

## Wednesday, June 11, 2014

Venue: [National Technical Library, Balling Hall](#)

15.00 Chairpersons	<b>Conference Opening</b> Tomas Brányik, ICT Prague, CZ Karin Kovar, ZHAW, Wädenswil, CH
15.10	<b>Welcome by rectors and officials supporting the Czech-Swiss collaboration</b> Karel Melzoch, Rector ICT Prague, CZ Daniel Baumann, Vice-Director ZHAW, Wädenswil, CH Werner Bardill, Embassy of Switzerland in the Czech Republic Marie Kousalíková, Mayoress of the Metropolitan District Prague 6
16.00	<i>Biotec from velvet revolution until today: A personal account from the Swiss side</i> Hans-Peter Meyer, Co-founder of the Czech-Swiss Symposia, Visp, CH <i>Biotec from velvet revolution until today: A personal account from the Czech side</i> Jan Káš, Co-founder of the Czech-Swiss Symposia, ICT Prague, CZ
16.30	<b>Plenary Lecture</b> <i>On the origin of life on earth</i> Václav Pačes, Institute of Molecular Genetics, ASCR, CZ
17.30	<b>Presenation of Main Sponsors</b> Robert Kužela, Site manager, Lonza Biotec, CZ Christoph Bremus, Director Sales Bioprocess - Europe Eppendorf, Germany Dirk Hebel, Infors HT, Switzerland
18.30 Venue	<b>Welcome Party</b> <a href="#">National Technical Library, Gallery</a>

## Thursday, June 12, 2014

Venue: **Balling Hall**

<b>Session 1</b>	<b>Large and Small Molecules for Pharma</b>
Chairpersons	Hans Peter Kocher, icb-partners, Basel, Switzerland Peter Šebo, Institute of Microbiology, ASCR, CZ
08.30	<i>Microbial production of antibody fragments for ophthalmic use</i> Peter Steiner, Novartis, Basel, CH
09.00	<i>Recombinant scaffolds derived from Streptococcus ABD domain as potential therapeutics for autoimmune disorders</i> Petr Malý, Institute of Biotechnology, ASCR, CZ
09.25	<i>DARPinS: Design, bacterial expression and bioorthogonal coupling for novel therapeutic concepts</i> Hannes Merten, Department of Biochemistry, University of Zürich, CH
09.50	<i>Optimization of batch time/cycle time for industrial pharma processes</i> Zdeněk Cakl, Lonza Biotec, Kouřim, CZ
10.15	<i>Glycotargets: novel vaccines for veterinary use</i> Christine Neupert, MALCISBO, Zürich, CH
10.45 - 11.15	Coffee Break & Poster Session
11.15	<i>Streptavidine-based system for antigen delivery and vaccination</i> Ondřej Staněk, Institute of Microbiology, ASCR, CZ
11.40	<i>Recombinant protein tools &amp; examples in bioanalytics</i> Roland Tynes, FHNW, Muttenz, CH
12.05	<i>Recombinant proteins for diagnostics</i> Mojmír Ševčík, Biovendor, CZ
12.30 - 13.30	Lunch & Poster Session

<b>Session 2</b>	<b>Food, Feed and Nutrition</b>
Chairpersons	Milan Čertík, Slovak University of Technology, Bratislava, SK Othmar Käppeli, ABAC R&D AG, Schlieren, CH
13.30	<i>Baker's yeast for production of sustainable ingredients in health, nutrition and wellness</i> Jørgen Hansen, Evolva SA, Reinach, CH
14.00	<i>Microbial Production of the Vitamins B<sub>2</sub> and C</i> Hans-Peter Hohmann, DSM Nutritional Products, Kaiseraugst, CH
14.25	<i>Biotransformations of prenylated hop flavonoids</i> Pavel Dostálek, ICT Prague, CZ
14.50	<i>The many faces of microbial laccases</i> Linda Thöny-Meyer, Laboratory for Biomaterials, EMPA St. Gallen, CH
15.15 - 15.45	Coffee Break & Poster Session
15.45	<i>From bacterial genomics to human metabolism</i> Guy Vergères, Functional Nutritional Biology Research Group, Agroscope, Bern, CH
16.10	<i>Biotechnically enriched cereals with polyunsaturated fatty acids as functional food and feed additives</i> Milan Čertík, Department of Biochemical and Food Technology, Slovak University of Technology, Bratislava, SK
16.35	<i>Present and Future of Nutrition &amp; Biotech</i> Othmar Käppeli, ABAC R&D AG, Schlieren, CH
17.00 - 19.00	<b>Poster Session - short presentations of highlighted posters</b>
Chairpersons	Hans-Peter Meyer, Commission for Technology and Innovation CTI, Bern, & HES-SO Valais, Sion, CH Karel Melzoch, Rector of Institute of Chemical Technology Prague, CZ
19.30	<b>Gala Dinner ( with a medieval brewing demonstration)</b>
Venue	<b>Břevnov Monastery</b>

## Parallel Sessions

Venue: **Hall 01**

<b>Session 3</b>	<b>Environmental Biotechnology</b>
Chairpersons	Olga Valentová, ICT Prague, CZ Ivo Frébort, Palacký University, Olomouc, CZ
08.30	<i>The Bio-nanocapsules. Versatile liposomes armed with virus-derived functional domains</i> Katsuyuki Tanizawa, Centre of the Region Haná for Biotechnological and Agricultural Research, Palacký University, Olomouc, CZ
08.55	<i>Nanostructured and functionalized surfaces for biocompatibility improvement and bactericidal action</i> Petr Slepíčka, Department of Solid State Engineering, Institute of Chemical Technology Prague, CZ
09.20	<i>Multicomponent biosurfactants - A "Green Toolbox" extension</i> Olga Schreiberová, Department of Biotechnology, Institute of Chemical Technology Prague, CZ
09.55	<i>Magnetic nanoparticles in biotechnologies and biosensing</i> Kateřina Holá, Regional Centre of Advanced Technologies and Materials, Palacký University, Olomouc, CZ
10.20	<i>New perspectives in antimicrobial peptide production in plants</i> Tufan M. Öz, Centre of the Region Haná for Biotechnological and Agricultural Research, Palacký University, Olomouc, CZ
10.45 - 11.15	Coffee Break & Poster Session
11.15	<i>Biotechnological aspects of cytoskeletal regulation in plants</i> Jozef Šamaj, Centre of the Region Haná for Biotechnological and Agricultural Research, Palacký University, Olomouc, CZ
11.40	<i>Barley with engineered drought resistance</i> Ivo Frébort, Centre of the Region Haná for Biotechnological and Agricultural Research, Palacký University, Olomouc, CZ
12.05	<i>Induced resistance as a bio-based strategy for plant protection against pathogens</i> Lenka Burketová, Institute of Experimental Botany, Prague, CZ
12.30 - 13.30	Lunch & Poster Session
13.30	<i>Biological treatment of wastewater from chemical industry with high concentration of nitrates and sulphates</i> Jana Záborská, Department of Water Technology and Environmental

	Engineering, Institute of Chemical Technology Prague, CZ
14.00	<i>Electrochemically-enhanced bioremediation of groundwater in a microbial fuel cell</i> Petra Hedbavna, Department of Civil and Structural Engineering, University of Sheffield, UK
14.25	<i>Geochemistry and microbiology of the slag leachate remediation with permeable reactive barriers</i> Karel Waska, Department of Geology and Environmental Geosciences, Northern Illinois University, DeKalb, IL, USA
14.50	<i>Production technology of fermentation accelerator and experience in sustainable use of organic animal waste</i> Alexander Ivanov, Federal Center for Toxicological, Radiation, and Biological Safety, Kazan, Russia
15.15 - 15.45	Coffee Break & Poster Session
15.45	<i>Towards haloalkane dehalogenases suitable for industrial applications</i> Veronika Štěpánková, Masaryk University, Brno, CZ
16.10	<i>Simultaneous production of bioelectricity and docosahexaenoic acid (DHA) from glycerol by the photomicrobial fuel cell</i> John Chi-Wei Lan, Department of Chemical Engineering and Materials Science, Yuan Ze University, Chung-Li, Taiwan
16.35	<i>Continuous cultivation of Azohydromonas australica for production of copolymer Poly (3-hydroxybutyrate-co-3-hydroxyvalerate)</i> Ashok K. Srivastava, Indian Institute of Technology Delhi, New Delhi, India

Venue: **Hall 02**

<b>Session 4</b>	<b>Biorefinery</b>
Chairpersons	Petra Patáková, ICT Prague, CZ Urs Baier, ZHAW, Wädenswil, CH
08.30	<i>Biomass refineries for a clean environment</i> Murray Moo-Young, University of Waterloo, Canada
09.20	<i>Lignocellulosic biomass utilization toward biorefinery: Technologies, products and perspectives</i> Solange Mussatto, Centre of Biological Engineering, University of Minho, PT
09.55	<i>Perspectives of Applied Microbiology with Purple Bacteria driven by Systems Biology</i> Hartmut Grammel Biberach University of Applied Science, Biberach, Germany Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg, Germany
10.20	<i>Applied biotechnology for the production of biofuels and bioproducts from sugarcane bagasse</i> Silvio da Silva, Department of Biotechnology, University of Sao Paulo, Brazil
10.45 - 11.15	Coffee Break & Poster Session
11.15	<i>Fungi-based biorefinery: Ethanol, biogas, fish feed and superabsorbents from lignocellulosic materials</i> Mohammad J. Taherzadeh, Swedish Centre for Resource Recovery, University of Borås, Sweden
11.40	<i>From biogas to biorefinery through added value chains</i> Urs Baier, ZHAW, Wädenswil, CH
12.05	<i>Bioinformatics for biotechnology research: data mining of Clostridium pasteurianum genome</i> Karel Sedlář, Department of Biomedical Engineering, Brno University of Technology, CZ
12.30 - 13.30	Lunch & Poster Session
13.30	<i>Renewable chemicals by design</i> Sean Sutcliffe, Edward Green, Patrick Simms, Timothy Davies, Green Biologics Ltd., UK
14.10	<i>Bioengineering Clostridia. A road map for gene system development</i> Ying Zhang, Centre for Biomolecular Sciences, University of Nottingham, UK

14.35	<i>Immobilized biocatalysis for biofuel production</i> Martin Rebroš, Institute of Biotechnology and Food Science, Slovak University of Technology, Bratislava, SK
14.55	<i>In situ product removal from improved isopropanol, butanol and ethanol production by fermentation</i> Ana M. López-Contreras, University of Wageningen, Netherland
15.15 - 15.45	Coffee Break & Poster Session
15.45	<i>The production of aminolevulinic acid and biohydrogen in a biorefinery concept using metabolically engineered Rhodobacter sphaeroides O.U.001</i> Gökhan Kars, Ümmühan Alparlan, Selçuk University, Konya, Turkey
16.10	<i>New microorganisms for wastes upgrading. the case of organic fraction of municipal solid wastes and brewer`s spent grain within Bioassort project</i> Antonella Amore, University of Naples, Italy
16.35	<i>Parallel cultivation of microorganisms using rigid wall single-use bioreactors</i> Sebastian Kleebank, Anne Niehus, Eppendorf AG, Germany

## Friday, June 13, 2014

Venue: **Balling hall**

<b>Session 1</b>	<b>Large and Small Molecules for Pharma</b>
Chairpersons	Diego Schmidhalter, Lonza AG, CH Kateřina Petříčková, Institute of Microbiology, ASCR, CZ
08.30	<i>Structure and function of a human heteromeric amino acid transporter</i> Dimitrios Fotiadis, Institute of Biochemistry and Molecular Medicine, University of Bern, CH
09.00	<i>Recombinant production of peptides</i> Sarah Wegmüller, HES-SO Valais, Sion, CH
09.25	<i>Microbial expression of human enzymes: from biocatalysis to drug design</i> Andrea Camattari, Institute of Molecular Biotechnology, TU Graz, A
09.50	<i>Sampling enhancement in biomolecular simulations</i> Vojtěch Spiwok, Department of Biochemistry and Microbiology, Institute of Chemical Technology Prague, CZ
10.15	<i>Using nature's chemical diversity for drug discovery</i> Kathrin Buntin, Novartis, Basel, CH
10.45 - 11.15	Coffee Break & Poster Session
11.15	<i>Gene shuffling for synthesis of novel lincosamid antibiotics</i> Lucie Najmanová, Institute of Microbiology, ASCR, CZ
11.40	<i>Production of highly active compounds by fermentation</i> Diego Schmidhalter, Lonza AG, Visp, CH
12.05	<i>Manumycins reloaded: from feeble antibiotics to promising anti-inflammatory agents</i> Kateřina Petříčková, Institute of Microbiology, ASCR, CZ
12.30 - 13.30	Lunch & Poster Session



<b>Session 5</b>	<b>Biomaterials and Biochemicals</b>
Chairpersons	Linda Thöny-Meyer, EMPA St. Gallen, CH Ivana Márová, Brno University of Technology, CZ
13.30	<i>Polymeric biomaterials based on collagen for bone regeneration</i> Lucy Vojtova, CEITEC, Brno, CZ
14.00	<i>The scientific approach and methods for mitigation of a large-scale limitations in isolation and purification of active pharmaceutical ingredients</i> Pavel Havelka, Lonza Biotec, Kouřim, CZ
14.25	<i>Bioactive bacterial exopolysaccharides. modification, characterization and chondrogenic potential for cartilage regenerative medicine</i> Sylvia Collic-Jouault, IFREMER, France
14.50	<i>Use of immobilized Lactobacilli to pharmaceutical and cosmetics products</i> Petr Ryšávka, Helvetia Pharma Prague/Favea, Ltd., Kopřivnice/Pharmaceutical Biotechnology, CZ
15.15 - 15.45	Coffee Break & Poster Session
15.45	<i>Utilization of various waste substrates for biotechnological production of biopolymers and other high value products</i> Stanislav Obruča, Materials Research Centre, Brno, CZ
16.10	<i>Production of poly(4-hydroxybutyrate) (P4HB) in recombinant Escherichia coli. Identification of the factors stimulating P4HB synthesis</i> Qun Ren, Laboratory for Biomaterials, EMPA St. Gallen, CH
16.35	<b>Poster Awards</b>
17.00	<b>Closing Ceremony</b>
18.00	<b>Guided Prague Sightseeing</b>

## Parallel Sessions

Venue: **Hall 01**

<b>Session 6</b>	<b>Microalgae Biotechnology</b>
Chairpersons	Kateřina Biřov, Institute of Microbiology, ASCR, CZ Yusuf Chisti, Massey University, NZ
08.30	<i>Products from Microalgae</i> Yusuf Chisti, Massey University, NZ
09.20	<i>Bridging the lipid yield gap</i> Packo Lamers, Wageningen University
09.55	<i>Bioethanol production from green microalgae. from theory to practice</i> Bruno Fernandes, Institute for Biotechnology and Bioengineering, University of Minho, PT
10.20	<i>The development of microalgal biotechnology in the Czech Republic</i> Jiř Masojdek, Laboratory of Algal Biotechnology, Institute of Microbiology ASCR, Třeboň, CZ
10.45 - 11.15	Coffee Break & Poster Session
11.15	<i>Growing Green Electricity: A new use for Cyanobacteria</i> Barry Bruce, University of Tennessee, Knoxville, USA
12.05	<i>Harvesting microalgae with novel agents using non-covalent interactions</i> Gita Prochzkov, Institute of Biotechnology, Institute of Chemical Technology Prague, CZ
12.30 - 13.30	Lunch & Poster Session
13.30	<i>Controlled synthesis of energy reserves in green algae; from cell cycle regulation to production</i> Vilm Zachleder, Laboratory of Cell Cycles of Alga, Institute of Microbiology ASCR, Třeboň, CZ
14.00	<i>Phenotypic spectrum and 3D/TEM analysis of Parachlorella kessleri mutants produced by heavy-ion irradiation</i> Shigeyuki Kawano, University of Tokyo, Japan
14.25	<i>The open thin-layer photobioreactor at the Zurich University of Applied Sciences. experiences after a year of continuous operation</i> Dominik Refardt, Institute of Natural Resource Sciences, Wadenswil, ZHAW, CH
14.50	<i>Bioremediation of contaminated agricultural land by combined effect of agriculture, biogas and microalgae production</i> Miroslav Kajan, Czech Biogas Association, CZ

15.15 - 15.45	Coffee Break & Poster Session
15.45	<i>Toward the sustainable cultivation of microalgae to produce renewable biofuels and fine chemicals</i> Jean-Paul Schwitzguébel, Laboratory for Environmental Biotechnology, EPFL, Lausanne, CH
16.10	<i>The importance of basic genetic experiments for improvement of microalgal biotechnology</i> Kateřina Bišová, Laboratory of Cell Cycles of Alga, Institute of Microbiology ASCR, Třeboň, CZ

## Saturday, June 14, 2014

### [Excursion to Budweiser Budvar with Český Krumlov sightseeing](#)

Bus leaves from the main entrance of National Technical Library at 8:30