WORLD BIOPHARM FORUM

2019

Driving Value Through Intensified Bioprocessing

Lady Margaret Hall,
University of Oxford, Oxford, UK
26th-28th June, 2019

www.subramanian.org.uk

A WARM INVITATION TO COME AND JOIN US IN OXFORD

It is my great pleasure to invite you to the Sixth annual international conference on Continuous Biomanufacturing: Driving Value Through Intensified Bioprocessing; which will be held at Lady Margaret Hall, University of Oxford, Oxford, UK on June 26-28.2019.

Continuous Bioprocessing has seen a resurgence of interest for continuous manufacturing of biopharmaceuticals, resulting in several small, medium and large biotechnology industries in evaluating the available technology to assess their real potential and benefits in producing clinical products at an affordable cost. Today Biopharma industries accept Continuous Manufacturing Process as a novel approach to efficiently and economically producing a therapeutic product. However there are some bottlenecks still to overcome.

New up-and-down-stream manufacturing procedures and technologies, single-use equipment and modular facility design, as well as localized manufacturing or materials supply can all support a more highly intensified biomanufacturing process.

Single use continuous processing has yet to tick all the boxes from the industry's viewpoint. Over the last few years interest in continuous bioprocessing has grown considerably due to the ongoing developments of technologies and advancing their application to meet the needs of the manufacturers.

The conference is enhanced by the participation of leading industrial technologists, scientists, vendors and also distinguished academics from Europe and the USA. They have come forward to share their experience and knowledge to provide a better understanding of the current technologies and their application in continuous biomanufacturing.

By joining with us you can benefit from the current state-of-the-art advancements in continuous manufacturing and also learn about the successful organisations that are developing these methods in-house through the industrial case studies and workshops. Together we will drive change, innovate growth and pioneer smarter technologies to ensure they reach their full potential.

I look forward to welcoming you at Lady Margaret Hall with its beautiful surroundings in the historic city of Oxford.

Dr G.Subramanian

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WEDNESDAY 26TH JUNE

12.30
Registration and canapé reception

1.20pm
Welcome: *Dr G Subramanian*

Intensified bioproduction

Chairman: Dr Joseph Shultz

1.30pm
Intensification of preparative protein purification by polishing chromatography
Kosma Jurlewicz, Chris Wayne, and Ajoy Velayudhan; Department of Biochemical Engineering; University College London.

2.00pm
Intensified Seed Expansion and Simplified Clarification of Fed-batch Cultures Using the XCellTM ATF System
Dr Shashi Kudugunti ; Sr. Scientist; Repligen Corporation, Waltham-MA, USA

2.30pm
Novel Commercially available tools and services for cost efficient process
Dr Zerben Zijlstra, Global Tewchnical consultant Intensified Biomanufacturing, Sartorius-Sdtedim biotech, GmbH.

3.00pm
Implementation and Development of continuous processing, challanges and lessons learned the story so far.
Andrew Falconbridge, Snr, Director Process Technolgoy, Alvotech; Iceland.

3.30pm
Refreshments and Networking

4.00pm
Transformation to new intensified process platform
Dr Jonathan Souquet, Head of GD&L Technology and Innovation, Merckhealthcare/Global Manufacturing and Supply, Switzerland

4.30pm
Process Intensification
Dr Thomas Flouquet, Novasep, Lyon, France

5.00pm
Digitalization of bioprocess development
Professor Dr Peter Neubauer; Tchnische Universtat Berlin (TU Berlin), Germany

5.30pm

Chairman: Miriam Monge

How will the adoption of single-use and intensified processing in cGMP commercial manufacturing change the industry landscape? Key points to consider
Miriam Monge, Head of Segment Marketing mAb/ RecProtein /intensified bioprocessing: Bioprocess solution; Sartorius Stedim Biotech

Industry 4.0 meets continuous

Chairman: Dr Michael Butler

6.15pm
Accelerating Biologics Manufacturing by Process Modelling
Axel Schmidt; Institute of Separation and process Technology, Technische Universtat Clausthal, Clausthal University of Technology. Germany.

8.00pm
Gala Dinner - Denke Dinning Room

THURSDAY 27TH JUNE

8.00am
Enabling Industry 4.0 - Data Management and Analysis doe Digitalized and Automated Bioprocessing.
Dr Michael Sokolov, COO and Co-founder pf Datahow, Scientist and Lecturer at ETH, Switzerland

8.30am
Integrated Digital Twins for Intensified Bioprocess Life Cycling
Professor Dr Christoph Herwig, ICEBE, Research Area Biochemical Engineering, TU Wien, Austria.

9.00am

On line Biomass Monitoring: What's really going on in your reactor

Dr Rachel Crossley and David Anderson, Aber instruments; United Kingdom

9.30am

Digitising bioprocessing towards automated analytics and next generation PAT for advanced bioprocess understanding and control

Dr Markus Gershater, Chief Scientific Officer, Synthace Ltd, United Kingdom

10.00am

Cell Density – Viable Tool on your Online Measurements

Jochen Uhlenkuken, Hamilton

10.30am

Refreshments and Networking

Downstream developments

Chairman: Britta Manser

11.00am

Meeting cost and facility utilization targets through single-batch use of convective membranes for chromatographic capture steps.

Hemanth Kaliigotla, Volkmar Thom, Patrick Adametz, Ame Blima, Thomas Edenberger, Kathryn Schnorf, Jacques Clements, Sartorius-Stedim

11.30am

Model-assisted process characterisation and validation for a continuous two-column protein A capture process

Daniel Baur1, James M Angelo1, Srinivas Chollangi1, Thomas Müller-Späth3, Xuankuo Xu1, Sanchayita Ghose1, Zheng Jian Li2 , Massimo Morbidelli1

1 Biologics Process Development, Bristol-Myers Squibb, Devens, MA, USA

2 Department of Chemistry and Applied Biosciences, ETH Zürich, Zürich, Switzerland

3 ChromaCon AG, Zürich, Switzerland

12.00 noon

Efficient single-pass tangential flow diafiltration for continuous processing

Dr Alexander Helling, Ceren Gencoglu and Martin Leuthold

Sartorius Stedim Biotech GmbH. Goettingen, Germany

12.30pm

Lunch

2.00pm

Design Protein A resins for continuous chromatography

Marck Hicks, Hans J. Joansson. Patrick Gilbert; Purolite, Wales, United Kingdom

2.30pm

Continuous Protein A Chromatography development and implementation using a next generation resin.

Dr Laura Carnston, DSP Process Development Specialist, Alvotech, Iceland.

3.00pm

Parallelized DSP steps with a single skid at pilot-scale: Manufacturing strategies buffer platform and equipment integration

Nicolas-Julian Hilbold; Purification Innovation Scientist, Bioprocess Technology and Innovation; Biopharma/GMS Development and Launch Merckserano, Switzerland

3.30pm

Networking and Refreshments

4.00pm

Case Studies for Debottlenecking Existing Facilities

Significant productivity improvement using multi-column chromatography; Case studies for a new approach to a downstream fed-batch mAb process

Dr Kathleen Mihlbachler; YMC Process Technologies

4.30pm

Case Study: Sequential Pool-less Processing for downstream polishing

Dr Mary Jo Wojtusik, YMC Technologies

New directions in continuous applications

Chairman: Miriam Monge

5.00pm
Case Study: Continuous bioprocessing with E.Coli chances and drawbacks
Julian Kopp, Project assistant at TU Wien, ICEBE, Austria

5.30pm
Quality by Design for continuous Bioprocessing
Dr Marc Bisschops; Director SLS-Integrated Process-Solutions, Pall Biotech

6.00pm
Monitoring mammalian cell growth and metabolism at high densities.
Michael Butler; Distinguished Professor Emeritus (Univ. Manitoba); Adjunct Full Professor University College Dublin; Chief Scientific Officer (CSO), National Institute of Bioprocessing Research & Training (NIBRT) Dublin Ireland

8.00pm
Dinner - Monson Room

FRIDAY 28TH JUNE

8.00am
Gain efficiency and reach high-density cultures through flexible and highly customizable Single Use Bioreactor enhancements for both perfusion on suspension cells and adherent cell culture.
Camille DESROUSSEAUX; Sr Field Application Specialist SUT; Bioproduction; Life Sciences Solutions; Thermo Fisher Scientific; United Kingdom

8.30am
"Enabling the Next Generation of Biopharmaceutical Manufacturing through Integrated Processing"
Dr Joseph Shultz, Global Head of Advanced Process and Manufacturing Technologies at Novartis Pharma AG; Switzerland.

Challenges and concern for continuous biomanufacturing

Chairman: Dr Jean-Francois Hemel

9.00am
Viral Clearance Studies on a Fully Continuous Manufacturing Process for phase 1 studies
Maarten Pennings, BiosanaPharma, The Netherlands

9.30am
Is Continuous Manufacturing, Transitioning from Batch to Continuous Economics and Operational Implications
Andrew Sinclair;/Dr Yuki Abe, Biopharm Services Ltd., United Kingdom

10.00am
Implementation Challenges for Large Scale Continuous Bioprocessing Technologies
Dr Marc Bisschops, Director SLS-Integrated Process Solutions, Pall Biotech

10.30am
Refreshments and Networking

11.00am
Challenges in Biomanufacturing
Nico Oosterhuis, Celltainer Biotech BV. The Netherlands

11.30am
Integration of PAT-analysis for real-time monitoring a bioprocess: Implications for research and teaching
Dr Jean-Francois Hemel, Director, Undergraduate Teaching Laboratories, MIT, USA

12.00 noon
Workshop: Implementation challenges for Innovative Manufacturing Technologies for Process Intensification.
Marc Bisschops, Director SLS - Integrated Process Solutions; Pall Biotech, Gerben Zijlstra, Global Technical Consultant; Intensified Biomanufacturing, Sartorius Stedim Biotech GmbH and Britta Manser, Manager SLSEU Continuous Bioprocessing. Pall Biotech.

12.45pm
Conclusion

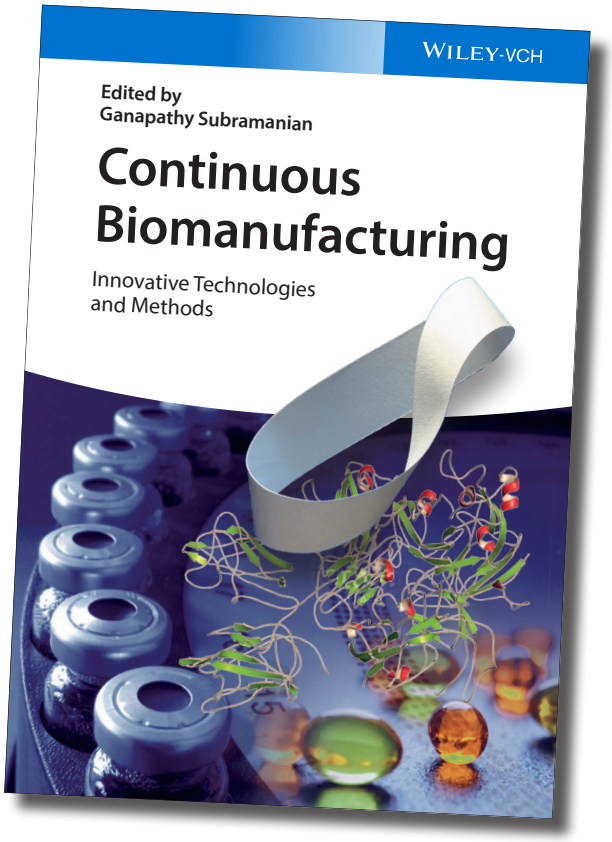
1.00pm
Lunch - Mary O'Brien Room

*All Information is correct at the time of print and maybe subject to change.

NOW AVAILABLE

This is the most comprehensive treatise of this topic available, providing invaluable information on the technological and economic benefits to be gained from implementing continuous processes in the biopharmaceutical industry. Top experts from industry and academia cover the latest technical developments in the field, describing the use of single-use technologies alongside perfusion production platforms and downstream operations. Special emphasis is given to process control and monitoring, including such topics as 'quality by design' and automation.

The book is supplemented by case studies that highlight the enormous potential of continuous manufacturing for biopharmaceutical production facilities. Published by Wiley-VCH and available online and at all academic bookshops.



WORLD BIOPHARM FORUM 2019

To reserve your place please complete the registration form in BLOCK LETTERS and post it with full remittance to: Dr. G. Subramanian, 44 Oaken Grove, Maidenhead, Berkshire, SL6 6HH or, email to gsub@subramanian.org.uk

Full Name: .....

Job Title: .....

Organisation: .....

Address: .....

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..... Postcode: .....

Country: .....

Tel: .....

Email: .....

Any Special Requirement (Dietary): .....

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Questions or Comments: .....

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Registration Fees:

Attendance, all meals and accommodation: £875

Attendance, all meals and no accommodation: £725

Payment Method:

☐ Online at www.subramanian.org.uk/Conferences

☐ For bank transfer please contact.

Cancellation:

Should you be unable to attend, a substitute delegate is welcomed at no extra charge.

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