



# **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	Muriël DEWILDE, Bio Base Europe Pilot Plant, Belgium Challenges in scale-up of industrial bioprocesses
9:55-10:15	Wim SOAETERT, Professor industrial Biotechnology, 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 Guillaume MOTTET, Sanofi, France Microfluidics approaches for antibody selection (Title to be confirmed) 15:05-15:25 Muriel BARDOR, Université de Rouen, France Microalgae as alternative cell factory for the production of monoclonal antibodies

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

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

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	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