

Program (July 23rd 2018) Hotel Sheraton Montevideo

### MONDAY SEPTEMBER 10

9:00 a.m. - 8:00 p.m. REGISTRATION

9:00 p.m. DINNER (at Ballroom)

### TUESDAY SEPTEMBER 11

8:00 a.m. REGISTRATION

9:00 a.m. PLENARY SESSION (Ballroom)

Opening words : Acad. Eng. Lucio Cáceres – ANIU

**“The Economics and Politics of the Post-Financial Crisis Global Geography. With special focus in Latin America”**  
Dr. Ec. Ernesto Talvi – CERES, Uruguay

10:30 a.m. - 11:00 a.m. COFFEE BREAK

**General South American trends in Bioeconomy**  
Agr. Eng. Luis Augusto Barbosa Cortez - Campinas University, Brazil

**“Who needs more plantations?”: it would discuss the dynamics of world markets for “traditional products” as well as the “emerging products & services of the bioeconomy”**  
For. Eng. MBA. Joao Cordeiro – Biorefining & Pulp Practice Area at Pöyry Management Consulting in Helsinki.

12:30 p.m. LUNCH (Ballroom)

1:30 p.m. PARALLEL SESSIONS

ROOM 1 (Ballroom)	ROOM 2 (25th floor)	ROOM 3 (25th floor)
<p><b>Forest plantations and sustainability</b> Chairman Acad. Eng. Rosario Pou Ferrari</p> <p><b>The role of Forest Plantations in supplying the World’s needs of wood and fibre and the development of industrial forest plantations in Uruguay</b> Acad. Eng. Maria del Rosario Pou Ferrari</p> <p><b>Sustainability of eucalyptus wood production in Uruguay</b> Eng. For. Diego Carrau, Eng. For. PhD Ricardo Methol, Eng. For. Msc. Juan Pedro Posse</p>	<p><b>Engineered Wood Materials (EWM) as high-value biomaterials</b> Chairman: Agr. Eng. Dr. Andrés Dieste</p> <p><b>"Supertall Timber: Functional Natural Materials for High Rise Structures".</b> Dr. Michael Ramage - Dept. of Architecture, University of Cambridge</p> <p><b>“Wood in Civil Engineering, advantages and new technologies”</b> Dr. Carlito Calil Jr., Prof. Of the Dept. of Structural Engineering, School of Engineering, University of Sao Paulo, Brazil.</p>	<p><b>Agriculture and sustainability</b> Chairman: Agr. Eng. PhD. Mario Allegri Association of Agronomic Engineers VicePresident</p> <p><b>"Sustainable Agriculture: a global challenge"</b> Agr. Eng. PhD Walter Baethgen IRI at the Earth Institute Columbia University (USA)</p> <p><b>“Land-use change, extreme climatic events and agricultural sustainability”</b> Agr.Eng. PhD Ernesto Viglizzo. CONICET, Academia Nacional de Agronomía y Veterinaria (Argentina). Advisor for agricultural companies in Argentina and Mercosur.</p>

3:30 p.m. - 4:00 p.m. COFFEE BREAK

<p><b>Eucalyptus genetic improvement in the world and sustainability: the example of Brazil</b> Eng. For. Msc Teótonio de Assis</p> <p><b>Sustainability of Plantation wood production in South East Asia</b> Bsc. Phd Christopher Harwood</p> <p><b>The future of South American plantation forestry sector</b></p> <p style="text-align: center;"><b>Panel - conclusions</b></p>	<p><b>“Natural adhesives in the wood industry”</b> Dr. Bruno Gorrini - Bioforest Arauco, Chile</p> <p><b>“Wood Industry challenge for Engineered Wood materials production”</b> Eng. MBA. Francisco Lozano, Arauco</p> <p style="text-align: center;"><b>Project OPP VTT</b> <b>"Bioeconomy in Uruguay"</b></p> <p style="text-align: center;"><b>Panel - conclusions</b></p>	<p><b>"Improving productivity and environmental stewardship: a comprehensive agroecosystemic approach"</b> Agr. Eng. PhD. Armen Kemanian Professor University of Pennsylvania (USA)</p> <p><b>"First step to design sustainable agricultural systems: how to measure sustainability"</b> Agr. Eng. Dr. Sebastián Mazzilli. School of Agriculture, UdelaR (ROU)</p> <p><b>"Agriculture and forests facing climate change. How to reconcile adaptation and mitigation?"</b> Jean-Marc Guehl. UMR Silva, INRA, Université de Lorraine, AgroParisTech, Nancy, France</p> <p style="text-align: center;"><b>Summary Panel</b></p>
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7:00 p.m. Panel - conclusions

WEDNESDAY SEPTEMBER 12

8:00 a.m.

PARALLEL SESSIONS

ROOM 1 (Ballroom)

**Soil and Water sustainability under Agricultural and Plantations forestry use.**  
Chairman Acad. Dr. Agr. Eng. Fernando García Préchac

**The Status of the World Soil Resources Report; main threats and recommendations.**  
Agr. Eng. Dr. Miguel Angel Taboada - INTA, Argentina, member of the Intergovernmental Technical Panel on Soils of the Global Soil Partnership de FAO.

**Regulations of Soil and Surface Water Conservation in Uruguay**  
Agr. Eng. Msci Mariana Hill, Uruguay.

ROOM 2 (25th floor)

**Chemical products from renewable sources**  
Chairman Acad. Eng. Norberto Cassella  
**“Conversion processes, biorefineries strategies for a sustainable bioeconomy”**  
Dr. Luiz Pereira Ramos - Chemistry Dept. Federal University of Parana, Brazil

**“Second generation biofuels in China”**  
Prof. Tao Zheng Guangzhou - Institute of Energy Conversion, Chinese Academy of Science  
**“Biomass based Biofuel Emerging biological engineering and technology challenges”**  
Prof. Purnendu Ghosh - INAE. Birla Institute of Scientific Research, Jaipur  
**“Energy and biomass sustainability”**  
Prof. Dr. Frank Behrendt - Berlin Institute of Technology (TU Berlin)

ROOM 3 (25th floor)

**Logistics and Information Technology**  
Chairman Acad. Eng. Luis María Rodríguez and Acad. Eng. Julio Fernández

**Logistics: an additional improvement or a fundamental pillar for the productive sustainability of Latin America**  
Msc Civil Eng Jorge Kogan – former Senior Advisor on Infrastructure at CAF, Development Bank of Latin America

**Balance between efficiency, resilience and sustainability of infrastructure for development**  
Economist Ricardo J Sanchez - Senior Economic Affairs Officer in the United Nations. Chief Economist for Infrastructure and Ports at CEPAL.

10:30 a.m.  
11:00 a.m.

COFFEE BREAK

**Effects of Plantation forestry on Hydrology of Watersheds in Uruguay**  
Agr. Eng. Dr. Luis Silveira - IMFIA-Fing-Udelar.

**Effects of Plantations forestry on soil physical and chemical properties in Uruguay.**  
Agr. Eng. Dr. Mario Pérez Bidegain and Agr. Eng. Dr. Jorge Hernández - Soils and Water Department, Fagro-Udelar.

Panel- Conclusions

**“Biorefining: Engineering, Science and Economics”**  
Dr. Michael Ladisch - Laboratory of Renewable Resources, Engineering, Purdue University

**“Developing sustainable feed ingredients from natural resources that are not suitable for direct human consumption”**  
Dr. Kari Kolstad - Biosciences, Norwegian University of Life Sciences.

**“Bioproducts from bioethanol plant”**  
Eng. W. Bisio, ALUR, Uruguay

Luc Lebel - Mikael Ronnqvist, Laval University, Canadá

1:00 p.m.  
2:00 p.m.

LUNCH (Ballroom)

2:00 p.m.

**Engineering Education for XXI**  
Chairman Jaime Domínguez

**Forest Engineering degree in Uruguay**  
Diego Passarella - Carlos Mantero - Fernando Ferreira - Gabriel Pisciotano - María Simón

**Curriculum development for architects and civil engineers in postgraduate studies**  
Laura Moya - Vanesa Baño

**“Four product platforms, improved pulp properties, regenerated cellulose, lignin and biobase chemicals”**  
Eng. Otavio Ponte - Veracel, Brazil

**“Adding value to Biomass in a sustainable way”**  
Eng. Eduardo F. Rodríguez Treskow - Celulosa Arauco, Chile

**Potential of Latin America in the production of lignin**  
Tarja Tamminen - Scientist VTT Technical Research Centre of Finland Ltd

**Sustainability and certification of forestry and industrial crops**

Chairman Acad. Eng. Edgardo Cardozo

**“Certification Programs applied to forestry plantations. A successful experience: the case of Chile”**  
For. Eng Dr. Hernán Cortes Salas, Chile

**“Certification Programs applied to forestry plantations and chain of custody: the case of Uruguay”**  
For. Eng. Dr. Gustavo A. Daniluk, School of Agriculture, Forestry Department, UdelaR

**“Panel with representatives from the different sectors involved in forestry: farmers, industry, official sector, certification companies and consumer representatives.”**

**“Good agriculture practices and commercial certification crops Certification Programs. The case of Soybean and B. carinata in Uruguay”**  
Agr. Eng. Natalia Marius, Uruguay. SGS, Uruguay Branch

4:00 p.m.  
4:30 p.m.

COFFEE BREAK

4:30 p.m.  
7:00 p.m.

PLENARY SESSION (Ballroom)

**Academy and Industry Synergies**  
Chairman Acad. Eng. Javier Solari

**Industry**

Msc Chem Eng Esa Laurinsilta – UPM Strategic Partnerships and Technology

**Academy**

Dr. Chem Eng Alex Berg – University of Concepcion Chile Technologic Development Unit

**Government and Public Policies**

Cr. Alvaro García – Director, Uruguay Planning and Budget Office

**Panel Academy, Industry and Government Synergies; discussion in respect of implementing circular economy.**

Ceremony Closing words: Acad. Ing. Lucio Cáceres – ANIU

8:30 a.m.

THURSDAY SEPTEMBER 13

**Additional technical activity in LATU. Transportation provided by LATU Meeting with local researchers in bioprocessing and wood engineering materials and Visit to pilot plant for biomass pretreatment.**

8:00 a.m.  
8:00 p.m.

FRIDAY SEPTEMBER 14

TOUR MONTES DEL PLATA PLANT AND COLONIA DE SACRAMENTO

POSTERS GALLERY  
Ballroom

AUTHORS	TITLE
Alejandro Benitez Garcia and Itagaki Naoyuki	Propiedades Mecánicas del Eucalyptus grandis H. del norte de Uruguay
Carmina Reyes Plascencia and Nestor Tancredi	Hydrothermal Liquefaction a pathway to produce woody biomass biofuels
Santiago L. Poggio and Alberto M. Peper	Exploring alternatives for sustainably intensifying cropping systems: a long-term experimental approach applied in the Pampas of Argentina
Diego Passarella, Carlos Mantero, Fernando Ferreira, Gabriel Pisciotano and María Simón	Forest Engineering degree in Uruguay
Mairan Guigou, Florencia Cebreiros, María Noel Cabrera, Leonardo Clavijo, Mauricio Vique, Juan Guarino, Melissa Bariani, Florencia Risso, Norberto Casella, Mario Daniel Ferrari and Claudia Lareo	Production of bioethanol from eucalyptus sawdust using different pretreatments in a biorefinery approach
Valeria Larnaudie, Mario Daniel Ferrari and Claudia Lareo	Sustainable production of ethanol from switchgrass in Uruguay
Bernardo Del Campo	Production of Activated Carbon from Fast and slow Pyrolysis Biochar
Magdalena Ripoll, Erienne Jackson and Lorena Betancor	Towards biodiesel biorefinery: glycerol valorization using immobilized bacteria
Leandro Cantera and Andrés Dieste	Thermal Modification of Wood: changes in the structural polymers of the cell wall of Eucalyptus grandis
Melissa Bariani, Elzeario Boix, María Noel Cabrera and Norberto Cassella	Furfural production from rice husk
Daniel Godoy and Vanesa Baño	Structural feasibility of CLT panels made from Uruguayan pine from small logs
Rodrigo Coniglio, Gonzalo Balbi, Camilo del Puerto and Carolina Spiess	Wood Adhesives: an alternative to fossil resins by using soy flour
María Noel Cabrera, Melissa Bariani, Elzeario Boix, Verónica Rodríguez Quinele, Martina Constantin and Norberto Cassella	Adding value to the Hemicelluloses of industrial Eucalyptus residues
Laura Moya and Vanesa Baño	Curriculum development for architects and civil engineers in posgraduate
Vanesa Baño and Laura Moya	Schematic proposal of a Strategic Plan in research to impulse the development of timber construction in Uruguay
Silvia Böthig, Fabiana Rey, Fernando Bonfiglio, Matías Cagno, Carlos Doune, Alvérico Banquerque, Carolina Noya and Nikolai Guchin	Center of research and development in second generation biofuels
Morgana de Medeiros Machado, Danielle Maass and Dachamir Hotza	Soil and water sustainability from biotransformation of mineral tailings
Fernando Bonfiglio, Fabiana Rey, Matías Cagno, Silvia Böthig, Pilar Menéndez and Solange I. Mussatto	Study of the Production of Bioethanol from Switchgrass pretreated by Steam