

TBMCE 2026

9. – 11. 9. 2026
Grand Hotel Bernardin
Portorož, Slovenia

CONFERENCE PROGRAMME



"This investment is co-financed by the Republic of Slovenia and the European Union Fund for Regional Development"

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Združenje kemijske industrije



Dravske elektrarne Maribor

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TBMCE 2026: CONFERENCE PROGRAMME

Wednesday, 9. 9. 2026	
9.00 - 10.00	Registration
10.00 - 10.45	Opening Ceremony - Ministry of the Economy, Labour and Sport Mag. Aleksandra Podgornik, Director of the Chamber of Commerce and Industry of Štajerska Assoc. prof. dr. Marko Hölbl, University of Maribor, Vice-Rector for Science and Research Prof. dr. Zoran Novak, University of Maribor, Dean of the Faculty of Chemistry and Chemical Engineering Prof. dr. Zdravko Kravanja, University of Maribor, Faculty of Chemistry and Chemical Engineering, President of the TBMCE conference
10.45 – 12.15	Round Table Pathways to Decarbonization: Alternative Energy and Carbon Capture and Utilization Moderated by: Assist. prof. dr. Tine Seljak, Faculty of Mechanical Engineering, University of Ljubljana Speakers: dr. Mojca Lončnar, SIJ Acroni d.o.o. dr. Haris Salihgić Hrenko, Talum d.d. Kidričevo dr. Ilja Gasan Osojnik Črnivec, Center for Development, Demonstration and Training for Carbon-Free Technologies (SI) Davor Rašić, Ministry of Infrastructure and Energy Žiga Kobal, BELINKA PERKEMIJA d.o.o.
12.15– 13.00	Keynote Lecture Circular Economy and Life-cycle Innovation: From Microalgae to Outer Space Dr Matjaž Vidmar, School of Engineering, The University of Edinburgh
13.00 – 14.30	Lunch



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14.30 – 16.00	Panel discussion 1 What the FOAK: Why Promising Technologies Fail to Reach Industry? Moderated by: Prof. Blaž Likozar , National Institute of Chemistry (SI) Speakers: Dr Gregor Kosec , ACIES BIO d.o.o. Prof Gašper Tavčar , Institute Jožef Stefan Dr Igor Mihelič , Melamin d.d. Kočevje Dr Robert Reinhardt , AlgEn d.o.o. Prof Primož Oven , University of Ljubljana, Biotechnical faculty	
16.00 – 16.30	Coffee break	
16.30 – 18.00	Panel discussion 2 Critical Raw Materials: Europe's Achilles' Heel – or Opportunity? Europe's dependence on imported critical raw materials Moderated by: Dr Primož Oprčkal , Slovenian National Building and Civil Engineering Institute (SI) Speakers: Prof Gašper Tavčar , Institute Jožef Stefan Mojca Jerina , BLOK d.o.o. Jure Fišer , Surovina d.o.o. Janja Sitar , RECIKEL d.o.o.	Lectures 1: From Research to Application: Cross-Sector Energy Technologies for the Climate Transition Chair: Blaž Likozar, National Institute of Chemistry (SI) Sorption Performance and Hydrothermal Stability of Ionic Liquids for Biogenic CO₂-to-Methanol Conversion at Wastewater Treatment Plants Anže Prašnikar , National Institute of Chemistry (SI) Jurij Golobič , National Institute of Chemistry (SI) Špela Gašperlin , University of Ljubljana (SI) Jošt Knez , University of Ljubljana (SI) Marcel Šarko , University of Ljubljana (SI) Andraž Pavlišič , National Institute of Chemistry (SI) Matej Huš , National Institute of Chemistry (SI) Igor Shlyapnikov , Centre of Excellence for Low-Carbon Technologies (SI) Blaž Likozar , National Institute of Chemistry PeCATHs: A Sustainable Way to Store Hydrogen Francisco Fabregat-Santiago , Universitat Jaume I (ES) Jose Mata , Universitat Jaume I (ES) Carmen Mejuto , Universitat Jaume I (ES) Rosario Vidal , Universitat Jaume I (ES) Elena Mas-Marzá , Universitat Jaume I (ES)

		Cristian Bachmann, Universitat Jaume I (ES) David Tilley, University of Zurich (CH) Thomas Moehl, University of Zurich (CH) Jordi Arbiol, Catalan Institute of Nanoscience and Nanotechnology (ES) Max Garcia-Melchor, CIC EnergiGune (ES) Conor Brennan-Pollak, Trinity College Dublin (IE) Nuria Mañés-Beltrán, Comet Global Innovation (ES) ILIMITED: Adsorbent Design for Process Intensification in CO₂ Valorisation to Methanol Filipe H. B. Sosa, University of Aveiro (PT) João Fabian, University of Aveiro (PT) Murilo Alcântara, University of Aveiro (PT) João A. P. Coutinho, University of Aveiro (PT) NOVETROL: Application of LCA and S-LCA to low-TRL Technologies: A Case Study of a Novel Current-limiting Solution for the Energy Transition Martina Pucciarelli, Spin Life s.r.l. (IT) Matilde Cavalli, University of Padova (IT) Matteo Superchi, Spin Life s.r.l. (IT) Alessandro Manzardo, University of Padova (IT) CarbNETs: CO₂ Capture, Thermal Energy Management, and Electrification Using Net-Zero Industrial Technologies for Decarbonisation Tomaž Čebela, Center for Development, Demonstration and Training for Carbon-Free Technologies (SI) Blaž Likozar, National Institute of Chemistry (SI) Janvit Teržan, Center for Development, Demonstration and Training for Carbon-Free Technologies (SI) Ilja Gasan Osojnik Črnivec, Center for Development, Demonstration and Training for Carbon-Free Technologies (SI)
19.00 -	Get Together	



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Thursday, 10. 9. 2026

8.00 – 9.00

Registration

9.00 - 9.45

Plenary Lecture

AI-assisted innovations in the twinning of bioreactors and the synthesis of industrial biocatalysts

Prof. Antonis Kokossis, CEng, FICChemE, FRSA, FIET & Leverhulme Visiting Professor at Imperial College, London;

European Federation, Sustainability Section, Chair

National Technical University of Athens (GR)

Chair: Prof. Zdravko Kravanja

10.00 - 11.30

Panel discussion 3

Circularity of Material Flows in Slovenia: how to advance the use of secondary resources

Moderated by:

Grit Ackermann, Chamber of Commerce and Industry of Slovenia

Speakers:

Nevia Paulić, Chamber of Commerce and Industry of Slovenia

Nikolina Babić, Chamber of Commerce and Industry of Slovenia

Antonija Božič Cerar, Chamber of Commerce and Industry of Slovenia

dr. Primož Oprčkal, ZAG

dr. Igor Karlovits, National Institute of Chemistry

Damir Huremović, ZEOS

Marija Zajec Čebular, Ministry of the Economy, Labour and Sport

Lectures 2

Stochastic Optimization of Food Self-Sufficiency under Extreme Weather Conditions

Jan Drofenik, University of Maribor (SI)

Zorka Novak Pintarič, University of Maribor (SI)

Towards Decarbonizing Agri-Food Industrial Heat: A Case Study Applied to a Jam Waste Valorization Process

Carlos Sanz, University of Salamanca (ES)

Alberto Almena, University of Salamanca (ES)

Mariano Martín, University of Salamanca (ES)

Advancing Sustainable Shipping with Ammonia: An Integrated Techno-Economic and Environmental Assessment

Antonio Sánchez, University of Salamanca (ES)

Richard Cabrera-Jiménez, ETH Zurich, (CH)

Gonzalo Guillén-Gosálbez, ETH Zurich, (CH)

Mariano Martín, University of Salamanca (ES)

Digital and Standardized Governance for Circular Business Models: Industrial Symbiosis in Slovenia

Erika Džajić Uršič, Rudolfovo – Science and Technology Centre (SI)

		Conversion of Driftwood into Biofuel: A Best Practice Example from Dravske Elektrarne Maribor <u>Polonca Ojsteršek</u> , Dravske elektrarne Maribor, d.o.o. (SI)
11.30 - 12.00	Coffee break	
12.00 - 13.20	Bridging Science, Business, and Regions: Essential Steps for a Stronger Innovation Ecosystem Marko Hren , Head of the Smart Specialisation Coordination Division, Ministry of Local Self-Government, Cohesion and Regional Development of the Republic of Slovenia	Lectures 3: Circular Construction A Common Strategy for Circular and Digital Construction in Central Europe: Approach and Results of the Interreg ReBuilt Project <u>Alenka Mauko Pranjič</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Dragica Marinič</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Primož Oprčkal</u> , Slovenian National Building and Civil Engineering Institute Cross-Border Cooperation: Circular Construction Value Chains: Potential and Barriers in the Slovenia-Austria Region <u>Dragica Marinič</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Primož Oprčkal</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Alenka Mauko Pranjič</u> , Slovenian National Building and Civil Engineering Institute (SI) Digital Product Passports for Circular Construction: a LIFE IP RESTART Pilot Implementation <u>Jan Prah</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Alenka Mauko Pranjič</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Primož Oprčkal</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Dragica Marinič</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Marko Petelin</u> , Infodata Sistemi (IT) <u>Elazem Abdelhamid</u> , Infodata Sistemi (IT) Modified Tessier Sequential Extraction for Reliable Assessment of Trace Element Mobility in Alkaline Industrial By-Products



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		Žan Hauptman, Slovenian National Building and Civil Engineering Institute & Jožef Stefan International Postgraduate School (SI) Vesna Zalar Serjun, Slovenian National Building and Civil Engineering Institute (SI) Marija Đurić, Slovenian National Building and Civil Engineering Institute (SI) Radmila Milačič Ščančar, Jožef Stefan Institute (SI) Janez Ščančar, Jožef Stefan Institute (SI)
13.20 - 14.45	Lunch	
14.45 - 15.15	Poster session	
15.15-15.30	Presentation of the SL.BIO HUB Slovenia Velislav Žvipelj, State Secretary, Ministry of Agriculture, Slovenia Ladeja Godina Košir, Circular Change Alenka Dovč, Chamber of Commerce and Industry of Slovenia	
15.30 - 17.00	BIOEAST Pitching Event 2026 Circular Change in cooperation with SL.BIO HUB Slovenia and BIOEAST HUB Croatia Ladeja Godina Košir, Circular Change Lucija Marovt, Circular Change Mina Mansoor Rankel, Independent Advisor, Circular Change Pitching Jury: Ana Belac, Impact Hub Ljubljana Vanja Jurišić, Associate Professor, University of Zagreb, Faculty of Agriculture Tilen Šarlah, Country Manager Slovenia, Feelsgood Capital Panel Discussion: Dr. Andreja Kutnar, Director of InnoRenew CoE Miha Škrokov, Circular Bioeconomy Consultant, Anteja	

17.00 - 18.30

Panel discussion 4

Digitalisation in Circular Construction

Moderated by:

Dr Dragica Marinič, Slovenian National Building and Civil Engineering Institute (SI)

Speakers:

Dr Alenka Mauko Pranjič, Slovenian National and Civil Engineering Institute

Mitja Petelin, Infordata Sistemi

Borut Hojnik, Javno podjetje Nigrad, d.o.o.

Boštjan Gomilšek, Result d.o.o.

Lectures 4

BioFarms Cluster: A Transnational Model for Circular Biorefinery Value Chains

Michele Crudo, GOEL Social Cooperative (IT)

Giulia Franco, GOEL Social Cooperative (IT)

Luca Gallelli, Magna Graecia University of Catanzaro (IT)

Metrology as the Foundation of Trust in Circular Aluminum: From Impol's Industrial Practice to Advanced Tools for European Circular Industry

Varužan Kevorkijan, Impol Aluminum Industry (SI)

A Chemical Clock for Polyolefin Pyrolysis: Time-Temperature Superposition of Product Yield Distributions

Tim Tetičkovič, Scientific Research Centre Bistra (SI)

Dušan Klinar, Scientific Research Centre Bistra (SI)

Klavdija Rižnar, Scientific Research Centre Bistra (SI)

Darja Pečar, University of Maribor (SI)

Consumer Decision-Making in the Circular Bioeconomy: Evidence from a Multi-Country Discrete Choice Experiment

Karolina Kosjek, University of Ljubljana (SI)

Matej Fatur, University of Ljubljana (SI)

Damianos Michailidis, Rainno Idiotiki Kefalaiouschiki Etaireia (GR)

Giuseppe Bogani, Lombardy Green Chemistry Association (IT)

Urte Raubytė, AgriFood Lithuania DIH (LT)

Luka Juvančič, University of Ljubljana (SI)



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		Opportunities and Challenges of AI Support in the Assessment of Environmental Impacts of Circular Bio-Based Products Luka Goropečnik, University of Ljubljana (SI) Matej Fatur, VCG.AI GMBH, Stuttgart, (DE) Jože Kropivšek, University of Ljubljana (SI) Matej Jošt, University of Ljubljana (SI) Karolina Kosjek, University of Ljubljana (SI) Javier Vargas, VCG.AI GMBH, Stuttgart, (DE) Damianos Michailidis, Rainno Idiotiki Kefalaouchiki Etaireia (GR) Luka Juvančič, University of Ljubljana (SI)
20.00	Gala Dinner	

Friday, 11. 9. 2026

9.00 – 10.30	Lectures 5	
	Keynote lecture	
9.00-9.30	Multiscale Approaches to Develop a Biocircular Economy Carlos Sanz , University of Salamanca (ES) Vanessa Villazón-León , Instituto Tecnológico de Aguascalientes (MX) Roberto Cifuentes , University of Salamanca (ES) Manuel Taifouris , University of Salamanca (ES) Mariano Martín , University of Salamanca (ES)	
9.30-9.50	Unlocking Underutilized Woody Biomass: Extractives of Damaged and Bark Beetle-Attacked Norway Spruce Trees Vanja Štolcer , Kompetenzzentrum Holz GmbH (AT) Ida Poljanšek , University of Ljubljana (SI) Viljem Vek , University of Ljubljana (SI) Primož Oven , University of Ljubljana (SI)	
9.50-10.10	Effect of Storage Conditions on the Extractives Content in Silver Fir (<i>Abies alba</i> Mill.) Bark Peter Hrovatič , University of Ljubljana (SI) Ida Poljanšek , University of Ljubljana (SI) Urša Osolnik , University of Ljubljana (SI) Primož Oven , University of Ljubljana (SI) Viljem Vek , University of Ljubljana (SI)	
10.10-10.30	Assessment of the Economic Feasibility and Environmental Sustainability of Acid Whey Valorization with Ultrafiltration Matej Fatur , University of Ljubljana (SI) Stane Kavčič , University of Ljubljana (SI) Karolina Kosjek , University of Ljubljana (SI) Bojana Bogovič Matijašič , University of Ljubljana (SI) Giulia Di Filippo , University of Udine (IT) Niccolo Renoldi , University of Udine (IT) Nadia Innocente , University of Udine (IT) Jure Gramc , University of Ljubljana (SI) Luka Juvančič , University of Ljubljana (SI)	

10.30 - 12.00	Lectures 6	Lectures 7
	The Future of the Circular Aluminum Economy: From Material Circularity to Performance-Based Circularity <u>Varužan Kevorkijan</u> , Impol Aluminum Industry (SI)	Wastewater Treatment Plants as Circular and Flexible Energy Hubs through Sludge Management, Biogas Utilization and Renewable Energy Integration <u>Hazem Han Ashour</u> , University of Ljubljana (SI) <u>Tine Seljak</u> , University of Ljubljana (SI) <u>Andrea Turolla</u> , Politecnico di Milano (IT) <u>Mihael Sekavčnik</u> , University of Ljubljana (SI)
	Bio-Based Methacrylate Miniemulsions for High-Performance Sustainable Coating Applications <u>Blaž Užmah</u> , Helios Resins (SI) <u>Natalija Končan Volmajer</u> , Helios Resins (SI) <u>Zala Kožuh</u> , Helios Resins (SI) <u>Martin Ocepek</u> , Helios Resins (SI) <u>Tomaž Pirman</u> , Helios Resins (SI) <u>Jožefa Zabret</u> , Helios Resins (SI) <u>Tina Razboršek</u> , Helios Resins (SI)	Developing a Surrogate Reactor Network Model for Sewage Sludge Gasification and a Reduced Kinetic Mechanism for CFD Use <u>Gholamreza Masoudi Rad</u> , University of Ljubljana (SI) <u>Miha Sekavčnik</u> , University of Ljubljana (SI) <u>Tine Seljak</u> , University of Ljubljana (SI)
	Towards Sustainable Packaging Materials: Poly(vinyl alcohol) Biocomposite Films Reinforced with Green Fillers <u>Urša Osolnik</u> , University of Ljubljana (SI) <u>Peter Hrovatič</u> , University of Ljubljana (SI) <u>Viljem Vek</u> , University of Ljubljana (SI) <u>Primož Oven</u> , University of Ljubljana (SI) <u>Miha Humar</u> , University of Ljubljana (SI) <u>Ida Poljanšek</u> , University of Ljubljana (SI)	Experimental Evaluation of Dry Sludge Combustion from Sewage Treatment Plants <u>Muhammad Al Yousaf</u> , University of Ljubljana (SI) <u>Mihael Sekavčnik</u> , University of Ljubljana (SI) <u>Tine Seljak</u> , University of Ljubljana (SI)
	Optimization of Clay-Based Plasters Reinforced with Hemp Shives: Effect of Sand-Clay-Shives Ratio on Mechanical Properties (CHOICE) <u>Shivakumar Mani</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Vilma Ducman</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Lea Žibret</u> , Slovenian National Building and Civil Engineering Institute (SI) <u>Alenka Pavlin</u> , TERMIT (SI) <u>Primož Zorec</u> , COGREEN d.o.o., (SI)	Thermal Cascade Management for Quality-resolved Heat Integration in Modular Microfluidic Systems <u>Ting Pan</u> , Brno University of Technology (CZ) <u>Petar Sabev Varbanov</u> , Brno University of Technology (CZ)

	Pretreatment-Enabled Enzymatic Depolymerization of PET Polymer for High-Purity Terephthalic Acid Recovery <u>Tamilpavai Allwin Mabes Rai</u>, IOS, Institute of Environmental Protection and Sensors (SI), University of Maribor (SI) Mojca Poberžnik, IOS, Institute of Environmental Protection and Sensors (SI) Maša Knez Marevci, University of Maribor (SI) Urban Bren, University of Maribor (SI) Aleksandra Lobnik, IOS, Institute of Environmental Protection and Sensors (SI), University of Maribor (SI)	Assessing Natural Yeasts as Immobilizable Biocatalysts for Bioremediation of Metal-Contaminated Soil and Valorization of Waste Cooking Oil <u>Tadeja Vajdič</u>, University of Maribor (SI) Tjaša Zajec, University of Maribor (SI) Eva Horvat, University of Maribor (SI) Mišel Fridl, University of Maribor (SI) Vladyslav Zdanskyi, University of Maribor (SI) Mykola Honcharenko, University of Ljubljana (SI) Nick Leben, University of Maribor (SI) Brin Hlade, University of Maribor (SI) Gordana Hojnik Podrepšek, Javno podjetje Snaga, d.o.o. (SI) Katja Vasič, University of Maribor (SI) Marjanca Starčič Erjavec, University of Maribor (SI), University of Ljubljana (SI)
12.00-13.00	BRUNCH	



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POSTER SESSION

Slot	
1	THE FORMALIN PRODUCTION FROM WASTE <i>Anita Kovač Kralj</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
2	IMAGE-BASED ASSESSMENT OF PLEUROTUS OSTREATUS MYCELIAL COLONIZATION ON MUNICIPAL SEWAGE SLUDGE-SUPPLEMENTED SUBSTRATES <i>Erik Mihelič</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Marjana Simonič</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Katarina Zavrl</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Olivija Plohl</i> , University of Maribor, Faculty of Mechanical Engineering (SI)
3	FOOD WASTE PREVENTION FOR MORE EFFICIENT HOUSEHOLD FOOD RESOURCE USE <i>Ksenija Vuk Kostanjevec</i> , Scientific Research Centre Bistra Ptuj (SI) <i>Mojca Jevšnik Podlesnik</i> , University of Ljubljana, Faculty of Health Sciences (SI)
4	A CIRCULAR MONITOR TOOL FOR CITIES: AN INDICATOR FRAMEWORK FOR LOCAL PLANNING <i>Klavdija Rižnar</i> , Znanstveno-raziskovalno središče Bistra (SI) <i>Alja Širovnik</i> , Znanstveno-raziskovalno središče Bistra (SI)
5	GEOTECHNICAL CHARACTERIZATION OF RED GYPSUM <i>Tinkara Marija Podnar</i> , University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture (SI) <i>Darko Zakelšek</i> , University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture (SI) <i>Gregor Kravanja</i> , University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture; Faculty of Chemistry and Chemical Engineering (SI) <i>Grega Kos</i> , Cinkarna Celje d.d. (SI) <i>Dejan Verhovšek</i> , Cinkarna Celje d.d. (SI) <i>Bojan Žlender</i> , University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture (SI)
6	OPTIMIZATION OF RED GYPSUM GRANULATION AND STABILIZATION FOR SUSTAINABLE CONSTRUCTION <i>Gregor Kravanja</i> , University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture; Faculty of Chemistry and Chemical Engineering (SI) <i>Grega Kos</i> , Cinkarna Celje d.d. (SI) <i>Dejan Verhovšek</i> , Cinkarna Celje d.d. (SI) <i>Tinkara Marija Podnar</i> , University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture (SI)
7	POLYCARBONATE RECYCLING USING SUPERCRITICAL ALCOHOLS <i>Julija Ribarič</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Mihael Irgolič</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Maja Čolnik</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Mojca Škerget</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
8	HYDROTHERMAL CONVERSION OF WASTE CIGARETTE FILTERS <i>Tajana Bistrovič</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Maja Čolnik</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Mihael Irgolič</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Danijela Urbanc</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Mojca Škerget</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
9	COMPOSITION-CONTROLLED FORMATION AND SWELLING STABILITY OF CROSSLINKER-FREE POLYELECTROLYTE HYDROGELS FROM QUATERNIZED CHITOSAN AND HYALURONIC ACID <i>Lidija Tušek</i> , SRC Bistra Ptuj (SI) <i>Kenan Kapetanović</i> , University of Maribor, Faculty of Mechanical Engineering (SI) <i>Matej Bračič</i> , University of Maribor, Faculty of Mechanical Engineering (SI) <i>Lidija Fras Zemljič</i> , University of Maribor, Faculty of Mechanical Engineering (SI)

10	VIRIDI ACADEMY: CROSS-BORDER E-LEARNING FOR CIRCULAR BUSINESS MODELS IN SMES <i>Lidija Tušek, SRC Bistra Ptuj (SI)</i> <i>Robert Novak, SRC Bistra Ptuj (SI)</i> <i>Klavdija Rižnar, SRC Bistra Ptuj (SI)</i> <i>Ksenija Vuk Kostanjevec, SRC Bistra Ptuj (SI)</i> <i>Tjaša Glažar, SRC Bistra Ptuj (SI)</i> <i>Dragica Marinič, Slovenian National Building and Civil Engineering Institute (SI)</i> <i>Primož Oprčkal, Slovenian National Building and Civil Engineering Institute (SI)</i> <i>Petra Arzenšek, Chamber of Commerce and Industry of Slovenia (SI)</i> <i>Antonija Božič Cerar, Chamber of Commerce and Industry of Slovenia (SI)</i> <i>Neža Einspieler, Economic Chamber of Carinthia (AT)</i> <i>Kathrin Gindl, Energieforum Kärnten (AT)</i> <i>Barbara Wrolich, Slovenska gospodarska zveza (AT)</i>
11	CONTROLLING CALCIUM CARBONATE POLYMORPHISM IN CO₂-BASED PRECIPITATION: VATERITE, ARAGONITE AND SCALENOHEDRAL CALCITE TOWARDS MICROREACTOR SYNTHESIS <i>Tim Tetičkovič, SRC Bistra Ptuj (SI)</i> <i>Dušan Klinar, SRC Bistra Ptuj (SI)</i> <i>Klavdija Rižnar, SRC Bistra Ptuj (SI)</i>
12	DEVELOPMENT AND EVALUATION OF A PYTHON-BASED FLUID SIMULATION FRAMEWORK USING THE LATTICE BOLTZMANN METHOD <i>Jure Konjar, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Miloš Bogataj, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i>
13	VALORISATION OF FLAXSEED CAKE THROUGH RANDALL EXTRACTION OF BIOACTIVE COMPOUNDS <i>Kristina Genc, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Maja Čolnik, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Marjana Simonič, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Aleksandra Petrovič, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Lidija Čuček, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Pia Keršič, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i>
14	ENVIRONMENTAL ASSESSMENT OF BIOBASED PRODUCTS EXPOSED TO DIFFERENT pH CONDITIONS <i>Majda Pavlin, Slovenian National Building and Civil Engineering Institute (SI)</i> <i>Sara Tominc, Slovenian National Building and Civil Engineering Institute (SI)</i> <i>Lisbeth M. Ottosen, Technical University of Denmark (DK)</i> <i>Guang Ye, Delft University of Technology, Delft (NL)</i> <i>Nina Štirmer, University of Zagreb (HR)</i> <i>Ivana Carević, University of Zagreb (HR)</i> <i>Tero Luukkonen, University of Oulu (FI)</i> <i>Vilma Ducman, Slovenian National Building and Civil Engineering Institute (SI)</i>
15	POLYSACCHARIDE-FUNCTIONALIZED MAGNETIC NANOPARTICLES FOR THE REMOVAL OF STRATEGIC METALS FROM PRINTED CIRCUIT BOARDS <i>Laura Furman, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Marjana Simonič, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Sašo Gyergyek, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI), Jožef Stefan Institute (SI)</i> <i>Lidija Fras Zemljič, University of Maribor, Faculty of Mechanical Engineering (SI)</i> <i>Olivija Plohl, University of Maribor, Faculty of Mechanical Engineering (SI)</i>
16	INTEGRATING HIGH-FIDELITY PROCESS MODELS INTO CIRCULAR SUPPLY CHAIN SUPERSTRUCTURES VIA NEURAL NETWORKS <i>Chiara Železnik, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Zdravko Kravanja, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i> <i>Miloš Bogataj, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)</i>

17	EMISSION FACTOR SENSITIVITY IN SPEND-BASED SCOPE 3 CARBON FOOTPRINT ASSESSMENT OF HOSPITALS <i>Damjan Krajnc</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering, Chamber of Commerce and Industry of Štajerska, (SI) <i>Pia Keršič</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Chunyan Si</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Lidija Čuček</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
18	EXPIRED PUMPKIN SEED OIL AS A GREEN CO-ADDITIVE FOR COPPER CORROSION PROTECTION <i>Regina Fuchs-Godec</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
19	ASSESSMENT OF THERMAL DEGRADATION EFFECTS ON DIELECTRIC PERFORMANCE OF ELECTRICAL INSULATION MATERIALS <i>Petra Krištof</i> , Milan Vidmar Electric Power Research Institute (SI) <i>Peter Osenčič</i> , Milan Vidmar Electric Power Research Institute (SI) <i>Aljaž Špelko</i> , Milan Vidmar Electric Power Research Institute (SI) <i>Barbara Horvat</i> , Milan Vidmar Electric Power Research Institute (SI)
20	CASCADE VALORISATION OF SHREDDED WASTE ELECTRICAL CABLE INSULATION FOLLOWING INITIAL INCORPORATION INTO GEOPOLYMER COMPOSITES: A LIFE CYCLE ASSESSMENT WITH LONGEVITY AND LOOP FACTORS <i>Barbara Horvat</i> , Milan Vidmar Electric Power Research Institute (SI)
21	CONTINUOUS-FLOW SYNTHESIS OF CARBOXYMETHYL DEXTRAN-COATED MAGNETIC IRON OXIDE NANOPARTICLES IN A MODULAR MICROREACTOR <i>Ana Mohor</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Olivija Plohl</i> , University of Maribor, Faculty of Mechanical Engineering (SI) <i>Sašo Gyergyek</i> , Institut Jožef Stefan, (SI) <i>Andreja Nemet</i> , University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
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23	SURROGATE NEURAL NETWORK MODELING OF BIOMASS INDIRECT GASIFICATION: PREDICTING SYNGAS COMPOSITION AND OPTIMIZING PROCESS CONDITIONS FOR RENEWABLE HEXAMINE SYNTHESIS <i>Roberto Cifuentes García</i> , Universidad de Salamanca, Facultad de Ciencias Químicas (ES) <i>Mariano Martín</i> , Universidad de Salamanca, Facultad de Ciencias Químicas (ES) <i>Fernando Millán</i> , MAXAMCORP INTERNATIONAL (ES) <i>Unai Elizundia</i> , MAXAMCORP INTERNATIONAL (ES) <i>Luis Arturo Carranza</i> , MAXAMCORP INTERNATIONAL (ES) <i>Fernando Maria Beitia</i> , MAXAMCORP INTERNATIONAL (ES) <i>Jose Maria Castresana</i> , MAXAMCORP INTERNATIONAL (ES) <i>Mateusz Marek Hass</i> , MAXAMCORP INTERNATIONAL (ES)
24	MAIZE COBS AS CIRCULAR BIO-RESOURCES: QUALITY AND END-OF-WASTE PERSPECTIVES <i>Uroš Novak</i> , National Institute of Chemistry (SI) <i>Katja Makovšek</i> , National Institute of Chemistry (SI) <i>Blaž Likozar</i> , National Institute of Chemistry (SI)
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27	COMPARATIVE LIFE CYCLE ASSESSMENT OF FOSSIL-BASED METHANOL AND E-METHANOL PRODUCED USING CO₂ FROM DIFFERENT POINT SOURCES <i>Tinkara Ošlovnik</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Matjaž Denac</i>, University of Maribor, Faculty of Economics and Business (SI) <i>Zorka Novak Pintarič</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Lidija Čuček</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
28	CONCEPTUAL DESIGN AND AGRONOMIC EVALUATION OF A BIO-BASED SOIL IMPROVER DERIVED FROM FOOD PRODUCTION RESIDUES IN THE SLOVENIA-ISTRIA LIVING LAB <i>Lea Lavrič</i>, KOTO Ltd (SI) <i>Tanja Zrnec Drobňak</i>, University of Ljubljana, Biotechnical Faculty (SI) <i>Ana Schwarzmenn</i>, University of Ljubljana, Biotechnical Faculty (SI) <i>Vid Žitko</i>, University of Ljubljana, Biotechnical Faculty (SI) <i>Urška Libnik</i>, University of Ljubljana, Biotechnical Faculty (SI) <i>Maja Podgornik</i>, ZRS Koper (SI) <i>Rok Babič</i>, ZRS Koper (SI) <i>Rok Mihelič</i>, University of Ljubljana, Biotechnical Faculty (SI)
29	MAGNETIC NANOCELLULOSE-BASED FUNCTIONAL NANOADSORBENTS FOR EFFICIENT HEAVY METAL REMOVAL <i>Katja Vasić</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering & Faculty of Electrical Engineering and Computer Science (SI) <i>Željko Knez</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering & Faculty of Medicine (SI) <i>Maja Leitgeb</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering & Faculty of Medicine (SI)
30	SUSTAINABLE TREATMENT OF PHARMACEUTICAL INDUSTRY WASTEWATER USING VACUUM EVAPORATION <i>Nika Fekonja</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Danijela Urbanc</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Marjana Simonič</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
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33	ENVIRONMENTAL PERFORMANCE OF RENEWABLE AND WASTE HEAT-DRIVEN RANKINE CYCLE SYSTEMS <i>Monika Dokl</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Chunyan Si</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Sandro Nižetić</i>, University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (CR) <i>Kok Sin Woon</i>, The Hong Kong University of Science and Technology, Carbon Neutrality and Climate Change (CN) <i>Zdravko Kravanja</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Lidija Čuček</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
34	MACHINE LEARNING-ASSISTED MODELLING AND OPTIMISATION OF AN INTEGRATED PROCESS FOR SYNTHETIC LIQUID FUEL PRODUCTION VIA CO-ELECTROLYSIS AND FISCHER–TROPSCH SYNTHESIS <i>Lia Čotar</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Lidija Čuček</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Jan Pavšek</i>, RWTH Aachen University, Process Systems Engineering (AVT.SVT) (DE) <i>Sanja Potrč</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
35	OPTIMAL DESIGN AND ECONOMIC VIABILITY OF REGIONAL BIO-BASED POLYETHYLENE PRODUCTION <i>Simon Osvald</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Lidija Čuček</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Aleksandra Petrovič</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Sanja Potrč</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
36	ECONOMIC AND ENVIRONMENTAL OPTIMIZATION OF HYDROGEN SUPPLY NETWORK FOR INDUSTRY AND ROAD TRANSPORT IN SLOVENIA <i>Rok Petrovič</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Lidija Čuček</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI) <i>Sanja Potrč</i>, University of Maribor, Faculty of Chemistry and Chemical Engineering (SI)
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