Program

Single Use Technologies VIII

October 12 - 15, 2026

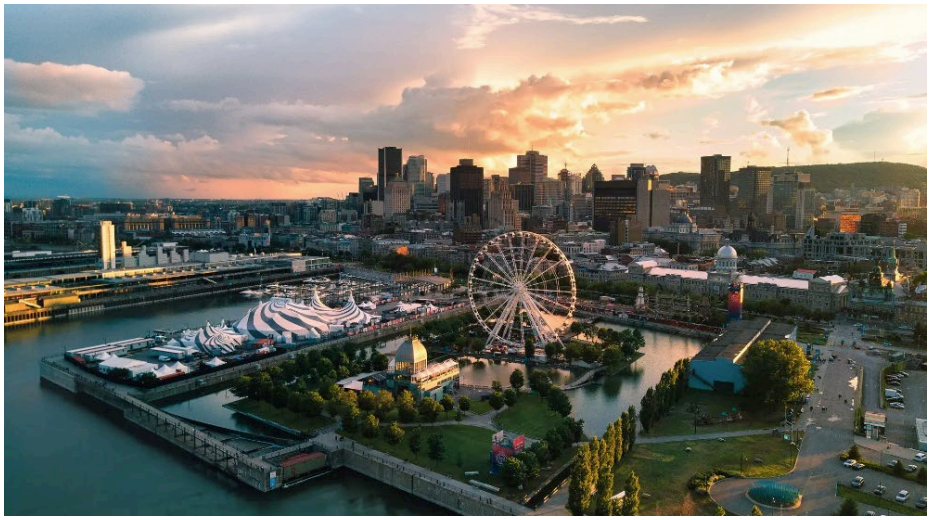
Montreal, Quebec, Canada

Conference Chairs

Gary Gilleskie, North Carolina State University, USA

Nelly Montenay, Sartorius, France

Phillip Smith, GSK Biopharm, USA



Engineering Conferences International
369 Lexington Avenue, 3rd Floor #389, New York, NY 10017, USA
www.engconfintl.org – info@engconfintl.org

Omni Mont Royal Hotel
1050 Sherbrooke Street West
Montreal, Quebec, H3A-2R6
Canada
Tel: +1-514-284-1110

Engineering Conferences International (ECI) is a not-for-profit global engineering conferences program, originally established in 1962, that provides opportunities for the exploration of problems and issues of concern to engineers and scientists from many disciplines.

ECI BOARD MEMBERS

Eugene Schaefer, Chairman
Paula Alves
Mike Betenbaugh
Franco Berruti
Joye Bramble
Nick Clesceri
Chetan Goudar
Peter Gray

Chair of ECI Conferences Committee: Nick Clesceri

ECI Technical Liaison for this conference: Beth Junker

ECI Executive Director: Barbara K. Hickernell

ECI Associate Director: Kevin M. Korpics

ECI Conferences Manager: Tressa D'Ottavio

ECI Conferences Registration Manager: Renee Smith

©Engineering Conferences International

Steering Committee

Magali Barbaroux, Sartorius

Stefan Bardeck, Mettler-Toledo Process Analytics

Marcus Bayer, Hamilton

Cameron Graham, BIOVECTRA

Beth Junker, BioProcess Advantage LLC

Miriam Monge, Sartorius

Ekta Mahajan, Gilead

Sade Mokuolu, Watson-Marlow Fluid Technology Group

Jon Molinari, GSK

Andrea Rayat, University College London

Robert Repetto, Pfizer

Chad Varner, Sanofi

Previous conference in this series

Single-Use Technologies: Bridging Polymer Science to Biotechnology Applications
October 18-21, 2015
Leesburg, VA, USA
Conference Chairs:
Ekta Mahajan, Genentech, Inc., USA
Gary Lye, Department of Biochemical Engineering, University College London, UK

Single-Use Technologies: Bridging Polymer Science to Biotechnology Applications II
May 7-10, 2017
Tomar, Portugal
Conference Chairs:
Ekta Mahajan, Genentech, Inc., USA
Gary Lye, Department of Biochemical Engineering, University College London, UK
Regine Eibl, Zurich University of Applied Science, Switzerland

Single-Use Technologies: Bridging Polymer Science to Biotechnology Applications III
September 23 – 26, 2018
Snowbird, Utah, USA
Conference Chairs:
Weibing Ding, Amgen, USA
Martina Micheletti, University College London, United Kingdom
Robert Repetto, Pfizer, USA

Single-Use Technologies IV Webinar
May 20, May 25, June 1, 2021
Conference Chairs:
Magali Barbaroux, Sartorius, France
Weibing Ding, Amgen, USA
Martina Micheletti, University College London, United Kingdom

Single-Use Technologies V
March 20-23, 2022
Marseille, France
Conference Chairs:
Magali Barbaroux, Sartorius, France
Martina Micheletti, University College London, United Kingdom

Single-Use Technologies VI
September 10-13, 2023
Boston, Massachusetts, USA
Conference Chairs:
Magali Barbaroux, Sartorius, France
Sheryl Kane, Takeda, USA
Seongkyu Yoon, University of Massachusetts, Lowell, USA

Previous conference in this series

Single-Use Technologies VII: Revolutionizing Manufacturing for Tomorrow's Medicines
March 17 – 20, 2025
Malta
Conference Chairs:
Andrea Rayat, University College London, UK
Nelly Montenay, Sartorius, France
Katharina Neutsch, Roche Genentech, Germany

Conference Sponsors

Bio-Process Systems Alliance

DuPont Liveo

MilliporeSigma

Gilead

METTLER TOLEDO Process Analytics

Sartorius

Watson Marlow Fluid Technology Solutions

Locations and Notes

- *Technical sessions will be in the Pierre de Coubertin.*
- *Poster Sessions will be in the Foyer.*
- *Meals will be in Printemps, except for dinner on Wednesday which will be in Pierre de Coubertin.*
- *The ECI office is Le Petit Salon.*
- *Audio, still photo and video recording by any device (e.g., cameras, cell phones, laptops, PDAs, watches) is strictly prohibited during the technical sessions, unless the author and ECI have granted prior permission.*
- *Speakers – Please have your presentation loaded onto the conference computer prior to the session start (preferably the day before).*
- *Speakers – Please leave at least 3 minutes for questions and discussion.*
- *Please do not smoke at any conference functions.*
- *Turn your mobile telephones to vibrate or off during technical sessions.*
- *After the conference, ECI will send an updated participant list to all participants. Please check your listing now and if it needs updating, you may correct it at any time by logging into your ECI account.*
- *Emergency Contact Information: Because of privacy concerns, ECI does not collect or maintain emergency contact information for conference participants. If you would like to have this information available in case of emergency, please use the reverse side of your name badge.*

Monday, October 12, 2026

11:00 - 13:00	Conference Registration Check-in (Foyer, 1st Floor)
13:00 - 13:15	**Chairs' opening remarks** Phillip Smith, GSK Biopharm R&D Clinical Manufacturing Pilot Plant; Nelly Montenay, Sartorius; Gary Gilleskie, North Carolina State University
	Session 1: Ensuring Quality in Single-use Manufacturing *Sponsored by Gilead* Session Chairs: Sade Mokuolu, Watson-Marlow Fluid Technology Group; Ekta Mahajan, Gilead Sciences
13:15 - 13:30	**Session Introduction**
13:30 - 14:00	**Introduction to quality aspects: End-user and supplier perspectives in single-use technologies** Ekta Mahajan, Gilead, USA, and Sade Mokuolu, Watson-Marlow Fluid Technology Group
14:00 - 14:30	**Applying Quality by Design (QbD) principles to ensure lifecycle control of single-use systems** Sade Mokuolu, WMFTS, USA
14:30 - 15:00	**Toward a disposable OFDR-based optical fiber pH sensor integrated into single-use bioprocess bags** Xingwei Wang, UMass Lowell, USA
15:00 – 15:30	Coffee Break
15:30 - 16:00	**Enabling diffusion-based integrity testing of small-area sterilizing filters in a single-use assembly** Anand Alembath, MilliporeSigma, USA
16:00 - 16:30	**Enhancing SUS quality through particulate characterization, risk analysis, and inspection alignment** Snehal Parikh, Gilead Sciences, USA
16:30 - 17:00	**Towards digital twins of X-ray sterilization processes: Insights from Monte Carlo dose simulations** Samuel Dorey, Sartorius Stedim FMT SAS, France
17:00 – 17:15	Stretch Break
17:15 – 17:30	**History of the SUT Conference** Ekta Mahajan, Gilead, USA
17:30 – 18:00	**Poster Intro & Flash Poster Presentations** Session Chairs: Andrea Rayat, University College London; Stefan Bardeck, Mettler – Toledo Process Analytics
18:00 - 19:00	Welcome Reception (Foyer, 1st Floor)
19:00 - 20:30	Welcome Dinner (Printemps)
20:30 – 22:00	**Poster Session 1** (With dessert and drinks) Session Chairs: Andrea Rayat, University College London; Stefan Bardeck, Mettler – Toledo Process Analytics

Tuesday, October 13, 2026

07:00 - 08:15	Breakfast
	Session 2: Intelligent Manufacturing: The Synergy of Automation and Single-Use *Sponsored by Sartorius* Session Chairs: Cameron K. Graham, Agilent Advanced Therapeutics; Marcus Bayer, Hamilton Bonaduz AG
08:15 – 08:30	**Session Introduction / Foundational talk: Automation in the single-use industry in past and present** Marcus Bayer, Hamilton, Switzerland
08:30 - 09:00	**The BAD project: Towards a grand 'unifying theory' of protein adsorption using data mining, machine learning, and empirical correlations** Dan Nicolau, McGill University, Canada
09:00 - 09:30	**Reinventing early-stage single use technology** Govind Rao, University of Maryland, Baltimore Campus, USA
09:30 - 10:00	**Representative scale-down modeling across bioreactor platforms using the 5 L DynaDrive S.U.B.** Alexander Vrbancic, Thermo Fisher Scientific, USA
10:00 – 10:30	Coffee Break
10:30 - 11:00	**Enabling next-generation ex vivo cell therapy manufacturing through real-time inline viable cell density monitoring using single-frequency dielectric spectroscopy** Katharina Dahlmann, Hamilton Bonaduz AG, Switzerland
11:00 - 11:30	**Advanced model process automation control: Simulated then spectroscopic-model-based decisions in a continuous bioprocess** Stuart Tindal, Sartorius, Germany
11:30 - 12:00	**Programmable cellular state transitions enable high-yield CHO bioprocessing in single-use systems** Rita Singh, Translational Health Science and Technology Institute, India
12:00 - 13:15	Lunch
13:15	Meet in lobby for excursion
13:30 - 18:00	Conference Excursion – Curling experience
19:00 – 20:30	Dinner
20:30 - 22:00	**Poster Session 2**(With dessert and drinks) Session Chairs: Andrea Rayat, University College London; Stefan Bardeck, Mettler – Toledo Process Analytics

Wednesday, October 14, 2026

07:00 - 08:15	Breakfast
	Session 3: Green Frontier - Innovating Single-use for a Sustainable Future Session Chairs: Jon Molinari, GSK; Magali Barbaroux, Sartorius
08:15 – 08:30	**Session Introduction**
08:30 - 08:55	**Introduction to the Green Frontier: Innovating Single-Use for a Sustainable Future** Jonathan Molinari, GSK, USA, and Magali Barbaroux, Sartorius
08:55 - 09:20	**Toward Closed-Loops with Polycarbonate** Pierre Moulinie, Covestro LLC, USA
09:20 - 09:45	**Greener by design: Predicting how manufacturing mode and technology transition shape single-use plastic footprint in biopharmaceutical production** Andrew Sinclair, BioPharm Services, UK
09:45 – 10:10	**Advancing bio-circular, circular plastics and recycling in single-use systems: environmental benefit, product carbon footprint, and risks considerations** Lucie Delaunay, Sartorius, France, and Roberta Tosato, Sartorius, Italy
10:10 – 10:40	Coffee Break
10:40 - 11:05	**Towards net zero single-use manufacturing: Scenario-based hotspot identification and mitigation pathways** Niklas Jungnelius, Cytiva, Sweden
11:05 - 11:30	**Debottlenecking shelf life of components for sustainable single-use solutions** Marcus Bayer, Hamilton, Switzerland
11:30 - 11:55	**Biopharma recycling single use technologies: How to build a circular pathway** Jacqueline Hollands, MilliporeSigma, USA
12:00 - 13:15	Lunch
13:15 – 15:30	**WORKSHOP: The Big Questions Surrounding the Future of Single-Use** Session Chairs: Chris Clark, BioProcess Systems Alliance; Dan Stanton, Sartorius
15:30 – 16:00	Coffee Break
16:00 – 17:00	**Keynote** **Humans to the power of AI: A leader's guide to scaling AI in health care** Jake Herway, Healthcare Innovation at ValueAdd Group, USA
17:00 - 19:00	Break
19:00 - 20:00	Gala Reception
20:00 - 22:00	Gala Dinner & Poster Awards (Pierre de Coubertin)

Thursday, October 15, 2026

07:00 - 08:15	Breakfast
	Session 4: End-User Journey with Single-use Systems Session Chairs: Chad Varner, Sanofi; Miriam R. Monge, Sartorius
08:15 – 08:30	**Session Introduction**
08:30 - 09:00	**Implementing single-use systems for continuous manufacturing** Lisa Connell-Crowley, Just-Evotec Biologics, USA
09:00 - 09:30	**Engineering the next generation of bioprocessing: Performance and sustainability outcomes from continuous manufacturing operations** Priyanka Gupta, Sartorius Stedim Biotech, USA
09:30 - 10:00	**Single use mixer parameter optimization to prevent copper precipitation in feed media** Ishmael Ordonez, Fujifilm Biosciences, USA
10:00 – 10:30	Coffee Break
10:30 - 11:00	**Scale-up of a high-density cell culture process via computational modeling and scale-down model validation** Hironori Nishino, Daiichi Sankyo Co., Ltd., Japan
11:00 - 11:30	**Feasibility of disposable container re-use in a large-scale single-use manufacturing facility** Brian Youchak, Eli Lilly and Company, Ireland
11:30 – 12:00	**Panel discussion**: Wrap up from the 4 sessions, suggestion of new topics for next conference
12:00 – 12:10	Chairs' Closing Remarks
12:10 - 13:30	Lunch
	Departures

Poster Presentations

1. **Benchmarking scalability and mixing performance across single-use modalities**
   Alexander Vrbancic, Thermo Fisher Scientific, USA

2. **Development of a high-performance single-use microbial fermenter using a simulation- and quality-driven engineering framework**
   Daniel Pessey, Sartorius Stedim FMT S.A.S., France

3. **Scale-up tech transfer expresssion in enhanced single-use fermentors**
   Ashley Umlauf, ThermoFisher Scientific, USA

4. **Impact of single use bioreactor sparger designs on mass transfer using response surface models**
   Anthony Beaney, Lonza Biologics, UK

5. **Implementation of process analytical technology (PAT) for real time bioreactor control**
   Anita Dabek, Lonza Biologics, UK

6. **Closing the glycosylation loop: Real-time in-situ glucose control in single-use bioreactors as a strategy for reproducible N-Glycan profiles in mAb manufacturing**
   Sebastian Schmidt, Mettler-Toledo GmbH, Switzerland

7. **Sustainable solutions: Advancing single-use technology for a greener future**
   Ralph Daumke, Mettler Toledo Pendotech LLc, USA

8. **On the path to a more sustainable biopharma packaging system through life cycle assessment and circular material strategies**
   Brandon Abernathy, Plastic Ingenuity, USA

9. **Oceo rover: A versatile and scalable solution for on-demand process liquid hydration**
   Tom Fletcher, BD Biosciences, USA

10. **AI-driven design of downscale bioreactor for reproducing large-scale mixing dynamics in single-use systems**
    Lena Achleitner, Print4biotech, Austria

11. **Recycling of single-use multilayer plastics for sustainable biomanufacturing via solvent-targeted recovery and precipitation**
    Karl Britt, Cytiva, USA

12. **Data-driven scale-up and quality assurance in ADC manufacturing with the single-use Mobius® ADC Reactor**
    Allyson Caron, MilliporeSigma, USA

13. **Mechanistic insights into fouling of single-use hollow fiber membranes for intensified perfusion biomanufacturing**
    Erica O'Brien, McMaster University, Canada

14. **Continuous downstream process orchestration in pionic platform**
    Alexandre Espachs Barroso, Sartorius Stedim Biotech GmbH, Germany

15. **Embedding PUPSIT as a critical control point within a contamination control strategy (CCS) for sterile filtration**
    Fateha Asha, Cytiva, UK

16. **Automated final filtration platform characterization: Integrity, flushing, and recovery**
    Marisa Meade, MilliporeSigma, USA

17. **The state of the single-use industry and DuPont sustainability efforts**
    Sweden Yocom, DuPont, USA

18. **Enabling circularity without compromising performance: Sustainable Polyolefins for Biopharma Single-Use Systems**
    Amel Murgic, Borouge International, Germany

19. **Detectability of particulate matter in single-use systems: A science-based understanding of visual inspection and liquid extraction testing**
    Fanny Gaston, Sartorius Stedim FMT SAS, France

20. **Advancing circularity in bioprocessing: Evaluating performance of single-use assemblies under extended use**
    Jenna Elsner, MilliporeSigma, USA