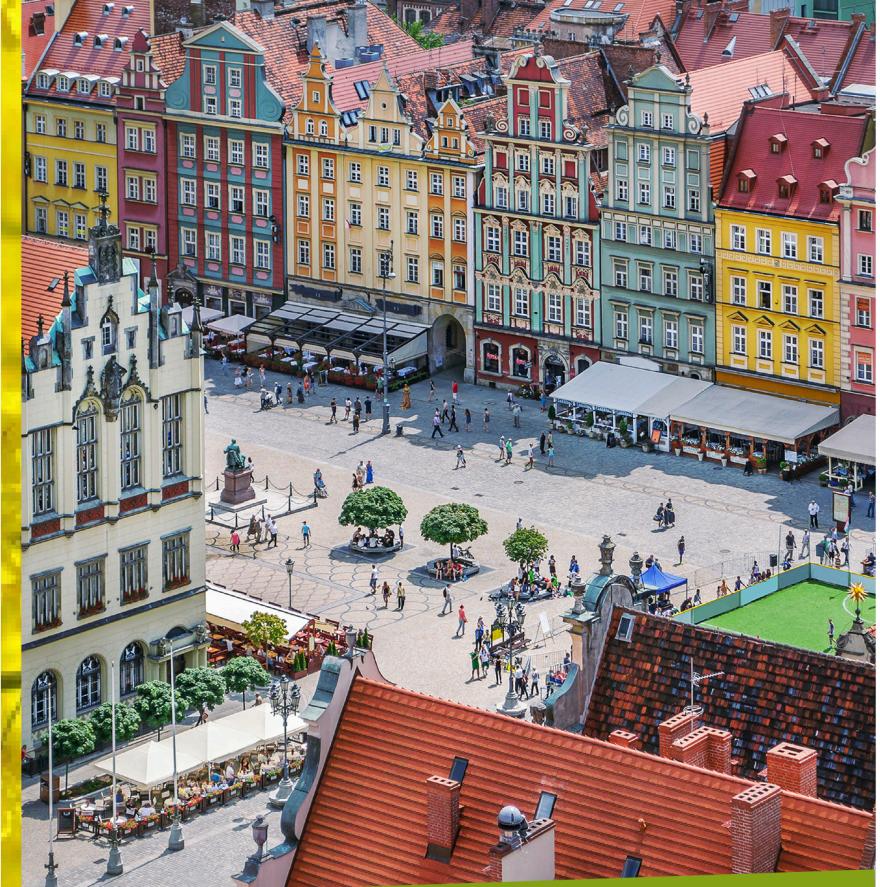




13th International Conference on Renewable Resources and Biorefineries

June 7 - 9, 2017
Wroclaw, Poland



Final Program



WROCŁAW UNIVERSITY
OF ENVIRONMENTAL
AND LIFE SCIENCES



FACULTY OF
BIOTECHNOLOGY
AND FOOD SCIENCE



The Leading National
Research Centre

Wroclaw Centre of Biotechnology 2014-2018



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Wednesday, 7 June 2017

09.00 – 10.00 Registration

10.00 – 10.15 **Official Opening of RRB-13** **Aula**
Christian Stevens, Ghent University, BE and Agnieszka Kita, WUELS, PL

Welcome to Wrocław

Prof. Tadeusz Trziszka, Rector of Wrocław University of Environmental and Life Sciences

Opening Plenary Session

Chairs: Christian Stevens, Ghent University, BE and Waldemar Rymowicz, WUELS, PL

10.15 – 10.45 **European Bioeconomy: Contribution of biorefineries and bioindustries**
Tomasz Calikowski, European Commission, DG Research & Innovation

10.45 – 11.05 **Bio-Based Industries Joint Undertaking (BBI): Developing a sustainable
bio-based sector in Europe**
Agata Pieniadz, Bio-Based Industries JU

11.05 – 11.50 **Biorefinery in modern agriculture and agro-industry**
George Aggelis, Department of Biology, University of Patras, GR

11.50 – 12.00 **BZK Group – Leaders within their industry sectors (movie)**
Short introduction by Waldemar Rymowicz, WUELS, PL

12.00 – 13.00 Lunch in the canteen (1st floor) followed by coffee in the lobby (ground floor)

Aula - Session 1A		Room IVC - Session 1B	Room IIIC - Session 1C
Biobased materials - I Chair: Waldemar Rymowicz, WUELs, PL	Valorisation of biomass waste streams - I Chair: Philippe Tavernier, Development Agency of West Flanders (POM), BE	Biomass fractionation Chair: Milan Čertik, Slovak University of Technology, SK	
13.00 – 13.30 Expanding castor oil production to provide renewable replacements for petro-chemicals Thomas McKeon, USDA-ARS, USA	13.00 – 13.30 Biorefining pilot plant for extracting raw materials from plant residues Nikolaj Frøm Petersen, Danish Technological Institute, DK	13.00 – 13.30 A simple two-step method for selective conversion of hemicellulose in pubescens to furfural Changwei Hu, College of Chemistry, CN	
13.30 – 13.55 Purification of xylitol by HPLC methods from fermented biomass Yannick Krauke, KNAUER Wissenschaftliche Geräte GmbH, DE	13.30 – 13.55 Efficient utilization of organic waste Daniel Pleissner, Leuphana University of Lueneburg, DE	13.30 – 13.55 Added value bio-refining of cereal brans Anne Christine Steenkjaer Hastrup, Danish Technological Institute, DK	
13.55 – 14.20 Exploitation of different pulp and paper factory waste streams for short-chain organic acids and polyhydroxyalkanoates production Luisa Serafim, University of Aveiro, PT	13.55 – 14.20 Statistical optimization of crude glycerol conversion into green chemicals using chemostats: Challenges and opportunities Cristiano Varrone, The Technical University of Denmark, DK	13.55 – 14.20 Low-temperature acetone organosolv fractionation of lignocellulosic biomass Kay J. Damen, Energy research Centre of the Netherlands, NL	
14.20 – 14.30 Adaptation of bacterial nanocellulose generation to meet the needs for today's high-value added bio-based products Uwe Beekmann, Friedrich-Schiller-University Jena, DE	14.20 – 14.30 Valorisation of biorefinery side streams into added value amides Pieter Naert, Ghent University, BE	14.20 – 14.30 How structure and composition of raw material influence hemicellulose extraction during hot pressurized water pretreatments Gianluca Gallina, Valladolid University, ES	

14.30 - 15.15 Coffee Break and Exhibition

Aula - Session 2A		Room IVC - Session 2B	Room IIIC - Session 2C
Biobased materials - II Chair: Stanislaw Bielecki, Lodz University of Technology, PL	Bioactive compounds from biomass Chair: Jozefa Chrzanańska – UP Wrocław, PL	Bioenergy I Chair: Małgorzata Wróbel-Kwiatkowska, WUELs, PL	
16.00 – 16.30 Can biobased chemicals be produced via the pathway of anaerobic digestion? An overview Eric Billig, Helmholz Center for Environmental Research, DE	16.00 – 16.30 Secondary metabolites in industrial and biomass plants Wiesław Oleszek, Institute of Soil Science and Plant Cultivation, Puławy, PL	16.00 – 16.30 New integrated polyphenols recovery and anaerobic digestion of two-phase olive pomace (alpeorujo) Mikel Orive, AZTI, ES	
16.30 – 16.55 Pinewood bio-oil as substrate for PHA and SCOAs production Paulo C. Lemos, NOVA University of Lisbon, PT	16.30 – 16.55 Biotechnological preparation of microbial-derived bioproducts enriched with lipophilic bioactive compounds and their applications Milan Čertik, Slovak University of Technology, SK	16.30 – 16.55 Ethanol and feed components production for field bean (<i>Vicia faba var. Equina</i>) seeds Witold Pietrzak, Wrocław University of Environmental and Life Sciences, PL	
16.55 – 17.20 Bio-based copolymers derived from the isomers of furandicarboxylic acid Shanmugam Thiagarajan, Wageningen Food & Biobased Research, NL	16.55 – 17.20 Anticancer activity of prenylated flavonoids isolated from spenthops and their derivatives obtained by microbial transformations and chemical synthesis Tomasz Tronina, Wrocław University of Environmental and Life Sciences, PL	16.55 – 17.20 Simultaneous utilization of xylose and glucose in a membrane assisted continuous bioethanol fermentation Amir Mahboubi, University of Borås, SE	

16.00 - 17.20 Parallel sessions

Aula - Session 2A		Room IVC - Session 2B	Room IIIC - Session 2C
Biobased materials - II Chair: Stanislaw Bielecki, Lodz University of Technology, PL	Bioactive compounds from biomass Chair: Jozefa Chrzanańska – UP Wrocław, PL	Bioenergy I Chair: Małgorzata Wróbel-Kwiatkowska, WUELs, PL	
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17.30 Guided city tour (see page 100)

19.00 Welcome Reception at the Town Hall (see page 100)

09.00 - 10.30 Parallel sessions

Aula - Session 3A		Room IVC - Session 3B	Room IIIC - Session 3C
Biocatalysis for bioresource transformation - I Chair: Tom Desmet, Ghent University, BE	Bioproducts from woody biomass Chair: Andriy Sibiry, Institute of Cell Biology, NAS of Ukraine, UA	Chemical platform molecules - I Chair: Chris Stevens, Ghent University, BE	
09.00 – 09.30 Redox-biocatalysis for renewables exploitation Marko Mihovilovic, TU Wien, AT	09.00 – 09.30 Superior industrial yeast strains for efficient conversion of ligno-cellulosic biomass into bioethanol Johan Thevelein, University of Leuven, BE	09.00 – 09.30 Ultra-low cost ionic liquids for biorefining Agnieszka Brandt, Imperial College London, UK	
09.30 – 09.55 New biocatalysts and their application to lignocellulosic biomasses conversion and succinic acid production Vincenza Faraco, University of Naples Federico II, IT	09.30 – 09.55 Biodegradable functional lignin: Enzymatic functionalization of dissolved organosolv lignin with amino and catechol groups with solely substrates and catalysts Charlotte Capitain, University of Kaiserslautern, DE	09.30 – 09.55 Xylolic acid from hemicellulose hydrolysates Thomas Hahn, Fraunhofer IGB, DE	
09.55 – 10.20 Flavors from wastes: Upgrading crude glycerol to ethyl valerate Ramon Ganigüé, Ghent University, BE	09.55 – 10.20 A techno-economic assessment for dilute acid hydrolysis of raw birch wood for the production of C₅ sugars Jai Lad, Aston University, UK	09.55 – 10.20 Eccatalysis: A new approach in the synthesis of chemical platform molecules Tomasz Olszewski, Wrocław University of Science and Technology, PL	
10.20 – 10.30 Optimization of process conditions for efficient saccharification of cellulose by LPMO-containing cellulase preparations Piotr Chylenski, Norwegian University of Life Sciences, NO	10.20 – 10.30 Pretreatment effect on anthocyanin extraction kinetics from different wine lees Rut Romero-Díez, University of Valladolid, ES	10.20 – 10.30 Chemicals from slow pyrolysis oil of short rotation salix biomass Suvi Kuittinen, University of Eastern Finland, FI	
10.30 - 11.15 Coffee Break and Exhibition			Lobby

11.15 - 12.45 Parallel sessions

Aula - Session 4A		Room IVC - Session 4B	Room IIIC - Session 4C
Pretreatment and transformation of lignocelluloses Chair: Jyrí-Pekka Mikkola, Åbo Akademi University, FI	Bioenergy II Chair: Joanna Kawa-Rygierska, WUELIS, PL	Single cell oil production Chair: Adam Dobrowski, WUELIS, PL	
11.15 – 11.45 Innovative pre-treatment: Sustainable paths to reach biorefinery concept Rafal M. Lukasik, National Laboratory of Energy and Geology, PT	11.15 – 11.45 Integration of 1st and 2nd generation ethanol plants using filamentous fungi Mohammad J. Taherzadeh, University of Borås, SE	11.15 – 11.45 Tools for engineering lipid production and expanding the substrate range of <i>Yarrowia lipolytica</i> Jean-Marc Nicaud, INRA-MICALIS Center, Jouy-en-Josas, FR	
11.45 – 12.10 Residual lignocellulosic biomass fractionation from a biorefinery processing perspective Antonio D. Moreno, CIEMAT, ES	11.45 – 12.10 An integrated catalytic process for production of 2,5-dimethylfuran from fructose Dong Won Hwang, Korea Research Institute of Chemical Technology, KR	11.45 – 12.10 Current challenges in microbial oil production by the yeast <i>S. occidentalis</i> Ric'hèle Wind, HAN BioCentre, NL	
12.10 – 12.35 Cardoom dilute acid hydrolysates fermentation for 2nd generation bioethanol production Ana M.R.B. Xavier, Universidade de Aveiro, PT	12.10 – 12.35 Biosyncrudes from lignocellulose Klaus Raffelt, Karlsruhe Institute of Technology, DE	12.10 – 12.35 Production of medium-chain fatty acids and aliphatic hydrocarbons in <i>Saccharomyces cerevisiae</i> Zhiwei Zhu, Chalmers University of Technology, SE	
12.35 – 12.45 Cellulosic ethanol production comparing sugarcane bagasse and <i>Eucalyptus urograndis</i> Luana Marcele Chiarello, Federal University of Paraná (UFPR), BR	12.35 – 12.45 Biomethanation of biomass-derived syngas by enriched microbial consortia Antonio Grimalt-Alemany, The Technical University of Denmark, DK	12.35 – 12.45 Biomass and polyunsaturated fatty acids production by <i>Nannochloropsis</i> strains cultivated on fish farm effluents Marianna Dourou, University of Patras, GR	

12.45 - 13.30 Lunch in the canteen (1st floor) followed by coffee in the lobby (ground floor)

13.30 - 14.30 **Poster Tour 1**

Lobby

Aula - Session 5A		Room IVC - Session 5B	Room IIIC - Session 5C
Biocatalysis for bioresource transformation - II Chair: Tom Desmet, Ghent University, BE	Thermocochemical transformations of biomass Chair: Thierry Talou, University of Toulouse, FR	Environmental protection using micro-organisms Chair: Włodzimierz Grajek, Poznań University of Life Sciences, PL	
14.30 – 15.00 Transformation of glycerol into glycerol carbonate/glycidol based on biocatalysis in non-conventional media Madalina Tudorache, University of Bucharest, RO	14.30 – 15.00 Twin-screw extrusion: A key technology for the biorefinery of renewable resources Antoine Rouilly, University of Toulouse, FR	14.30 – 15.00 Potential application of bacteriophages against ESBL/AmpC <i>E. coli</i> in food safety Aneta Skaradzińska, Wrocław University of Environmental and Life Sciences, PL	
15.00 – 15.25 Continuous production of pectic oligosaccharides from onion skins with an enzyme membrane reactor Kathy Elst, Flemish Institute for Technological Research, BE	15.00 – 15.25 Reliable Bio-based Refinery Intermediates – BioMates Volker Heil, Fraunhofer UMSICHT, DE	15.00 – 15.25 Biosorption of heavy metals from aqueous solutions using fucopol, an exopolysaccharide synthesized by <i>Enterobacter A47</i> Filomena Freitas, Universidade Nova de Lisboa, PT	
15.25 – 15.50 High-level production of raw starch digesting α-amylase from a niche source in efficient expression platform – <i>Yarrowia lipolytica</i> Ewelina Celińska, Poznań University of Life Sciences, PL	15.25 – 15.50 Molecular mapping of the biomass fast pyrolysis: Identification of its major conversion routes Marion Carrier, Aston University, UK	15.25 – 15.50 The efficiency of aerobic biodegradation and decolorization of sugar beet distillery stillage with using mixed culture of bacteria of the genus bacillus Krzysztof Lutosławski, Wrocław University of Economics, PL	
15.50 – 16.15 Coffee Break and Exhibition			
16.15 – 16.45 Keynote Lecture 2 Chair: Adam Dobrowolski, WUELS, PL			
The bioeconomy: The challenge of the century for policymakers James Philip, Directorate for Science, Technology and Innovation, OECD, Paris, FR			

16.45 - 18.15 Parallel sessions

Aula - Session 6A		Room IVC - Session 6B	Room IIIC - Session 6C
Biorefineries - I Chair: Avtar Matharu, University of York, UK	Chemical platform molecules -II Chair: Chris Stevens, Ghent University, BE	Sustainability Chair: Guido A Reinhardt, IFEU-Institute for Energy and Environmental Research Heidelberg, DE	
16.45 – 17.15 Guayule pyrolysis biorefining Akwasii A. Boateng, United States Dept. of Agriculture, USA	16.45 – 17.15 Modulating the redox household of <i>Lactobacillus diolivorans</i> by the carbon feed Michael Sauer, BOKU, AT	16.45 – 17.15 Pros and cons for renewable resources used in green chemical product design Dana Kralisch, University of Jena, DE	
17.15 – 17.40 Rapid, sensitive and automatable colorimetric assays for cellulase and xylanase Claudio Cornaggia, Megazyme, Bray, IE	17.15 – 17.40 Metal removal from waste- and groundwater by chitosan derivatives Stein Mincke, Ghent University, BE	17.15 – 17.40 Assessing the sustainability of biobased economy – Results from a technology foresight exercise Emmanuel Koukios, Institute for Sustainable Technologies – NRI, GR	
17.40 – 18.05 Bioethanol production from steam-exploited wheat straw and valorization of the lignin residue through a biorefinery approach Elia Tomás-Pejó, IMDEA Energy Institute, ES	17.40 – 18.05 Maximization of monomeric C5 sugars from wheat bran using ruthenium-supported catalysts Nuria Sánchez-Bastardo, University of Valladolid, ES	17.40 – 18.05 First phosphorus fertilizer recovery facility in municipal plant in Spain Angela Mañas, Veolia Water Systems Iberica, ES	
18.05 – 18.15 Influence of the development stage of the plant biomass for protein yield in a green biorefinery Maria Santamaría-Fernandez, Aalborg University, DK	18.05 – 18.15 Extraction, characterization and evaluation of pyrolytic lignin from beech wood bio-oil for application as a bio-based raw material Caroline Carriel Schmitt, Institute of Microstructure Technology, DE	18.05 – 18.15 Novel co-production process for the synthesis of ethyl acetate and buryl acetate using ion exchange resins Nydia Ileana Guzmán-Barrera, Université de Toulouse, FR	
19.30 Conference Dinner and Networking Event at the Zoological Gardens (see page 100)			

09.00 - 10.30 Parallel sessions

Aula - Session 7A		Room IVC - Session 7B	Room IIIC - Session 7C
Biorefineries – II Chair: Edmund Cibis, Wrocław Economist University, PL	Downstream processing Chair: Erick Vandamme, Ghent University, BE	Valorisation of biomass waste streams – II Chair: Juan Serna, University of Valladolid, ES	
09.00 – 09.30 Biomass to building blocks of fuels and chemicals – From pretreatment, detoxification, hydrolysis to products Jyri-Pekka Mikkola, Umeå University, SE	09.00 – 09.30 Enhanced downstream processing of biofuels Tony Kiss, AkzoNobel & University of Twente, NL	09.00 – 09.30 Environmentally friendly enzymatic processes for the valorization of waste of leather industry Stefano Sforza, University of Parma, IT	
09.30 – 09.55 Enrichment strategies for polyhydroxyalkanoates (PHA) production from fermented crude glycerol using microbial mixed cultures Anna Burniol-Figols, Denmark Technical University, DK	09.30 – 09.55 Entowaste – Valorisation of agri-food wastes with insect technologies Sergiy Smetana, German Institute of Food Technologies, DE	09.30 – 09.55 Feedstock tolerance of the lactic acid fermentation using agri-food residues Joachim Venus, Leibniz Institute for Agricultural Engineering and Bioeconomy, DE	
09.55 – 10.20 Lignin valorization - Techno-economic analysis of three lignin conversion routes Iris Vural Gursel, Utrecht University, NL	09.55 – 10.20 A novel approach towards the efficient recovery and purification of biobutanol: Vapor phase adsorption by combining shape-selective zeolites Benjamin Claessens, Vrije Universiteit Brussel, BE	09.55 – 10.20 Xylose: An underexplored carbon source for Burkholderia sacchari Maria Teresa Cesário, IBB-Institute of Bioengineering and Biosciences, PT	
10.20 – 10.30 Biorefinery approach towards a sustainable utilization of rice straw Chantelle Sikhom, University of York, UK	10.20 – 10.30 Experimental design used to optimize molecular distillation processes for lactic acid purification from fermented hemicellulosic liquor Regiane Alves de Oliveira, University of Campinas, Campinas, BR	10.20 – 10.30 Bio-process development for the production of succinic acid from sugar beet pulp derived hydrolysates Maria Alexandri, Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB), DE	
10.30 – 11.30 Coffee Break, Exhibition & Poster Session 2			

11.30 - 13.00 Parallel sessions

Aula - Session 8A		Room IVC - Session 8B	Room IIIC - Session 8C
Metabolic engineering of cell factories Chair: Aleksandra Mironczuk – UP Wrocław, PL	Cyanobacterial and algal technology Chair: Erick Vandamme, Ghent University, BE	Biosurfactants Chair: Wim Soetaert, Ghent University, BE	
11.30 – 12.00 Metabolic engineering of yeast cell factories for sustainable chemicals Irina Borodina, Technical University of Denmark, DK	11.30 – 12.00 Microalgal protein biorefinery Carl Safi, Wageningen University & Research, NL	11.30 – 12.00 Microbial biosurfactants, from lab to market: Hurdles and how to take them Sophie Roelants, Bio Base Europe Pilot Plant & Ghent University, BE	
12.00 – 12.25 Molecular background of cell wall rearrangement after pathogen infection in flax Jan Szopa-Skórkowski, University of Wrocław, PL	12.00 – 12.25 LCA of algae based biorefineries: Actual state of the art worldwide and perspectives Guido A Reinhardt, IFEU-Institute for Energy and Environmental Research Heidelberg, DE	12.00 – 12.25 Lichenysin production and application in the pharmaceutical field Jonathan Coronel León, Escuela Superior Politécnica del Litoral, EC	
12.25 – 12.50 Metabolic engineering of non-conventional yeasts for improvement of ethanol synthesis from xylose and glycerol Andriy Sibiry, Institute of Cell Biology, National Academy of Science, UA	12.25 – 12.50 Challenges in the isolation of carbohydrates from seaweeds Jelle van Leeuwen, Wageningen Food and Biobased Research, NL	12.25 – 12.50 MARISURF – Novel, sustainable marine biosurfactant/bio-emulsifiers for commercial exploitation: An overview on Horizon 2020 project Karina Salek, Heriot-Watt University, UK	
12.50 – 13.00 Metabolic engineering of <i>Yarrowia lipolytica</i> enhancing the production of value-added compounds from glycerol Dorota A. Rzechornek, Wrocław University of Environmental and Life Sciences, PL	12.50 – 13.00 Understanding the role of microalgae proteins on anaerobic digestion Cristina Gonzalez-Fernandez, IMDEA Energy, ES	12.50 – 13.00 Integrated fermentation and separation of insoluble bioproducts Ben Dolman, The University of Manchester, UK	
13.00– 13.15 Closing remarks and presentation of RBB-14 Philippe Tavernier, Development Agency of West Flanders (POM), BE			
13.15 Farewell Lunch in the canteen (1 st floor)			

Aula
13th International Conference on Renewable Resources and Biorefineries, Wrocław - Poland, 7 - 9 June 2017
13th International Conference on Renewable Resources and Biorefineries, Wrocław - Poland, 7 - 9 June 2017



Poster List – Poster Tour 1



Bioactive compounds from biomass

- P1 **Asian pumpkin as an attractive source of proteolytic enzyme**
Anna Dąbrowska, M. Szołtysik, K. Babij, J. Chrzanowska (PL)
- P2 **Characterization of erythrose reductase from *Yarrowia lipolytica* and its influence on erythritol synthesis**
Tomasz Janek, A. Dobrowolski, A. Biegalska, A. Mirończuk (PL)
- P3 **Application of natural deep eutectic solvents on fish canning biomass valorisation**
Liliana Rodrigues, R. Craveiro, F. Mano, A. Alexandre, A. Paiva, A.A. Matias (PT)
- P4 **Exploring the potential of microwave extraction on the residues of *Arbutus unedo* distillate production: A biorefinery approach**
Agostinho Alexandre, L. Rodrigues, A. Matias, C.M.M. Duarte, M.J. Cocero, M.R. Bronze (PT & ES)
- P5 **Biorefinery of chia seeds: A novel approach for dual production of virgin vegetable oil and proteinated powder**
Bouchra Sayed Ahmad, O. Merah, Z. Kruma, E. Straumite, M. Sabovics, A. Hijazi, Z. Saad,
Thierry Talou (FR, LB & LV)
- P6 **ATOC-refinery: Cumin and caraway seeds for dual production of flavored vegetable oil and flavored flour**
Bouchra Sayed Ahmad, O. Merah, Z. Kruma, E. Straumite, M. Sabovics, A. Hijazi, Z. Saad,
Thierry Talou (FR, LB & LV)
- P7 **Adhesive properties of medium chain length polyhydroxyalkanoates from *P. chlororaphis* for medical applications**
João Ricardo Pereira, D. Araujo, V.D. Alves, F. Freitas, M.A.M. Reis (PT)

Biobased materials

- P8 **Tolerance to adipic acid for future microbial cell factories: *Candida vishwanatii* vs. *Saccharomyces cerevisiae***
Emma Karlsson, T. Ferone, V. Mapellia, L. Olsson (SE & IT)
- P9 **Polylactide and polyhydroksyalkanoate composites with controlled degradation**
Ewelina Niedzielska, A. Masek, M. Zaborski (PL)

Biocatalysis for bioresource transformation

- P10 **Biological production of 2,5-furandicarboxylic acid: Cell-free, and whole-cell biotransformation**
Tien-Yang Ma, W.L. Tu, G.L. Guo, W.S. Hwang (TW)
- P11 **Continuous production of pectic oligosaccharides from onion skins with an enzyme membrane reactor**
Kathy Elst, S. Baldassarre, N. Babbar, S. Van Roy, W. Dejonghe, M. Maesen, S. Sforza (BE & IT)
- P12 **Lignite biodegradation by a novel laccase**
Natalia Kwiatos, B. Strzelecki, A. Krzemińska, S. Bielecki (PL)
- P13 **Magnetic nanoparticles as reusable carrier for enzyme immobilization**
Ana M.R.B. Xavier, A.P.M. Tavares, A. Daniel-da-Silva, C. Fortes (PT)
- P14 **Idase activity of laccase-like multicopper oxidases from bacterial lignin degraders**
Rommel Santiago Granda Travez, T.D.H. Bugg (UK)

Bioenergy

- P15 **Optimization of biodiesel production from *Ceiba pentandra* oil using lipase reaction**
B. Norjannah, Hwai Chyuan Ong, H.H. Masjuki, F. Kusumo (MY)
- P16 **Integrated solution of valorization of forest residues**
M. Cristina Fernandes, C.P. Nunes (PT)
- P17 **Energy efficiency of short rotation woody crops biomass production**
Mariusz J. Stolarski, M. Krzyżaniak (PL)
- Biomass fractionation**
- P18 **Insights into the cleavage of the inter- and intra- molecular linkages in pubescens in γ-valerolactone/water for its fullest utilization**
Changwei Hu, Y. P. Luo, Z. Li (CN)
- P19 **Promoting effect of tetrahydrofuran on the solubilization and depolymerization of cellulose in NaCl-H₂O-tetrahydrofuran system**
Zhicheng Jiang, P. Zhao, J. Li, X. Liu, C. Hu (CN)
- P20 **Hemicellulose hydrothermal extraction yield estimation from thermal degradation data**
Alvaro Cabeza, G. Gallina, F. Sobrón, J. García-Serna (ES)
- P21 **Effect of solvent on the cleavage of inter- and intra-molecular linkages of lignin in corncob residue**
Hui Zhang, Z. Jiang, J. Li, C. Hu (CN)
- P22 **Biorefinery of insects to high-added value products: Evaluation of fractionation procedures**
Stefano Sforza, L. Soetemans, M. Uyttebroek, L. Bastiaens (BE & IT)
- P23 **Beer dealcoholization by lyophilization study on the ethanol content and aroma compounds**
Cristina Andrés-Iglesias, J. García-Serna, C.A. Blanco (ES)

Bioproducts from woody biomass

- P24 **BIOFOREVER project for the conversion of woody biomass to chemicals**
Adriana Contin, H. Kroon, L. Bevers, Y. Zha, C. Villa-Sanin, P. Yousefzadeh-Faal-Deghati, A. Janse, T. Zijlmans, W. van Winden, A. Happel (NL)

Biorefineries

- P25 **Malic acid production from alternative carbon sources by *Aspergillus oryzae***
Vanessa Schmitt, S. Dörsam, C. Syldatk, K. Ochsenreither (DE)
- P26 **Continuous enzymatic hydrolysis of sugar beet pectin for the recovery of L-arabinose within a biorefinery context**
Max Cardenas-Fernandez, C.E.M. Bennett, D.J. Leak, G.J. Lye (UK)
- P27 **Simulation of the rate of disintegration of microalgae during bead milling**
Edgar Suarez Garcia, C. Lo, C. van den Berg, M. Eppink, R. Wijffels (NL & NO)
- P28 **Exploitation of industrial glycerol and glucose for arabitol production by the yeast *Debaryomyces hansenii***
Rosanina Filippousi, K. Philipp, A.A. Koutinas, S. Papanikolaou (GR)
- P29 **Optimization of biotechnological production of 2,3-butanediol using a newly isolated *Enterobacter* sp. strain**
Anastasia – Marina Palaiogeorgou, S. Papanikolaou, A. Koutinas (GR)



- P30 Screening of bacterial strains capable of converting sucrose into 2,3-butanediol and optimization of 2,3-butanediol production by *Klebsiella oxytoca* FMCC-197
Anastasia – Marina Palaiogeorgou, A. Koutinas, V. Liakou, E. I. Michael Delopoulos, S. Papanikolaou (GR)
- P31 Biorefinery of amaranth seeds: A source of vegetal squalene/squalane and vegetal oil for cosmetics
Bouchra Sayed Ahmad, O. Merah, M. Urrutigoity, A. Hijazi, Z. Saad, Thierry Talou (FR & LB)
- P32 LCA: 40 years of research in agroresources chemistry
Thierry Talou, Gérard Vilarem, L. Rigal, C. VacaGarcia, E. Borredon, A. Gaset (FR)

Poster List – Poster Tour 2

Biosurfactants

- P33 Integrated fermentation and separation of insoluble bioproducts
Ben Dolman, J.B. Winterburn (UK)

Chemical platform molecules

- P34 Enhanced α- ketoglutaric acid production in *Yarrowia lipolytica* on media containing plant oil
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