



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 Jan-Willem de GIER, Professor, Stockholm University, Sweden Engineering E. coli strains for recombinant Protein production
- 14:50-15:10 Simon TRANCART, Altar Unlocking the potential of industrial biotechnology with adaptative evolution
- 15:15-15:35 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
- 15:40-16:00 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, INSA Toulouse 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, INSA Toulouse 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

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 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