>, Radomila Konečná<sup>1</sup>, and Gianni Nicoletto<sup>2</sup> <sup>1</sup>University of Žilina, Slovakia <sup>2</sup>University of Parma, Italy</p> <p><b>(OL-2) Composite material for thermal storage reinforced by aluminium foam skeleton</b> Arun Gopinathan, Jaroslav Jerz, and Jaroslav Kováčik <sup>1</sup>Institute of Materials &amp; Machine Mechanics, SAS, Bratislava, Slovakia <sup>2</sup>Faculty of Materials Science and Technology in Trnava, STU Bratislava, Slovakia</p> <p><b>(OL-3) Lightweight carbon fibre magnesium-based composites</b> Juraj Koráb, Stanislav Kúdela Jr., Pavol Štefánik, and František Simančík Institute of Materials &amp; Machine Mechanics, SAS, Bratislava, Slovakia</p> <p><b>(OL-4) Corrosion properties of PEO coated AZ31 magnesium alloy</b> Milan Štrbák, Filip Pastorek, Daniel Kajánek, and Branislav Hadzima University of Žilina, Slovakia</p>
4:30 – 5:00 PM	<p><b>Poster Session</b></p> <p><b>(PS-1) Ni-NiO-Al<sub>2</sub>O<sub>3</sub> porous preforms</b> Andrej Opálek<sup>1*</sup>, Marta Gaburjaková<sup>2</sup>, Peter Švec<sup>3</sup>, Stanislav Kúdela Jr. <sup>1</sup>, Matej Štěpánek<sup>1</sup>, Pavol Štefánik<sup>1</sup>, and Karol Iždinský<sup>1</sup> <sup>1</sup>Institute of Materials &amp; Machine Mechanics, SAS, Bratislava, Slovakia <sup>2</sup>Institute of Molecular Physiology and Genetics, Centre of Biosciences, SAS, Bratislava, Slovakia <sup>3</sup>Institute of Physics, SAS, Bratislava, Slovakia</p> <p><b>(PS-2) Effect of sintering process on the microstructure and microhardness of the powder mixture S509</b> Prateek Prakash Srivastava<sup>1,2*</sup>, Naďa Beronská<sup>1</sup>, Ľubomír Orovčík<sup>1</sup>, Martin Nosko<sup>1</sup> <sup>1</sup>Institute of Materials &amp; Machine Mechanics, SAS, Bratislava, Slovakia <sup>2</sup>Faculty of Materials Science and Technology in Trnava, STU Bratislava, Slovakia</p>
5:00 – 5:15 PM	Closing Remarks