

Biomass Conversion: Green Chemistry & Innovative Processes

Thursday 10 March 2016 - Friday 11 March 2016

Chimie ParisTech

Scientific Program

As highlighted by the current international awareness of environmental issues, **the need to find competitive alternatives or even replace fossil fuels is crucial** in order to reduce global warming, protect biodiversity and natural resources, and to limit the consequences of human activity for life on Earth. As part of this challenge, biomass and the molecules obtained from it can be considered providential sources of renewable building blocks dedicated to the chemistry of the future.

To achieve this goal, **chemists and chemical engineers have at their disposal several tools and approaches** from green chemistry, homogeneous and heterogeneous catalysis, enzymatic catalysis... which allow to convert renewable resources into value-added chemical products for various fields of applications (chemical synthesis, pharmacy, materials, energy).

These novel uses of biomass as feedstocks require however innovative processes which are at the same time challenging and fascinating for a chemical engineer: multiphase systems, consecutive exothermic reactions, macromolecules with different functions, Newtonian and non-Newtonian fluid... How to deal with such systems? Which chemical reactor or catalyst to use? How to intensify the process?

Due to their environment and a strong industry related to wood and agricultural resources, **the Nordic countries have a long experience and a recognized expertise in the conversion and use of biomass**, involving both academic and private sectors. Especially, their knowledge of chemical processes is crucial for the use of second-generation biomass (lignocellulosic feedstocks) which is more and more developed. Thus, the purpose of this event is to bring together Nordic and French researchers involved in this field, and to share the different strategies pursued in each country.

Beside the exchange of up-to-date scientific results on the first day (with plenary lectures by Nordic and French speakers & poster sessions), **this event aims at facilitating the establishment of French-Nordic networks** in order to build consortia able to respond to calls of the Horizon 2020 European program. The morning session of the second day of the event will thus be devoted to face-to-face discussions between project leaders.

Confirmed speakers

Luc Avérous, University of Strasbourg (France)

Nadège Charon, IFP Energies nouvelles (France)

Frank Dumeignil, University of Lille (France)

Riitta Keiski, University of Oulu (Finland)

Anne S. Meyer, Technical University of Denmark (Denmark)

Jyri-Pekka Mikkola, University of Umeå (Sweden)

Tapio Salmi, Åbo Akademi (Finland)

Sophie Thiebaud-Roux, INP-ENSIACET (France)

Karine Øyaas, Paper & Fibre Research Institute (Norway)

Poster

There will be two poster sessions at the coffee-breaks on March 10 (morning and afternoon). You can see the abstracts of the posters by clicking on these sessions in the detailed schedule. If their authors so wish, the posters will remain visible for the participants on March 11.