Cell Factories for Industrial Bioproduction

CFIB - Selecting and enhancing expression systems for biomolecules production

Biocitech Paris-Romainville, March 29 and 30th, 2022

Day One: TUESDAY MARCH 29th, 2022

9:00-9:30	*Welcome coffee*
9:30-9:40	**Adebiotech welcome** **Sylvio BENGIO**, Adebiotech, France
9:45-10:15	**Keynote lecture** **Fayza DABOUSSI**, Director Life Sciences at Toulouse White Biotechnology (TWB), France

10:20-12:30 SESSION 1 - INDUSTRIAL BIOPRODUCTION STRATEGIES, Part 1

10:20-10:40	**Michael J. O'DONOHUE**, INRAe *IBISBA: integrating European capacity in industrial biotechnology*
10:45-11:05	**John McBRIDE**, Sr. Director R&D, MASCOMA Corp. (Lallemand), Darmouth College, USA) *New Yeasts for fuel ethanol production*
11:05-11:30	*Coffee break / exhibitions / posters / networking*
11:30-11:50	**Anthony BRESIN**, Chief Technology Officer, HTL Biotechnology, France *Constraints associated to the development of a novel polysaccharide by fermentation*
12:00-12:30	*FLASH POSTERS PRESENTATION (4 x 5 min.)*
12:30-14:00	*LUNCH BREAK AND EXHIBITION*

14:00-16:40 SESSION 1 (continued) - INDUSTRIAL STRATEGIES, Part 2

14:00-14:20 **Frank DELVIGNE**, Professor, University of Liège, Belgium
Scale-up of microbial processes: a modern light on an old issue

14:25-14:45 **Simon TRANCART**, Altar
Unlocking the potential of industrial biotechnology with adaptative evolution

14:50-15:10 **Leonardo MAGNESCHI**, Section Head – Molecular Biology, Ingenza Ltd., Scotland
SynBio A to Z: integrated bioengineering platforms for efficient biomanufacturing in prokaryotic and eukaryotic production systems

15:15-15:35 **Jan-Willem de GIER**, Professor, Stockholm University, Sweden
Engineering E. coli strains for recombinant Protein production

15:40-16:00 Coffee break / exhibitions / posters / networking

16:05-16:25 **Egon HEUSON**, Ecole Centrale de Lille, France
High-throughput strain identification and production of fungal enzymatic cocktails for the valorisation of lignocellulosic biomass

16:30-16:50 **Guy HELIN**, Syngulon, Belgium
Taking a license on CRISPR/Cas9: a testimony

16:55-18:30   COCKTAIL

Day Two: WEDNESDAY MARCH 30th, 2022

9:30-12:30 SESSION 2 - INDUSTRY-SCALE FERMENTATION

9:30-9:50 **Nico SNOECK**, Bio Base Europe Pilot Plant, Belgium
Challenges in scale-up of industrial bioprocesses

9:55-10:15 **Sophie ROELANTS**, BBE, University of Ghent, Belgium
Metabolic engineering for the production of specialty carbohydrates and biosurfactants

10:20-10:40 **Lorie HAMELIN**, TBI /INSA (Toulouse Biotechnology Institute)/Federal University Toulouse (France)
Role of industrial biotech within a sustainable national strategy towards zero fossil carbon

10:45-11:15 Coffee break / exhibitions / posters / networking

11:15-11:35 FLASH POSTERS PRESENTATION part 2 (4 x 5 min.)

11:35-12:30 ROUND TABLE - Industrial biotechnology: sustainability, eco-conception and new challenges for non-therapeutic bioproduction

*Chair: **Lorie HAMELIN**, TBI /INSA (Toulouse Biotechnology Institute)/Federal University Toulouse (France) and **Clément AURIOL**, Adisseo*

12:30-13:30 LUNCH BREAK AND EXHIBITION

13:55-15:30 SESSION 3 - EXPRESSION SYSTEMS FOR THERAPEUTIC PROTEINS

13:55-14:15 **Mathieu ROCABOY**, Scientific advisor, Xpress Biologics, Belgium
A molecular biology Toolbox for rapid selection of E. coli expression strains

14:20-14:40 **Lena THORING**, FyoniBio
GlycoExpress® - an alternative host for difficult to express proteins

14:45-15:05 **Esteban LEBRUN**, Sanofi, France
An in-droplet assay for the functional selection of antibodies from yeast libraries

15:05-15:25 **Muriel BARDOR**, Université de Rouen, France
Microalgae as alternative cell factory for the production of monoclonal antibodies

15:30-16:30 Coffee break / exhibitions / posters / networking

16:30-17:10 SESSION 4 - MODELING and EMERGING APPROCHES

16:30-16:50 **Moritz VON STOSCH**, DataHow AG, Switzerland
Hybrid modeling, combining data- and knowledge-driven modeling for fast and systematic upstream process development

16:50-17:10 **Thanos BEOPOULOS**, Bio-Modeling Systems
CADI™ Heuristic Modeling for Complete & Efficient Human Protein Glycosylation in Yeast

17:15-18:00 ROUND TABLE - Expression of therapeutic proteins *Expression for therapeutic proteins*

*Chair: **Jacques DUMAS**, Sanofi*

18:00 GENERAL CONCLUSIONS - End of the meeting