Sunday 22th

18:00 Welcome cocktail

Monday 23th

09:20 – 09:30 Opening: Alex Berg, Chairman of the Organizing Committee
09:30 – 10:15 Plenary session: Piergiuseppe Morone, University of Rome, Italy
Taking the transition towards a biobased economy
10:15 – 10:45 Coffee break

Economic, environmental and social sustainability

10:45 – 11:20 Keynote Speaker
Orlando Rojas, Aalto University, Finland
Title TBA

11:20 – 11:40 Full mill model for dissolving pulp based biorefinery
Karin Lindgren, Innventia, Sweden

11:40 – 12:00 Techno-economical feasibility assessment of butanol production from lignocellulosic biomass
Julian Quintero, Pontificia Catholic University of Valparaiso, Chile

12:00 – 12:20 Lignocellulosic biofuels co-production and co-generation using integrated biorefineries. A solution to the treatment of agro-industrial wastes
Arturo Sanchez Carmona, National Polytechnic Institute - IPN, Mexico

12:20 – 12:40 Contribution of Chemurgy to the Advancement of Biorefinery in the context of Circular Economy - a Polish Perspective
Janusz Golaszewski, University of Warmia and Mazury in Olszty, Poland

12:40 – 13:40 Lunch

13:40 – 14:15 Keynote Speaker
Ronalds Gonzalez, NC State University, USA
Challenges and Opportunities in the Bio-refinery Economy

14:15 – 14:35 Systemic vision of Biorefineries linked to the production of food and energy
Jorge Antonio Hilbert, National Agricultural Technology Institute - INTA, Argentina

14:35 – 14:55 Productivity and costs of two low-investment biomass harvesting systems applied in a situation of mixed forest of semi-natural origin
Patricio Carey, Austral University of Chile - UACH, Chile

14:55 – 15:15 Assessment of supply chains for pre-treatment of forest residues in Chile
Tobias Zimmer, Karlsruhe Institute of Technology - KIT, Germany

15:15 – 15:35 Kinetic model for the oxidation of hazardous compounds in an industrial effluent from forest biomass processing
Fernando E. Felissia, National University of Misiones - UNaM, Argentina

15:35 – 16:05 Coffee Break

Chemical Conversion

Keynote Speaker
Franck Dumeignil, University of Lille, France
EuroBioRef: Designing next generation biorefineries

2G Bioethanol Biorefinery using sugarcane lignocellulosic biomass residues
Francisco Girio, National Laboratory of Energy and Geology - LNEG, Portugal
Where are we with green Biorefineries?
Rafal Lukasik, National Laboratory of Energy and Geology - LNEG, Portugal
Conversion of inulin-containing and lignocellulosic biomass to the platform chemical 5-hydroxymethylfurfural in water
David Steinbach, Karlsruhe Institute of Technology - KIT, Germany

Lipid extraction from Chlorella vulgaris using electromagnetic field
Catalina Bernal Lopez, University of Valle, Colombia
Bioethanol

16:05 – 16:40 Keynote Speaker
Valdeir Arantes, University of Sao Paulo, Brazil
The potential for the fractionation of lignocellulose for integrated production of biofuel and value-added products: A case of bioethanol, food additives and nanocellulose

16:40 – 17:00 Improvement of the lignocellulose hydrolysis by use of auxiliary enzymes
Oriana Salazar, University of Chile, Chile

17:00 – 17:20 The influence of sono-assisted alkaline pretreatment of sugarcane bagasse in enzymatic hydrolysis for cellulose ethanol production
Luiz Pereira Ramos, Federal University of Parana, Brazil

17:20 – 17:40 Comparison between microwave and conduction-convexion heating for autohydrolysis processing in the production of high-value compounds and substrates for biofuel under the biorefinery concept
Héctor A. Ruiz, Autonomus University of Coahuila, Mexico

17:40 – 18:00 Different strategies for lignocellulose sugars conversion into ethanol from phosphoric acid steam exploded olive tree pruning
Mercedes Ballesteros, Centre for Energy, Environment and Technology - CIEMAT, Spain

Thermochemical Conversion

Keynote Speaker
Jaap Kiel, University of Twente, The Netherlands
The role of thermochemical conversion in biorefinery concepts: not just combustion

16:40 – 17:00 Effects of biomass source on the composition and reactivity of thermochemical reaction products
Steve Kelley, North Carolina State University, USA

17:00 – 17:20 Upgrading of low-grade biogenic feedstock by innovative screw pyrolysis
Marco Tomas Morano, Karlsruhe Institute of Technology - KIT, Germany

17:20 – 17:40 Pyrolysis of mixtures of concentrated spent pulping liquor and sodium formate to produce a phenolic bio-oil
Adriaan van Hingen, University of Maine, USA

17:40 – 18:00 Selective production of formic acid from aqueous phase bio-oil by catalytic oxidation using heteropoly acids (for bio-oil hydrodeoxygenation)
Mauricio Escobar, Technological Development Unit - UDT, Chile

Tuesday 24th

9:00 – 9:20 Second generation bioethanol from Eucalyptus globules labill and Nothofagus pumilio using ionic liquids
Maria Cristina Ravanal Espinosa, University of Chile, Chile

9:20 – 9:40 Ethanol production from CMC and Avicel using ethanologenic Escherichia coli expressing a novel endoglucanase
Inés Loaces, Biological Research Institute Clemente Stable - IIBCE, Uruguay

9:40 – 10:00 Catalytic hydrodeoxygenation of pyrolysis oil over nickel-based catalysts under H2/C02 atmosphere
Wolfgang Olbrich, Karlsruhe Institute of Technology - KIT, Germany

10:00 – 10:20 Concept for combined heat and power production from wood via gasification followed by catalytic gas cleaning
Tilm Schulte, Fraunhofer UMSICHT, Germany

10:20 – 11:00 The Bio-SCWG project: Integration of biomass supercritical water gasification with CHP units
Thomas Kohl, Aalto University, Finland

10:00 – 10:20 Sustainability analysis of lignocellulosic bioethanol production and electricity generation. Western Mexico case study
Arturo Sánchez, National Polytechnic Institute - IPN, Mexico

10:20 – 11:00 Activated biochar derived from agricultural residual biomass pretreated with alkaline agent
Luis Sebastian Romero-Hermoso Osorio, Scientific and Technological Bio-resource Nucleus - BIOREN, Chile
**Microalgae**

11:00 – 11:40  
Keynote Speaker  
Gabriel Acién, University of Almería, Spain  
Integral utilization of microalgae: Production of biofertilizers

11:40 – 12:00  
Chilean Technological Consortium “Desert Bioenergy S.A.”  
Laura Azócar, Scientific and Technological Bio-resource Nucleus - BIOREN, Chile

12:00 – 12:20  
Multi-scenario economic evaluation for a biorefinery based on microalgae biomass with application of anaerobic digestion  
Cristian P. Bravo-Fritz, Pontifical Catholic University of Chile, Chile

12:20 – 12:40  
High pressure biomass conversion processes for biofuels and chemicals production  
Pablo E. Hegel, National Council of Scientific and Technical Research - CONICET, Argentina

12:40 – 13:00  
Energy recovery through the anaerobic digestion of the residual microalgae biomass from a biodiesel production process  
Alvaro Torres, Scientific and Technological Bio-resource Nucleus - BIOREN, Chile

13:00 – 14:00  
Lunch

14:00 – 14:20  
Evaluation of technical feasibility of biogas upgrading using microalgae  
Leslie Meier Figueroa, Scientific and Technological Bio-resource Nucleus - BIOREN, Chile

14:20 – 14:40  
Production of PHB production from glycerol waste by B. xenovorans LB400  
Pamela Villegas Pizarro, Federico Santa María Technical University - UTFSM, Chile

14:40 – 15:00  
Medium chain length production by *Pseudomonas fluorescens* and unrelated carbon source  
Diana Marcela Vanegas Hernández, Pontificia Bolivariana University, Colombia

15:00 – 15:20  
Life cycle assessment of biomethane from waste water algae: The Ali-Gas approach  
Daniel Maga, Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT, Germany

15:20 – 16:00  
Coffee Break

16:00 – 18:00  
Poster presentation

20:00  
Official dinner

**Cellulose fibers and microfibers**

Keynote Speaker  
Gary Chinga-Carrasco, Paper and Fibre Research Institute - PFI, Norway  
Kraft pulps from Eucalyptus and Pinus radiata - raw materials for nanocellulose production and novel bio-applications

Comparative analysis of commercial cellulases cocktails for the production of nanocrystalline cellulose  
Germano Andrade Siqueira, University of Sao Paulo, Brazil

Biocomposites from microfibrillated cellulose and biodegradable polymers  
Patricia Eisenberg, National Institute of Technology - INTI, Argentina

TBA  
Miguel Pereira, University of Concepcion, Chile

Biomass valorisation by heterogeneous catalysis: Ethylene glycol production via hydrolysis of cellulose using Pd-WXC/C catalyst  
Antonio Aprigio da Silva Curvelo, Universidade de Sao Paulo, Brazil

Affibody functionalized bacterial cellulose tubes for bioseparation applications  
Ilari Filpponen, Aalto University, Finland

A comparative study of CNF production by different desintegration equipment: Reinforcement potential and production cost  
Quim Tarrés, University of Girona, Spain

The role of ligno-nanocellulosics in the biorefinery concept  
Maria Soledad Peresin, VTT, Finland
Wednesday 25th

**Natural polyphenols**

9:00 – 9:40 Keynote Speaker
Antje Potthast, University of Natural Resources and Life Sciences - BOKU, Austria
Analyzing biorefinery product streams - challenges, requirements and (some) solutions

9:40 – 10:00 Mild chemical modification of acetosolv lignin from several Chilean sources
Danny Eugenio García Marrero, Technological Development Unit - UDT, Chile

10:00 – 10:20 Use of organosolv lignin modified by alkaline catalyst in adhesive resins: Evaluation of the behavior
Marcela Norambuena, Biotechnology Center, Chile

10:20 – 10:40

**Carbohydrates and cellulosic fibers applications**

9:00 – 9:40 Keynote Speaker
Frank Miletzky, Papiertechnische Stiftung, Germany
Between two stools: the paper industry in a change

9:40 – 10:00 Ethanol-water fractionation of wheat straw and saccharification of the cellulosic residue
Juan Carlos Villar, National Research Institute and Agricultural and Food Technology - INIA, Spain

10:00 – 10:20 Determination of hemicellulose extraction conditions from alkaline-sulfite pretreated sugar cane bagasse with a crude enzymatic extract from Bacillus pumilus
Maiara Paparele dos Santos, Universidade de São Paulo, Brazil

10:20 – 10:40 Addition Of Poly-Electrolytes On Recycled Fiber For Paper Sheet Formation
José Turrado Saucedo, University of Guadalajara, Mexico

10:40 – 11:20 Coffee break

11:20 – 11:40 Biodegradable films formed by polyelectrolyte complexes of xylan and chitosan
Paulina Mocchiutti, National University of Litoral, Argentina

11:40 – 12:00 The potential of cork-containing barks for biorefineries: structural and chemical features, fractionation and conversion routes for materials and chemicals
Helena Pereira, University of Lisbon, Portugal

12:00 – 12:20 Biodegradable films formed by polyelectrolyte complexes of xylan and chitosan
Paulina Mocchiutti, National University of Litoral, Argentina

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