



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 |
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| 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 | Muriël DEWILDE, 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 |
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| 16:50-17:10 | Manuel GEA, 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