

## POSTERS

### **Development of Vertical Laminates Board from Bamboo for Interior House Application**

**Chawla, Vipin; Mohanty, B.N.**

IPIRTI, MOEF&CC, Government of India, India

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### **Effect of Coagulating Agents on Lignin and Sugar Contents in Acid Prehydrolysis Liquor Obtained in the Production of Dissolving Pulp from Poplar Residual Slabs**

**Wu, Chaojun**

Qilu University of Technology (Shandong Academy of Sciences), China, People's Republic of

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### **Carbon negative pulp industry**

**Onarheim, Kristin; Harlin, Ali; Arasto, Antti; Lehtonen, Juha**

VTT, Finland

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### **Real-time analysis of syngas quality for feedback control of torrefaction**

**Woytiuk, Kurt (1); Phoenix, Aaron (2); Evitts, Richard (2)**

1: FPInnovations, Canada; 2: University of Saskatchewan, Canada

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### **Wood fractionation and lignin valorization by prehydrolysis-alkaline cooking with phenols**

**Nonaka, Hiroshi; Okamura, Tsubasa; Hata, Tomoyuki**

Mie University, Japan

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### **Novel reaction systems and catalysts for producing aromatic hydrocarbons from lignin**

**Dey, Raju; Ghoreishi, Solmaz; Occhipinti, Giovanni; Jensen, Vidar R.; Le Roux, Erwan; Barth, Tanja**

University of Bergen, Norway

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### **Lignin Analytics: Variability, Challenges with the Methods, and Opportunities**

**Benali, Marzouk (1); Ajao, Olumoye (1); Jaaidi, Jawad (1); Restrepo, Andrea M. (2); El Mehdi,**

**Naima (2); Boumghar, Yacine (2)**

1: Natural Resources Canada, CanmetENERGY, Canada; 2: Centre d'études des procédés chimiques du Québec, Canada

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### **Electrospun lignin-based carbon fibers for energy storage application**

**Hosseinaei, Omid**

RISE Bioeconomy, Sweden

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### **Microwave-assisted conversion of pulp industry waste stream into levulinic acid**

**Lappalainen, Katja (1,2); Kuorikoski, Eveliina (2); Vanvyve, Elise (2); Dong, Yue (3); Rusanen, Annu (2); Niemelä, Matti (2); Kärkkäinen, Johanna (2)**

1: Kokkola University Consortium Chydenius, Finland; 2: University of Oulu, Research Unit of Sustainable Chemistry, Finland; 3: Centria University of Applied Sciences, Finland

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### **Preparation of cellulose-based conductive materials**

**Chu, Fuqiang; Cui, Bo; Zhang, Zhiwei**

Qilu University of Technology, China, People's Republic of

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### **Influence of solvent on microwave-assisted cellulose activation**

**Chowdhury, Mohammed; Budarin, Dr Vitaliy; Clark, Professor James**

Green Chemistry Centre of Excellence, Department of Chemistry, University of York. YO10 5DD. UK

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### **Alkaline pre-treatment for the production of bioethanol and xylan from eucalyptus pinchips.**

**Cabrera, Maria Noel; Guigou, Mairan; Guarino, Juan; Vique, Mauricio**

Universidad de la República - Engineering School, Chemical Engineering Institute, Uruguay

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### **Influence of lignosulfonate impurities on hemicellulose hydrogel properties**

**Al-Rudainy, Basel; Galbe, Mats; Wallberg, Ola**

Lund University, Sweden

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### **Enforced tannin-furanic based heterogeneous catalysts support materials.**

**Varila, Toni (1); Luukkonen, Tero (2); Romar, Henrik (3); Lassi, Ulla (1,3)**

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### **Totally bio-based, high-performance wood fibre biocomposites**

**Peltola, Heidi; Wikström, Lisa; Immonen, Kirsi; Rokkonen, Teijo; Sandquist, David**

VTT Technical Research Centre of Finland Ltd., Finland

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### **Novel processing technologies for cellulose-based electrical insulation components**

**Kangas, Heli**

VTT Technical Research Centre of Finland, Finland

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### **Biohydrogen from wood hemicellulose hydrolysate**

**Ahola, Juha (1); Aho, Atte (2); Rosales, Carlos (2); Kangas, Jani (1); Eränen, Kari (2); Salmi, Tapio (2); Murzin, Dmitry (2); Grénman, Henrik (2); Tanskanen, Juha (1)**

1: University of Oulu, Chemical Engineering, Finland; 2: Åbo Akademi University, Laboratory of Industrial Chemistry and Reaction Engineering

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### **Reuse of a hydrotropic solution for fractionation of hardwood mixtures**

**Olsson, Johanna; Galbe, Mats; Wallberg, Ola**

Lund University, Sweden

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### **Bioactive compounds extraction from forestry residues using ionic liquids with emphasis on solvents recycling**

**Lauberts, Maris; Dizhbite, Tatjana; Lauberte, Liga; Arshanitsa, Alexandr; Jurkjane, Vilhelmine; Jashina, Liliija; Telysheva, Galina**

Latvian State Institute of Wood Chemistry, Latvia

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### **A comparable study on analytical pyrolysis of silver birch (*Betula pendula*) and Norway spruce (*Picea abies*) sawdust**

**Ghalibaf, Maryam; Lehto, Joni; Alén, Raimo**

Department of Chemistry, Laboratory of Applied Chemistry, University of Jyväskylä, Finland

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### **Lignin purification from poplar hydrolysis rest: a sub-product from a bioethanol pilot plant**

**Svensson, Ingemar (1); Roncal, Tomás (2); Barrio, Aitor (1)**

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### **Enzymatic technology for lignin valorisation**

**Hämäläinen, Veera; Grönroos, Toni; Suonpää, Anu; Heikkilä, Matti; Romein, Bastiaan; Ihalainen, Petri; Birikh, Klara**

MetGen Oy, Finland

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### **Valuable furfural side stream from large scale pellet production - "Steam explosion of lignocellulosic biomass"**

**Løhre, Camilla (1); Barth, Tanja (1); Brusletto, Rune (2)**

1: University of Bergen, Norway; 2: Arbaflame AS

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### **New Bulk-Modified wood powder**

**Zhao, Chuanshan; Li, Jiehua; Xiong, Xiaomin; Li, Hui; Wang, Shanshan**

QILU UNIVERSITY OF TECHNOLOGY, China, People's Republic of

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### **Use of novel biomass based carbon catalysts in production of valuable chemicals from pine sawdust**

**Rusanen, Annu (1); Lahti, Riikka (2); Hu, Tao (1); Lappalainen, Katja (1,2); Kärkkäinen, Johanna (1); Bergna, Davide (2); Lassi, Ulla (1,2)**

1: Research Unit of Sustainable Chemistry, University of Oulu, Finland; 2: Kokkola University Consortium Chydenius, University of Jyväskylä, Finland

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### **The degradation of bark extractives-derived phenolics during storage**

**Halmemies, Eelis Sakari (1,2); Brännström, Hanna (1); Nurmi, Juha (1); Alén, Raimo (2)**

1: Natural Resources Institute Finland, Finland; 2: University of Jyväskylä, Department of Chemistry

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### **Bioethanol from untreated waste lignocellulose materials - Transcriptomics of *Phlebia radiata* under fermentative conditions**

**Mattila, Hans; Mäkinen, Mari; Hartikainen, Anna; Lundell, Taina**

Department of Microbiology, University of Helsinki, Finland

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### **Simultaneous Bioconversion of High-inhibitor Xylose-Glucose Media Using Diffusion-based Reverse Membrane Bioreactor**

**Mahboubi, Amir (1,2); Lundin, Magnus (1); Doyen, Wim (2); De Wever, Heleen (2); Taherzadeh, Mohammad (1)**

1: University of Borås, Sweden; 2: Flemish Institute for Technological Research, Belgium

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### **Modification of Natural Fibres and Preparation of Cellulose-based Mixed-Matrix-Membranes**

**Weber, Jens; Fischbach, Daniel; Konrad, Felix; Kinne, Matthias**

Hochschule Zittau/Görlitz, Germany

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### **Life cycle assessment of lignocellulosic biomass valorisation into high-added value products**

**González Buch, Cristina; Blasco Galindo, Laura; Dobón López, Antonio**

ITENE, Spain

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### **Bioforever Project for the Conversion of Woody Biomass To Chemicals**

**Contin, Adriana (1); Kroon, Hans (1); Janse, Arthur (1); Maas, Jos (1); Rietkerk, Tim (1); Villa-Sanin, Carolina (1); van Haastert, Marco (1); Smits, Jan (1); de Graaf, Koen (1); Zijlmans, Timen (1); van Winden, Wouter (1); Happel, Anton (2)**

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### **Techno-economic evaluation of biofuel production from black liquor by hydrothermal liquefaction**

**Melin, Kristian; Välimäki, Alexi; Oasmaa, Anja; Lehtonen, Juha**

VTT Technical Research Centre of Finland, Finland

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## **Characterization of hemicelluloses extracted from mixed hardwood chips by an autohydrolysis. Effect of enzymatic post-treatments.**

**Guigon, Valentin; Chirat, Christine; Lachenal, Dominique**

Grenoble INP - Pagora

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## **Experimental and Economical Case Study: Competitive Odor-Free Lignin from an aquasolv Biorefinery**

**Conrad, Marc (1); Andersen, Lennart (3); Gil, Joana (1); Hartge, Ernst-Ulrich (6); Häring, Hans (2); Hu, Xihua (1); Kreft, Christian (4); Meyer, Robert (1); Reynolds, Wienke (1); Schmidt, Lisa Marie (5); Zetzl, Carsten (1); Heinrich, Stefan (6); Kaltschmitt, Martin (5); Lim, Cai Rong (4); Smirnova, Irina (1)**

1: Institute of Thermal Separation Processes (TUHH); 2: Sigmar Mothes Hochdrucktechnik GmbH; 3: Verbio AG; 4: tesa SE; 5: Institute of Environmental Technology and Energy Economics (TUHH); 6: Institute of Solids Process Engineering and Particle Technology (TUHH)