



Bayerisch-Tschechische  
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# Marie Skłodowska-Curie Actions Doctoral Networks and Twinning – Advanced Materials & Processes and Artificial Intelligence for Sustainability (Workshop)

22 – 23 March 2023

at Universität Regensburg

Auditory H 13, Building RWH, Faculty of Business, Economics, Management Information Systems,

Universität Regensburg



## Wednesday, March 22, 2023

13:00 | Registration and opening reception

### INTRODUCTION OF RESEARCH AND FUNDING PROGRAMS OF THE EUROPEAN UNION

Room: Auditory H 13, Building RWH, Faculty of Business, Economics, Management Information Systems,  
Universität Regensburg

14:00 | Welcoming

14:15 | Information session with questions & answers

Dr. Panteleimon Panagiotou, Head of Unit ICT,  
Engineering & Natural Sciences at the Bavarian Research Alliance (BayFOR)

- Marie Skłodowska-Curie Actions Doctoral Networks

15:15 | **PITCH TALKS (each 10 min)**

1. *Increasing energy efficiency of large-scale industrial processes*

Prof. Dr. Werner Kunz, Institute of Physical and Theoretical Chemistry, Faculty of Chemistry  
and Pharmacy, Universität Regensburg

2. *Vibrational spectroscopy in nanoworld*  
PhD Marcela Dendisova, Department of Physical Chemistry, University of Chemistry and Technology Prague
3. *Data-Based Process Control and Estimation*  
Miroslav Fikar, Institute of Information Engineering, Automation and Mathematics, Slovak University of Technology in Bratislava
4. *Optimization and simulation of production processes*  
Prof. Dr. Michael Eley, Faculty of Engineering, Technische Hochschule Aschaffenburg
5. *Easysem: a miniaturized electron microscope*  
Prof. Dr. Rupert Schreiner, Department of Applied Physics and Microsystems Technologies, Faculty of Applied Natural Sciences and Cultural Studies, OTH Regensburg

16:15 Joint photo and coffee break

16:45 **PITCH TALKS (each 10 min)**

1. *Redox Photochemistry: towards functional molecules and materials*  
Dr. Tomas Slanina, Department of Redox Photochemistry, Institute of Organic Chemistry and Biochemistry in Prague
2. *Product ecology supporting sustainability*  
Prof. Vladimír Kočí, Department of Sustainability and Product Ecology, Faculty of Environmental Chemistry, University of Chemistry and Technology Prague
3. *Eco-friendly biodegradable composite materials based on the plant raw*  
Prof. Olha Hulai and Associate Professor Oksana Sadova, Department of Material Science, Faculty of Customs Affairs, Materials and Technologies, Lutsk National Technical University
4. *Conversion of lignocellulosic biomass to valuable materials and chemicals*  
Prof. Dr. Jernej Iskra, Chair of Organic Chemistry, Faculty of Chemistry and Chemical Technology, University of Ljubljana
5. *New methods in organic chemistry utilizing photo- electro- and mechano-chemical approaches*  
Dr. Michal Májek, Department of Organic Chemistry, Faculty of Natural Sciences, Comenius-University Bratislava
6. *Materials research opportunities at Laboratory for Advanced Materials*  
Dr. Milan Sykora, Laboratory for Advanced Materials, Faculty of Natural Sciences, Comenius-University Bratislava
7. *Structure-property relationships in soft magnetic Fe-based nanocomposites*  
Jozef Bednarčík, Department of Condensed Matter Physics, Faculty of Science, P.J. Šafárik University in Košice
8. *Intriguing materials based on guanine-rich DNA sequences*  
Prof. Dr. Irena Drevenšek Olenik, Department of Physics, Faculty of Mathematics and Physics, University of Ljubljana
9. *Graphene derivatives and applications*  
Masoud Khaleghiabbasabadi, Institute for Nanomaterials, Advanced Technology and Innovation, Technical University of Liberec

18:15	End
20:00	<b>COMMON DINNER</b> (Restaurant Weltenburger am Dom, Domplatz 3)

**Thursday, March 23, 2023**

Room: Auditory H 13, Building RWH, Universität Regensburg

9:00	<p><b>PITCH TALKS (each 10 min)</b></p> <ol style="list-style-type: none"> <li><i>Symbiosis of Natural and Artificial in English-language Studies</i> PD Dr. Nataliia Lazebna, Chair of Didactics - Modern Foreign Languages, Institute of Modern Foreign Languages, JMU Würzburg</li> <li><i>Artificial Intelligence based forecast decision support system in agricultural production against diseases, pests and weeds</i> Onur Yolay, Co-founder, Innoway R&amp;D Kft.</li> <li><i>Supervised classification algorithm in land use classification (AI)</i> Anna Slachciak, Statistics Poland</li> <li>Prof. Dr. Oliver Reiser, Institute of Organic Chemistry, Faculty of Chemistry and Pharmacy, Universität Regensburg</li> </ol>
9:40	<p><b>BEST PRACTICES (each 20 min)</b></p> <ol style="list-style-type: none"> <li><i>MSCA project GuEst: New Directions in Guaranteed Estimation of Nonlinear Dynamic Systems and Their Applications to Chemical Engineering Problems</i> Miroslav Fikar, Institute of Information Engineering, Automation and Mathematics, Slovak University of Technology in Bratislava</li> <li><i>Twinning for development of world-class next generation batteries</i> Viera Pechancová, Center of Polymer Systems, University Institute, Tomas Bata University in Zlín (online)</li> <li><i>Marie-Curie Action „Initial Training Networks“: Functionalized Magnetic Nanoparticles and their Application in Chemistry and Biomedicine</i> Prof. Dr. Oliver Reiser, Institute of Organic Chemistry, Faculty of Chemistry and Pharmacy, Universität Regensburg</li> </ol>
10:40	Coffee break
11:00	<p><b>Information session with questions &amp; answers</b></p> <p>Adeline Kroll, EU-COM, Policy Officer, DG RI A2 (online)</p> <ul style="list-style-type: none"> <li>– Widening participation and spreading excellence across Europe: boosting research and innovation performance throughout the Union (Horizon Europe) <ul style="list-style-type: none"> <li>• Teaming</li> <li>• Twinning</li> </ul> </li> </ul>

12:00	<b>PITCH TALKS (each 10 min)</b> <ol style="list-style-type: none"> <li><i>Extending the lifetime of windmills: Sensor-integrated digital twin for high-performance fibre composite applications</i> Ursula Pähler, Department of Applied Computer Science &amp; Bionics - Technology Campus Freyung, Faculty of AI Computer Science, Deggendorf Institute of Technology</li> <li><i>Smart agriculture</i> Reza Moezzi, M.Sc., Mechatronics and interdisciplinary studies, TU Liberec</li> <li><i>To capture, convert and store/utilize sunlight: dye-sensitized solar devices</i> Dr. Urša Opara Krašovec, Faculty of electrical engineering, University of Ljubljana</li> <li><i>Applied Data Science at University of West Bohemia</i> Dr. Jan Pospíšil, Department, Faculty of Applied Sciences, University of West Bohemia</li> </ol>
12:40	<b>CLUSTERING AND NETWORKING SESSION</b> Dr. Panteleimon Panagiotou, Head of Unit ICT, Engineering & Natural Sciences at BayFOR
13:00	Farewell reception

## CONFERENCE LANGUAGE

The conference language is English.

## COSTS

The participation is free of charge. Free accommodation and grants for travel costs can be provided for a certain number of participants (to be indicated in the application form).

## DIRECTIONS

<https://www.uni-regensburg.de/contact/maps/index.html>  
or <https://urwalking.ur.de/navi/?lang=en>



## WI-FI ACCESS FOR GUESTS

Establishment of the connection with BayernWLAN Hotspot

- Turn on Wi-Fi on your device and select in the Wi-Fi settings the WLAN network (SSID) @BayernWLAN
- Open a web page in your browser, if it does not automatically open (depending on the operating system and device).
- Accept the terms of use on the home page of the hotspot. Click on "Connect" | "Verbinden"

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