

## INVITATION

We kindly invite all interested guests to the „PhD hallgatók anyagtudományi napja XXIII” conference of the Scientific Committee for Technical Chemistry, the Working Committee of Materials Science and Silicate Chemistry of the Hungarian Academy of Sciences, and the Working Committee of Silicate Technology and Materials Science of the Veszprém Academic Commission of the Hungarian Academy of Sciences.

Date: November 20, 2023, 9:00 a.m.

Location: Veszprém, University of Pannonia, Rédey Hall  
10 Egyetem Street, Building C, 4th floor, C 426

### Program:

9<sup>00</sup> – 9<sup>05</sup> *Opening ceremony:* Éva Kristófné Makó, the president of the Working Committee of Materials Science and Silicate Chemistry

9<sup>05</sup> – 9<sup>20</sup> Őze Csilla, Kristófné Makó Éva  
***Diatomaföld és trassz adagolásának hatása a kaolinit mechanokémiai aktiválására és puccolános reaktivására***  
*Affiliation:* Pannon Egyetem, Anyagmérnöki Intézeti Tanszék  
*Doctoral School:* Pannon Egyetem, Vegyészmérnöki és Anyagtudományok Doktori Iskola  
*Supervisor:* Dr. Kristófné dr. Makó Éva

9<sup>20</sup> – 9<sup>35</sup> Gráczer Kitti, Muránszky Gábor, Bánhidi Olivér, Viskolcz Béla  
***Stroncium meghatározása biológiai mintákban ICP-AES spektrometriával***  
*Affiliation:* Miskolci Egyetem, Kémiai Intézet  
*Doctoral School:* Kerpely Antal Anyagtudományok és Technológiák Doktori Iskola  
*Supervisor:* Prof. Dr. Viskolcz Béla, Dr. Muránszky Gábor

9<sup>35</sup> – 9<sup>50</sup> Tóth Gergely, Novák Máté, Csordás Anita, Kovács Tibor  
***A geológiai eredetű radonkockázat felmérése a Dunántúlon***  
*Affiliation:* Pannon Egyetem, Radiokémiai és Radioökológiai Intézet  
*Doctoral School:* Pannon Egyetem, Vegyészmérnöki és Anyagtudományok Doktori Iskola  
*Supervisor:* Kovács Tibor, Csordás Anita

9<sup>50</sup> – 10<sup>05</sup> Kövér László Márk, Dr. Gyurika István Gábor, Dr. Korim Tamás  
***CVD receptúrák és a bevonatolási környezet vizsgálata a bevonatolási hatékonyságot előre becslő rendszer kifejlesztése céljából***  
*Affiliation:* Pannon Egyetem, Géptan Intézeti Tanszék  
*Doctoral School:* Pannon Egyetem, Vegyészmérnöki és Anyagtudományok Doktori Iskola  
*Supervisor:* Dr. Gyurika István Gábor; Dr. Korim Tamás

10<sup>05</sup> – 10<sup>20</sup> Gergely Horváth, Vilaboy José Trujill, Zoltán Kozár, Alex Kummer, Tamás Varga  
***Development and comparison of machine learning models to analyse the synthesis of methylenedianiline***  
*Affiliation:* BorsodChem Zrt.  
*Doctoral School:* Pannon Egyetem, Vegyészmérnöki és Anyagtudományok Doktori Iskola  
*Supervisor:* Dr. Varga Tamás, Dr. Kummer Alex

10<sup>20</sup> – 10<sup>35</sup> András Rácz-Szabó, Tamás Ruppert, János Abonyi  
***Logistics resources reallocation for process optimization based on the DBSCAN algorithm***  
*Affiliation:* Continental & Pannon Egyetem (kooperatív doktori), Folyamatmérnöki Intézeti Tanszék

*Doctoral School: Pannon Egyetem, Vegyészmérnöki és Anyagtudományok Doktori Iskola*  
*Supervisor: Dr. Abonyi János, Dr. Ruppert Tamás*

- 10<sup>35</sup> – 10<sup>50</sup> Mohammed Qasim Kareem  
**3D SLM 17-4PH with different scanning angles (0°, 45°, 90°) and sample orientations**  
*Affiliation: Institute of Physical Metallurgy, Metalforming and Nanotechnology, University of Miskolc*  
*Supervisor: Prof. Dr. Zoltán Gácsi*
- 10<sup>50</sup> – 11<sup>05</sup> Fadhil Mohanad  
**The differences in oil (petroleum and hydraulic) wettability behavior on materials surfaces**  
*Affiliation: Institute of Physical Metallurgy, Metalforming and Nanotechnology, University of Miskolc*  
*Supervisor: Prof. Dr. Baumli Péter*
- 11<sup>05</sup> – 11<sup>20</sup> Akerele Ayodeji, Póliska Csaba, Simon Andrea  
**The Challenges of Producing Ceramic Foam Glass Made from Incinerator Slag, Waste Glass and Red Mud**  
*Affiliation: Institute of Polymer, Ceramics and Energy Technology, Faculty of Energy, Ceramics & Polymer Technology, University of Miskolc*  
*Doctoral School: Antal Kerpely Doctoral School of Materials Science and Technology*  
*Supervisor: Dr. Póliska Csaba, Dr. Simon Andrea*
- 11<sup>20</sup> – 11<sup>35</sup> Coffee break
- 11<sup>35</sup> – 11<sup>50</sup> Juan Hidalgo, Graziella Turdean, Ildiko Galambos  
**Modification of glassy carbon nanoparticles using Titanium Nanoparticles as a platform for determining diclofenac Sodium**  
*Affiliation: University of Pannonia, Soós Ernő Research and Development Center*
- 11<sup>50</sup> – 12<sup>05</sup> Yitbarek Firew Minale, Prof. Dr. Marossy Kálmán, Prof. Dr. Andrea Ádámné Major, Annamaria Polyákné Kovács  
**Investigating the Compatibility of PVC Based Ternary Blends**  
*Affiliation: Energy, Ceramics, and Polymer technology Institute, University of Miskolc*  
*Doctoral School: Antal Kerpely Doctoral School of Materials Science and Technology*  
*Supervisor: Prof. Dr. Marossy Kálmán, Prof. Dr. Andrea Ádámné Major*
- 12<sup>05</sup> – 12<sup>20</sup> Ariyo Prabowo Hidayanto, Péter Koska, Béla Fiser  
**Investigation of Enzymatic Degradation of Plastics**  
*Affiliation: Institute of Chemistry, University of Miskolc*  
*Doctoral School: Antal Kerpely Doctoral School of Materials Science and Technology*  
*Supervisor: Dr. Fiser Béla*
- 12<sup>20</sup> – 12<sup>35</sup> Hamsasew Hankebo Lemago, Tamás Igricz, Zoltán Erdélyi, Imre Miklós Szilágyi  
**Atomic Layer Deposition of Inverse Opals for Photocatalytic Degradation of Methylene Blue under Visible Light Illumination**  
*Affiliation: Department of Inorganic and Analytical Chemistry, Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics*
- 12<sup>35</sup> – 12<sup>50</sup> Shoaib Mukhtar, Erzsébet Szabó-Bárdos, Ottó Horváth  
**Green and sustainable organic pollutant degradation by the synthesis and use of a g-C<sub>3</sub>N<sub>4</sub>/Ag nanocomposite driven by visible light**  
*Doctoral School: Doctoral School of Chemistry and Environmental Sciences, University of Pannonia*  
*Supervisor: Dr. Horváth Ottó, Szabóné Dr. Bárdos Erzsébet*

- 12<sup>50</sup> – 13<sup>05</sup> Mustafa Hathal, Viola Somogyi, Thamer Adnan Abdullah  
**Utilizing Nanoparticle Technologies to Improve Wastewater Reclamation in Water-Scarce Regions of Iraq**  
*Doctoral School:* Chemical Engineering and Material Sciences Doctoral School, University of Pannonia  
*Supervisor:* Dr. Somogyi Viola
- 13<sup>05</sup> – 13<sup>35</sup> Lunch break
- 13<sup>35</sup> – 13<sup>50</sup> E. O. Akuo-ko, L. Tettey-Larbi, T. Ganbaatar, T. Gergely, M. Novák, A. Shahrokhi, A. Csordás, T. Kovács  
**Polonium-210 activity concentrations in different brands of cigarettes smoked in Ghana and evaluation of the induced radiation dose**  
*Affiliation:* Department of Radiochemistry and Radioecology, University of Pannonia  
*Doctoral School:* Doctoral School of Chemical Engineering and Material Sciences, University of Pannonia  
*Supervisor:* Dr. Kovács Tibor, Dr. Csordás Anita
- 13<sup>50</sup> – 14<sup>05</sup> Lordford Tettey-Larbi, Esther Osei Akuo-ko, Tuvshinsaikhan Ganbaatar, Gergely Tóth, Máté Novák, Amin Shahrokhi, Edit Tóth-Bodrogi, Tibor Kovács  
**Environmental Impact of Naturally Occurring Radionuclides in Ghana's Mining Areas**  
*Affiliation:* Department of Radiochemistry and Radioecology, University of Pannonia  
*Doctoral School:* Doctoral School of Chemical Engineering and Material Sciences, University of Pannonia  
*Supervisor:* Dr. Kovács Tibor, Dr. Tóth-Bodrogi Edit
- 14<sup>05</sup> – 14<sup>20</sup> Zsolt Homoki, Ágnes Szigeti, Anita Csordás, Tibor Kovács  
**Experience of the radiological survey of Hungarian buildings**  
*Affiliation:* Nemzeti Népegészségügyi és Gyógyszerészeti Központ  
*Doctoral School:* Pannon Egyetem, Vegyészmérnöki és Anyagtudományok Doktori Iskola  
*Supervisor:* Dr. Kovács Tibor, Dr. Csordás Anita
- 14<sup>20</sup> – 14<sup>35</sup> Tuvshinsaikhan Ganbaatar, Amin Shahrokhi, Lordford Tettey-Larbi, Esther Osei Akuo-ko, Edit Tóth-Bodrogi, Tóth Gergely, Fehérvári Máté, Tibor Kovács  
**The New Conception of Radiological Sustainability Possibilities by Reutilization of Residues Products and Building Materials**  
*Affiliation:* Department of Radiochemistry and Radioecology, University of Pannonia  
*Doctoral School:* Doctoral School of Chemical Engineering and Material Sciences, University of Pannonia  
*Supervisor:* Dr. Tóth-Bodrogi Edit, Dr. Amin Shahrokhi
- 14<sup>35</sup> – 14<sup>50</sup> Iskander Ben Rijiba, Georgina Tóth-Nagy, Viktor Sebestyén  
**Exploring construction materials and processes to reduce greenhouse gas emissions**  
*Doctoral School:* Doctoral School of Chemical Engineering and Material Sciences, University of Pannonia  
*Supervisor:* Dr. Tóth-Nagy Georgina, Dr. Sebestyén Viktor
- 14<sup>50</sup> – 15<sup>05</sup> Osamah Ihsan Ali, István Gábor Gyurika, Miklós Jakab  
**The Tribological Behavior of TiN/TiC CVD Coatings under Dry Sliding Conditions Against Zirconia and Steel Counterparts**  
*Affiliation:* Research Centre for Engineering Sciences, University of Pannonia  
*Doctoral School:* Doctoral School of Chemical Engineering and Material Sciences, University of Pannonia  
*Supervisor:* Dr. Gyurika István Gábor

15<sup>05</sup> – 15<sup>20</sup>

Emel Razzouk, Tamás Török

**Challenges Associated with Anodizing Casting Al-Si Alloys**

*Affiliation:* Faculty of Materials and Chemical Engineering, University of Miskolc

*Doctoral School:* Antal Kerpely Doctoral School of Materials Sciences and Technologies

*Supervisor:* Prof. Dr. Tamás Török

15<sup>20</sup> – 15<sup>35</sup>

Jawhara Marouani

*Affiliation:* University of Miskolc

Budapest, November 16, 2023

Éva Kristófné Makó  
Working Committee of Materials Science and Silicate Chemistry  
President