

Scope

The BioTech conference series has successfully focused on various biotechnology topics for many years, bringing together scientists and professionals from both industry and academia.

It is our pleasure to invite you to the BioTech 2014 conference. This symposium will provide an interdisciplinary discussion forum for experts in the field of (bio)process analytics and sensor technology.

Optical technologies for sensing and imaging

Biotech 2014 will promote discussions on the latest developments in this field, ranging from novel, robust dyes to applications in sensing and imaging.

Online analytics in bioprocesses

Online analytics may facilitate scale-up and process development if it is based on non-invasive, scalable instrumentation. The conference will discuss current trends in implementing advanced online analytics in bioprocesses.

Next generation pH sensors

Users are reluctant to use conventional glass electrodes for food and hygienic processes; speakers will focus on new technologies that may close this gap.

Single-use sensing solutions

Advanced biopharmaceutical manufacturing based on single-use systems requires appropriate sensor technologies. Biotech 2014 will address opportunities and challenges associated with single-use sensors for inline measurements

Committees

Scientific Committee

Dieter Beckmann	Institute for Bioprocessing and Analytical Measurement Techniques
Caspar Demuth	Institute of Biotechnology, ZHAW
Oreste Ghisalba	CTI
Michael Jeitziner	Sigma Aldrich
Cathy Kroll	Swiss Biotech Association
Edith Lang	Institute of Biotechnology, ZHAW
Joseph Maisano	Inartis Network

Organising Committee

Matthias Bleisch	ZHAW Alumni
Daniel Gygax	Biotechnet Switzerland
Gérard Hopfgartner	Swiss Chemical Society, Division of Analytical Chemistry
Philipp Kutter	Mayor of Wädenswil
Tobias Merseburger	Institute of Biotechnology, ZHAW
Beat Ritschard	Zurich Parkside

Thursday, 4 September 2014 (morning)

Single Use Sensors in Biopharma Applications

09.00-09.30	Registration and coffee
Session Chair	Caspar Demuth, ZHAW
09.30-09.50	Welcome message Tobias Merseburger, ZHAW Wädenswil
09.50-10.30	Ion sensors: from key concepts to analytics Eric Bakker, University of Geneva (CH)
10.30-11.00	Disposable pH-sensor for on-line monitoring of bioreactors Daniel Caminada, CSEM SA, Landquart (CH)
11.00-11.30	Novel single use flow sensor for dynamic dosing in the micro- to milliliter range Simon Zumbrunnen, Institute for Print Technology, UAS Berne Stefan Berger, ReseaChem, Burgdorf
11.30-12.00	Sensor technologies for single use bioreactors Diana Lieber, Hamilton Bonaduz AG, Bonaduz (CH)
12.00-13.30	Lunch, exhibition and posters

Thursday, 4 September 2014 (noon)

Sensor Innovation for Bioprocess Control

Session Chair	Gérard Hopfgartner, Swiss Chemical Society
13.30-14.00	Robust, fast and accurate pH sensing platform solution Srinivas Rao, Senova Systems Inc., Sunnyvale (USA)
14.00-14.30	Controlling dissolved CO₂ to improve cell cultures Kurt Hiltbrunner, Mettler Toledo, Process Analytics, Urdorf (CH)
14.30-15.00	Application of digital measurement technology – from process development to production Dagmar Bracht, Endress+Hauser Conducta, Gerlingen (D)
15.00-15.30	Coffee break and exhibition

Thursday, 4 September 2014 (afternoon)

Process Analytics in an Industrial Environment

Session Chair	Cathy Kroll, Swiss Biotech Association
15.30-16.00	Process analytics in biopharmaceutical operations Helge Engelking, Lonza AG, Visp (CH)
16.00-16.30	Online process monitoring – examples for process development Werner Bretzel and Tamas Godany, DSM Nutritional Products, Kaiseraugst (CH)
16.30-17.00	New prospects for process control using universal sampling systems Bernd-Ulrich Wilhelm, bbi Biotech, Berlin (D)
17.00-17.30	Workshops and networking (for details, see www.biotech2014.ch)
17.00-18.00	Exhibition and posters
18.00	Aperitif
18.30	Conference dinner

Friday, 5 September 2014 (morning)

Application of Optical Sensors and Spectroscopy

08.30-09.00	Registration
Session Chair	Tobias Merseburger, ZHAW
09.00-09.30	Optical sensors in biotechnology: New materials and methods Ingo Klimant, Technische Universität Graz (A)
09.30-10.00	Online monitoring of pH, oxygen and backscattered light during biotechnological cultivation Christian Ude, Leibnitz University, Hannover (D)
10.00-10.30	NIR spectroscopy for bioprocess monitoring & control Sven Gross, Sartorius Stedim Biotech GmbH, Göttingen (D)
10.30-11.00	Coffee break and exhibition

Friday, 5 September 2014 (noon)

Process Analytical Tools in Bioprocess Development

Session Chair	Susanne Lauber Fürst, Inartis Network
11.00-11.30	Monitoring and control of high density cultures Ian Marison, Dublin City University, Dublin (IRL)
11.30-12.00	Mathematical model of adherent vero cell growth and poliovirus production in animal component free medium Gerco van Eikenhorst, Intravacc, Bilthoven (NL)
12.00-12.45	Particular aspects of process control in Syngas fermentation for bioplastic production Daniel Egger, Infors AG, Bottmingen (CH) Manfred Zinn, HES-SO Valais-Wallis, Sion (CH)
12.45-13.15	Challenges and solutions for measurement and controlling in small scale cultivation systems Martijn Kreukniet, Applikon Biotechnology B.V., Delft (NL)
13.15-14.30	Lunch, exhibition and posters

Friday, 5 September 2014 (afternoon)

Sensors for Biotech: Visions and Perspectives

Session Chair	Caspar Demuth, ZHAW
14.30-15.00	Living until 120, thanks also to bioanalytics? Reinhard Renneberg, Hong Kong University of Technology (HK)
15.00-15.30	RFID sensors as a sensing platform for single-use biopharma manufacturing Radislav Potyrailo, GE Global Research, Niskayuna (USA)
15.30-16.00	Synthesis and closing remarks Caspar Demuth, ZHAW Wädenswil
16.00	Farewell aperitif
19.00	Alumni get-together

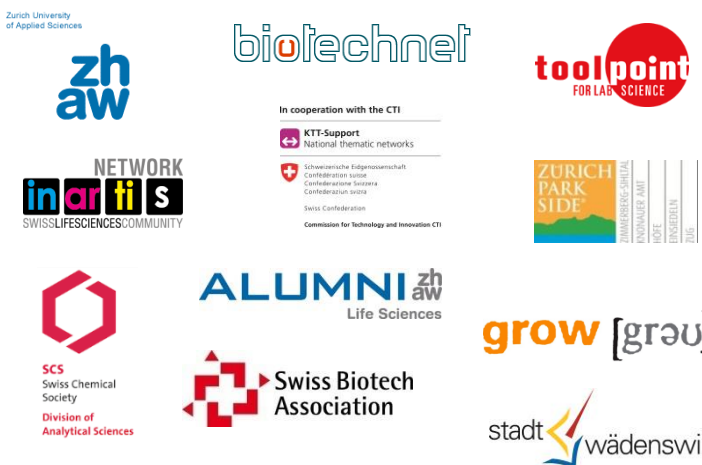
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Registration

Please register online at the conference website:
www.biotech2014.ch/registration

Fees

	before 31 July 2014	after 31 July 2014
4 and 5 September 2014 (2 days)	CHF 350.-	CHF 400.-
4 or 5 September 2014 (1 day)	CHF 250.-	CHF 300.-

The conference fee includes a copy of the abstract book, coffee breaks, lunches, dinner on Thursday as well as VAT. Accommodation is not included.

Submission of abstracts

Abstracts of oral contributions or posters should be submitted by e-mail to the scientific committee (caspar.demuth@zhaw.ch). Please follow the format guidelines at www.biotech2014.ch/submission.

Deadlines

27 June 2014	Submission of abstracts
4 July 2014	Notification of acceptance of abstracts
31 July 2014	Early registration deadline
29 August 2014	Registration and payment deadline

Contact

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Switzerland

Venue

BioTech2014 will be held at the ZHAW School of Life Sciences and Facility Management in Wädenswil/Zurich. Wädenswil is a picturesque town of about 20.000 inhabitants on the south shore of the Lake of Zurich. The Campus Grüental can be easily reached by public transport.



How to find us

From Zurich to Wädenswil

By train (for details, see www.sbb.ch)

- From Zurich main railway station (Hauptbahnhof) to Wädenswil: trains six times an hour (S2, S8, S25, RegioExpress), travel time ca. 20 minutes
- From Zurich airport to Wädenswil: direct trains every 30 minutes (S2), travel time 35 minutes

By car

Leave the A3 motorway (Zurich-Chur) at the exit 'Wädenswil' and follow the sign 'ZHAW Tagung'.

From Wädenswil railway station to ZHAW Grüental Campus

- By public transport: buses number 123 and 126 to the bus stop 'Campus Grüental'
- By taxi from Wädenswil railway station (approximately CHF 15.- one way):
Wädi Taxi +41 44 780 52 52 or 1A Regional Taxi +41 44 780 77 77

Accommodation

For recommended hotels, see www.biotech2014.ch.

Zurich University
of Applied Sciences

zhaw Life Sciences and
Facility Management



BioTech 2014
Chemical Sensors Forum

**Bioprocess Analytics and
Sensor Technology**

4 & 5 September 2014

Campus Grüental,
Zurich University of Applied Sciences
Wädenswil, Switzerland

www.biotech2014.ch