CHALLENGES OF THE BIOLOGICAL CONVERSION OF RESIDUES INTO PLATFORM CHEMICALS

Santiago de Compostela, 28 May 2020

OBJECTIVE
Converting residues and wastes into chemicals, such as volatile fatty acids, is a hot topic of research which has not yet reached the maturity for becoming an economically viable valorisation technology. This symposium is meant to serve as a forum for experts to discuss the main current and future challenges: What are the suitable technologies for the conversion into chemicals? Which substrates are more appropriate to be transformed? How to utilize the vast modelling capacities in the design of processes? How to purify the final products?

STRUCTURE
The symposium is structured in 4 sessions, each starting with a guest speaker and 2-3 short presentations to be selected from the abstracts call. The selection will be based not only on the abstract quality but also attempting to display a full picture of the state of art and possible alternatives to move forward.

The symposium is conceived with a limited number of delegates (approx. 50) to ensure smooth debate and discussions during the sessions and breaks. All the sessions count with time for debate and exchange in a friendly environment.

TOPICS
The topics of interest include biotechnologies for the production of volatile fatty acids and other platform chemicals; downstream processing highlighting separation and purification technologies; modelling tools; microbiology and economic viability studies.
TENTATIVE SCIENTIFIC PROGRAM

Thursday 28 May, morning

09:00 Welcome to the participants
09:15 Keynote: Jean-Philippe Steyer

Session 1. Technological alternatives for the biological conversion of residues
09:45 Keynote. Korneel Rabaey
10:15 Short presentations
10:45 Debate
11:00 Coffee break

Session 2. Separation and purification challenges
11:30 Keynote. Pending confirmation
12:00 Short presentations
12:30 Debate
13:00 Group picture and lunch

Thursday 28 May, afternoon

Session 3. Bioprocess design strategies
14:30 Keynote. Miguel Mauricio-Iglesias
14:50 Keynote. Pending confirmation
15:10 Short presentations
15:40 Debate

Session 4. Economic feasibility and scale-up opportunities
16:00 Keynote. Alberto Sánchez
16:30 Short presentations
17:00 Debate

Final conclusions and Farewell

ABSTRACT SUBMISSION

The short presentations (10 min) will be selected out of the submitted abstracts which must be written in English with a maximum extension of 1 page and sent by email with the subject “Symposium BIOCHEM Abstract” to rosamaria.arcos@usc.es before 13 March 2020.

COMMITTEES

ORGANISING COMMITTEE
Marta Carballa - Chair
Juan M. Lema - Co-chair
Technical Administration
Rosa Mª Arcos
Iria Lema

SCIENTIFIC COMMITTEE
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Korneel Rabaey
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