

Monday 1 June 2026

- 09.00 – 10.00 Registration
- 10.00 – 10.30 **Official Opening of RRB 2026**
- 10.30 – 12.00 **Opening Plenary Session**
- 12.00 – 13.00 Lunch
- 13.00 – 14.30 **Parallel sessions**



Session 1A	Session 1B	Session 1C
Biobased chemicals and biodegradable materials I Chair: Chris Stevens, Ghent University, BE	Biorefining I	Biocatalysis & novel fermentation processes I Chair: Benjamin Horemans, KU Leuven, BE
Invited talk: Navigating the Complexity of Cellulose and Lignin Antje Potthast, Boku, AT	Thermal and structural analysis of new lignin-based resins synthesis Raphaela Süß, Wood K plus – Competence Center for Wood Composites & Wood Chemistry, Kompetenzzentrum Holz GmbH, AT	Invited talk: Mixotrophic microbial consortia in anaerobic fermentation: A biotechnological route to carbon-efficient waste upcycling Sabine Kleinsteuber, Helmholtz Centre for Environmental Research, DE
Itaconic acid functionalization for development of biobased surfactants Jevgenij Lazko, Materia Nova Research Center & University of Mons, BE	Supercritical carbon dioxide extraction and fractionation of glycerides and fatty acid methyl esters Hannes Sels, Karel de Grote University of Applied Sciences & Arts, BE	Feeding the future with fungi: Fermentation of algal side streams into sustainable mycoproteins Kasra Khatami, Chalmers University of Technology, SE
Sustainable cellulose-based hydrogels <i>within situ</i> synthesized metal nanoparticles for antimicrobial wound dressings Aleksandra Mikhailidi, BAU International University Batumi, GE	Biodesign4Insulation: Environmental assessment of used cooking oil valorisation into bio-polyols for polyurethane industry Anda Fridrihsone, Latvian State Institute of Wood Chemistry, LV	Upcycling a methanol rich side stream from pulp and paper industry to bio-based acetic acid with <i>Acetobacterium woodii</i>: Process optimization, CO₂ fixation, and sustainability assessment Hans Marx, TU Wien, AT
From biomass to thermoplastic: Liquefied woody biomass for circular thermoplastic composites and coatings Shikha Gupta, University of Twente, NL	Establishing structure-acidity-performance relationships in zeolite catalyzed lignin pyrolysis for aromatics production Devanshu Sajwan, Utrecht University, NL	Rational strain engineering and bioprocess optimization for enhanced succinic acid production from organic biowaste Vasiliki Korca, Agricultural University of Athens, GR & University of Liège, BE

14.30 – 15.00 Coffee Break

15.00 – 15.45 **Poster Tour 1**

15.45 – 17.15 **Parallel sessions**

Session 2A	Session 2B	Session 2C
Biobased chemicals and biodegradable materials II	Biorefining II Chair: Avtar Matharu, University of York, UK	Wood chemistry and engineering Chair: Gunnar Henriksson, KTH, SE
Re-thinking heritage packaging: Customizable bio-based composite polyurethane foams combined with 3D printed technology: Two case studies Letizia Verdolotti, National Research Council (IPCB-CNR), IT	Valorization of sunflower stalks in a multi-product biorefinery for prebiotics and bioethanol Aleta Duque, CIEMAT, ES	Invited Talk Monika Österberg, Aalto University, FI
Yeast-based industrial bioprocess for converting lipid waste streams into long-chain dicarboxylic acids Iris Cornet, University of Antwerp, BE	Hydroprocessing of high inorganic-content HTL-biocrudes from manure and straw using solid residue catalysts Ole Reinsdorf, RISE-Research Institutes of Sweden, SE	Lignin carbohydrate complexes – Inferring Structure-property relations with artificial intelligence Matthias Stosiek, Technical University of Munich, DE
Cellulose-based foams via ionic and eutectic crosslinking strategies Bruno B. Ravanello, AlmaScience CoLab, PT	Advanced membrane separations – A key-enabling technology for current and future biorefineries Kristien De Sitter, VITO, BE	Turning waste into adsorbents: VOC removal using waste-wood-derived activated carbons Bilge YILMAZ, Karadeniz Technical University, TR
Muconic acid as a biobased platform chemical for bio-advantage monomer synthesis Lisa De Vriendt, KU Leuven, BE	Scale-up of a green waste biorefinery: Transferring pressing and fermentation to the technical scale Wolfgang Laudensack, RPTU Kaiserslautern-Landau, DE	Aromatic platforms from industrial lignins for high value materials production Sanja Vucetic, Åbo Akademi, FI

17.30 Guided Walk

19.00 Welcome Reception at the Jubilee Hall of the University Halls

Tuesday 2 June 2026

- 09.00 **Plenary talk**
- 09.30 Transition break
- 09.40 – 10.50 **Parallel sessions**



Session 3B	Session 3C
<p>Bioenergy & thermochemical transformations Chair: Maria Westerholm, Swedish University of Agricultural Sciences, SE</p>	<p>Carbon capture and utilization Chair: Dominik Bongartz, KU Leuven, BE</p>
<p>Invited talk: Harnessing anaerobic fungi to enhance anaerobic digestion of natural and synthetic biopolymers Magdalena Calusinska, LIST, LU</p>	<p>Invited talk: Designing CCUS systems with life cycle thinking: From CO₂ capture to utilization Niklas von der Assen, RWTH Aachen University, DE</p>
<p>Process optimisation of anaerobic digestion using sludge-biochar for biomethane production from industrial sludge Ngoc D. Le, University of Aveiro, PT</p>	<p>CO₂ capture with temperature swing adsorption method - Laboratory and small-scale pilot experiments in biomass combustion Niko M. Kinnunen, LUT University, FI</p>
<p>Breaking biomass twice: Improving bio-oil production via two-step hydrothermal liquefaction Christyfani Sindhuwati, University of Leeds, UK & Politeknik Negeri Malang, ID</p>	<p>Ethanol removal as an enabling step for downstream processing of syngas fermentation broths Hanieh Khalili, Technical University of Munich & Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT, DE</p>

- 10.50 – 11.20 Coffee Break

11.20 – 12.50 **Parallel sessions**

Session 4A	Session 4B	Session 4C
<p>Pretreatment and transformation of lignocellulosics I Chair: Henrik Grénman, Åbo Akademi, FI</p>	<p>Catalysis for renewables and kinetics I Chair: Bert Sels, KU Leuven, BE</p>	<p>Polysaccharides Chair: Pedro Fardim, KU Leuven, BE</p>
<p>Invited talk: lignin to thermosets: insights on structure-reactivity and structure-property relationships Martin Lawoko, KTH Royal Institute of Technology, SE</p>	<p>Invited talk: Selective depolymerization of lignin: insights into the selective cleavage of C–O bonds Yuhe Liao, KU Leuven</p>	<p>Invited talk: Polysaccharides – basis for green products Thomas Heinze, Friedrich-Schiller-University, Jena, DE</p>
<p>Deciphering lignocellulose recalcitrance: From genotypic traits and cultivation to advanced fractionation strategies Holger Klose, Forschungs-zentrum Jülich, DE</p>	<p>Photocatalytic C–H bond activation over metal sulfides for biomass valorization Xuejiao Wu, Xiamen University, Xiamen, CN & KU Leuven, BE</p>	<p>Mechanochemically assisted oxidation of polysaccharides Anwar Jardine, University of Cape Town, ZA</p>
<p>Spatio-chemical mapping of lignocellulosic transformations across wood and agricultural biomass Agneta Richter-Dahlfors, Karolinska Institutet & Karlstad University, SE</p>	<p>Sustainable 5-HMF production from waste biomass over Nb₂O₅ and NbOPO₄ catalysts Elisa I. García-López, Università di Palermo, IT</p>	<p>Designing highly porous materials using lignocellulosic nanostructures for water remediation Rubia Figueredo Gouveia, Brazilian Center for Research in Energy & Materials/Brazilian Nanotechnology National Laboratory, BR</p>
<p>Bacterial conversion of alkyl glycosides generated by ethanosolv lignocellulosic fractionation Siti Mariyam, Engineering and Technology Institute of Groningen, NL</p>	<p>Hydrothermally stable catalysts for the one-pot conversion of cellulose to ethylene glycol Ana Luiza Slama de Freitas, University of Groningen, NL</p>	<p>Exopolysaccharides production and characterization from cyanobacteria using plastic waste Rebeca Pires, UCIBIO, i4HB, LNEG, PT</p>

12.50 – 13.45 Lunch

13.45 – 14.45 **Poster Tour 2 & Coffee Break**

14.45 – 16.15 **Parallel sessions**

Session 5A	Session 5B	Session 5C
<p>Sustainability and circular economy I Chair: Klaus Kümmerer, Leuphana University of Lüneburg, DE</p>	<p>Biorefining III</p>	<p>Valorization of food residues I Organised by Flanders' Food</p>
<p>Invited talk: Deep Eutectic Systems: Is it a sustainable alternative for the extraction of natural products? Alexandre Paiva, Universidade NOVA de Lisboa, PT</p>	<p>Development of scalable extraction processes for bioactive compounds from underutilized residues such as grape pomace and mushroom stems Winnie Dejonghe, Flemish Institute for Technological Research (VITO), BE</p>	<p>Details to follow.</p>
<p>Circular lignin epoxies: Activation and functionalisation for BPA-free, self-healing thermosets Giorgio Tofani, National Institute of Chemistry, SI</p>	<p>Pilot-scale production of biofuel from lignocellulosic pyrolysis oil Linda Sandström, RISE Research Institutes of Sweden, SE</p>	
<p>“Trash” to Taste: Erythritol sweetener production from biodiesel crude glycerol Ana M.R.B. Xavier, University of Aveiro, PT</p>	<p>Subcritical solvents for insect biorefineries: Chitin isolation from black soldier fly and beyond Ruben Smets, KU Leuven, BE</p>	
<p>Policy vs Science: Do real advanced biofuels have a future if fraud can't be prevented? Filip Boeckx, DG Energy, Federal Public Service Economy, BE</p>	<p>Selective degradation of impurities in sugar syrups using high-frequency ultrasound Shambel Getachew Wasse, Université de Poitiers, FR</p>	

16.20 – 17.00 Biobased Market pitches

17.00 – 18.45 Biobased Market

19.30 Conference Dinner at 'De Hoorn'

Wednesday 3 June 2026



09.00 – 10.20 Parallel sessions

Session 6A	Session 6B	Session 6C
Pretreatment and transformation of lignocellulosics II	Catalysis for renewables and kinetics II	Valorization of food residues II
Extraction, separation and concentration of protein from brewery spent grain: A combined alkali pretreatment with SANI membrane technology Mihaela Tanase-Opedal, RISE PFI AS, NO	Engineering zirconia-based catalysts for renewable chemical production Amin Osatiashtiani, University of Leeds, UK	Valorization of lipid and carbohydrate-rich waste through acidogenic fermentation Luísa S. Serafim, University of Aveiro, PT
The power of butylamine as a distillable pretreatment solvent: Efficiently deconstructing plants into bioavailable sugars Blake A. Simmons, Lawrence Berkeley National Laboratory, USA	Conversion of furfural to furfuryl alcohol on CuZnAl mixed oxides with different copper contents using isopropanol as a hydrogen donor Oleg Kikhryanin, University of Chemistry and Technology, CZ	Integrated extraction and upgrading assessment of banana peel-derived fractions Juan García-Serna, Åbo Akademi University, FI
Development of an electrochemical method to assess the antioxidant capacity of lignin and related depolymerization products Aihemaiti Kayishaer, Université de Strasbourg, FR	Selective C-O and C-C cleavage of lignin model compounds using titanium-supported Ru-X (X = Mo, Mn, W AND Ni) bimetallic nanocatalysts Marcelo Domine, Universitat Politècnica de València, ES	Mapping and exploring poultry processing waste stream in high-value applications Ann Vermoesen, Karel de Grote University of Applied Sciences and Arts, BE
Wood2Wood project: Decontamination and material recovery of post-consumer wood by coupling thermochemical and biological processes Coline Giustiniani, University of Lorraine, FR	Towards sustainable biosourced solvents: Can bisfuran alkylation/hydrogenation reconcile performance and environmental friendliness? Gabrielle Terrochaire, University of Poitiers, FR	Optimization of twin-screw extrusion and enzymatic hydrolysis unit processes for the conversion of animal waste into bio-based fertilizers Julien Lequitte, Université de Toulouse, FR

10.20 – 11.00 Coffee Break

11.00 – 12.20 **Parallel Sessions**

Session 7A	Session 7B	Session 7C
Biobased chemicals and materials III	Environmental Biotechnology	Valorization of food residues III
4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-methyl-morpholinium chloride mediated modification of carboxymethyl cellulose for food packaging Valentina Beghetto, University Ca' Foscari & Crossing Srl, IT	Optimizing nutrient recovery and algal biomass production from Finnish dairy and animal by-product side streams Sema Sirin, University of Turku, FI	Valorisation of red beet wastes for sustainable carbon quantum dots synthesis and betalains extraction for food applications Maria Carmen Garrigós, University of Alicante, ES
The chemical valorisation of insects and microalgae as a sustainable alternative feedstock Joost Matthijssen, Thomas More University of Applied Sciences, BE	Developing a continuous fermentation process for the recovery of Rare Earth Elements (REE) from electronic waste Golnaz Memari, University of Applied Sciences Krems, AT	Boosting waste biomass potential for polymeric materials by mild torrefaction on the example of pomegranate and Rosa canina peels Aleksander Hejna, Poznan University of Technology, PL
Converting biomass with hydrogen chloride gas: From nanoparticles to chemicals Eero Kontturi, Aalto University, FI	Techno-economic assessment of cellulose carbamate-based regenerated cellulose films: The role of chemical recovery and side-stream management Waleed Mehmood, Aalto University, FI	Circular valorization of green leafy vegetable side streams into active biodegradable packaging Zeinab Qazanfarzadeh, Chalmers University of Technology, SE
Production of carotenoid and coenzyme Q10 using winery wastewater and purple phototrophic aggregates Jairo Carrillo-Osorio, Universidad Nacional Autónoma de México, MX	Proteolytic and non-proteolytic mechanisms involved in keratin degradation by <i>Onygena corvina</i> Siddhi Pavale, Norwegian University of Life Sciences (NMBU), NO	Chitinolytic marine bacteria for crustacean waste valorisation: Linking enzyme activity to genetics potential Raejeong Ryu, Ghent University, BE

12.20-13.30 **Lunch**

13.30 – 14.30 **Parallel sessions**

Session 8A	Session 8B	Session 8C
Pretreatment and transformation of lignocellulosics III	Sustainability and circular bioeconomy II	Biocatalysis and novel fermentation processes II
Ionic liquids for sustainable lignocellulosic biomass valorisation and biomaterials development Cariny Polesca, Imperial College London, UK	Synthetic, bio-based or recycled textile fibres – Which are the most sustainable options? Hanna Karg, ifeu gGmbH, DE	From beetle to bioreactor: Engineering microbiomes of wood-eating beetle larvae for lignocellulose valorisation Lilian Prinsen, KU Leuven, BE
HemiCoat – Conversion of hemicellulose to coatings Otto Laufer, DBFZ, gGmbH, DE	Processing of agricultural wastes for local protein production Marcella Fernandes de Souza, Ghent University, BE	High cell density fermentation of <i>Yarrowia lipolytica</i> on n-Hexadecane for the valorization of pyrolyzed plastic waste Antonia Keil, Ghent University & Bio Base Europe Pilot Plant, BE
Mycocomposites for reducing the weight of concrete structures Paul Langlois, Université de Lorraine, FR	OBIWAN: Converting organic waste into advanced chemicals and sustainable aviation fuels Iliyas Melnikov, Ghent University, BE	Development of an integrated electrochemical bioreactor for succinic acid production using engineered <i>Escherichia coli</i> strain and municipal biowaste hydrolysates Apostolos Petropoulos, Agricultural University of Athens, GR

14.40 **Plenary Keynote Talk**
AI and Data for the Bioeconomy
Nigel Mouncey, Lawrence Berkeley National Laboratory, USA

15.10 **Closing Session**

Presentation of the Awards for the best PhD talks

Presentation of the 14th Golden Crop Award

Presentation of RRB 2027