

International Review Conference BIOTECHNOLOGY

Vienna, November 14-18, 2004

PROGRAM

Sunday, Nov. 14, Evening

18:00 *Opening addresses*

18:25 H. Schwab: ***Engineering of industrial enzymes by rational design and directed evolution***

19:00-20:00 *Concert*

20:00-22:00 *Get-together party*

Monday, Nov. 15, Morning

Chairpersons: W. Grajek, H. Schwab

9:00 S. Bielecki: Bacterial cellulose – biosynthesis and application

9:35 H. Redl: ***Criteria for the use of fibrin matrix in tissue engineering***

10:10-10:30 *Coffee break*

10:30 K. Bieñkowska-Szewczyk: ***Recombinant vaccines, bioproducts and novel molecular diagnostics***

11:05 R. Necina, W. Buchinger: ***New therapeutic molecules – a challenge for biopharmaceutical production***

11:40-12:00 *Coffee break*

12:00 D. Mattanovich: ***Improvement of recombinant protein producing yeast hosts by rational design and random screening***

12:15 G. Posfai, G. Plunkett, T. Feher, G. Keil, K. Umenhoffer, V. Kolisnychenko, S. Sharma, S. Harcum, F.R. Blatter: ***A reduced Escherichia coli lacking mobile genetic elements***

12:30 W. Billes, R. Tschelliessnig, J. Fisher: ***Molecular simulation of the adsorption of molecules from dilute solutions***

12:45 O. Stamm: ***Contract quality control of biopharmaceuticals***

Monday, Nov. 15, Afternoon

Chairpersons: R. Grabherr, L. Kaczmarek

15:00 J. Kuźnicki: ***Protein studies at the International Institute of Molecular and Cell Biology in Warsaw***

15:35 J. Wesierska-Gadek, J. Wojciechowski, G. Schmid: ***Advantage of a baculovirus expression system for protein-protein interaction studies. Evaluation of the involvement of posttranslational modifications***

16:10 – 16:30 *Coffee break*

16:30 M. Olszewski, R. Piątek, J. Kur: ***Single stranded-DNA-binding proteins from Thermus thermophilus and Thermus aquaticus – application and new arrangement of binding domains***

16:45 E. Rieder, A. Nigisch, G. Seebacher, M.T. Kasimir, E. Wolner, P. Simon, G. Weigel: ***Leukocyte chemotaxis towards decellularized porcine and human heart valve material in vitro***

17:00 M. Szczotka: ***Flow cytometry determination of lymphocyte subsets, PCNA activity and bcl-2 expression in animals experimentally infected with bovine leukemia virus***

17:15 A. Stanisławska-Sachadyn, P. Sachadyn: ***MutS as a tool for mutation detection***

- 17:30 A. Podgornik, M. Barut, A. Strancar: *CIM supports - short layered monoliths: new standard for analyzing and purifying biomolecules*
17:40 A. Dubin: *New generation of peptide antibiotics*

Monday, Nov. 15, Evening **Chairperson: J. Spak**

- 19:30 S. Malepszy: *Plant biotechnology in Poland*
20:05 A. Dinnyes: *Novel diseases model animals produced by somatic cell gene transfer targeting and cloning*

Tuesday, Nov. 16, Morning **Chairpersons: G. Posfai, H. Redl**

- 9:00 J. Dulak, A. Józkwicz: *New strategies for gene therapy*
9:35 W.H. Günzburg: *Cell and gene therapy to improve cancer treatment.*

10:10-10:30 *Coffee break*

- 10:30 A. Józkwicz, J. Dulak: *Helper-dependent adenoviral vectors (HDAd) - a promising tool for gene therapy*
10:45 A. Gornikiewicz, A. Zommer, R. Jakesz, M. Gnant, C. Brostjan: *Retroviral targeting of proliferating endothelial cells*
11:00 M. Müller: *Production of antibodies in transgenic cattle cloned by nucleus*

11:35-11.55 *Coffee break*

- 11:55 L. Kaczmarek: *Matrix metalloproteinase-9 (MMP-9) in brain function and dysfunction*
12:30 E. Borowski, M.M. Bontemps-Gracz, A. Piwkowska: *Strategies for overcoming the multidrug resistance (MDR) of tumor cells*
12:45 H. Wędrychowicz, M. Wiśniewski, M. Keşik, M. Kozak-Cięszczyk, L. Jedlina-Panasiuk, A. Płucienniczak: *Effective immunization against gastrointestinal helminth infections with cDNA and/or recombinant protein of parasitic proteases*
13:00 B. Zalewska, R. Piątek, K. Bury, J. Kur: *Chimeric Dr-HSV fimbriae as a model of recombinant vaccine*

Tuesday, Nov. 16, Afternoon

- 15:00-17:00 *Visit to the Vienna Biocenter*
19:00 *Conference dinner*

Wednesday, Nov. 17, Morning **Chairpersons: S. Bielecki, F. Grundler**

- 9:00 D. Dudits: *Green biotechnology: from functional genomics to seed industry*
9:35 M. Laimer da Camara Machado: *The perspectives of plant biotechnology*

10:10-10:30 *Coffee break*

- 10:30 A. Pretova: *Biotechnology in Slovakia and the legislation framework*
11:05 J. Spak: *Plant biotechnology in the Czech Republic*

11:40-12:00 *Coffee break*

- 12:00 A. Aniol: *The implementation of transgenic cultivars in Polish agriculture: prospects and constraints*
- 12:15 J.J. Rybczyński, A. Mikula: *Plant biotechnology in protection of Polish flora*
- 12:30 A. Kormutak, M. Lanakova, A. Kamenicka: *PCR-RFLP of cpDNAs in some Magnolia species*
- 12:45 E. Sułuja, L. Strokowskaja, W. Zagórski-Ostojka, A. Pałucha: *Virus-like particles of potato leafroll polerovirus as potential carrier/delivery system in gene therapy*

Wednesday, Nov. 17, Afternoon

Chairpersons: M. Laimer, A. Pretova

- 15:00 F. Grundler: *Making solutions – from field to cell and from cell to field: Plant biotechnology at the new Department of Applied Plant Sciences and Plant Biotechnology, BOKU – University of Natural Resources and Applied Life Sciences, Vienna*
- 15:35 W. Grajek: *Probiotics, prebiotics and plant antioxidants as functional food compounds: biotechnological methods of production and evaluation*
- 16:10 – 16:30 *Coffee break*
- 16:30 P. Raspor: *Bio-markers in food safety and traceability*
- 17:05 W. Szeja, G. Gryniewicz: *Chemical modification of naturally occurring polyphenols for enhanced bioavailability and increased selectivity of their biological activity*
- 17:20 E. Żyracka, R. Zadrag, S. Koziół, A. Krzepiłko, G. Bartosz, T. Biliński: *Yeast can be a biosensor for antioxidants. Ascorbate abolishes auxotrophy caused by the lack of superoxide dismutase in Saccharomyces cerevisiae*
- 17:35 J. Juśkiewicz, Z. Zdunczyk, J. Fornal: *Nutritional properties of tubers of conventionally bred and transgenic clones resistant to necrotic strain of potato virus (PVY^N)*
- 17:50 M. Fonberg-Broczek, B. Windyga, Jacek Szczawiński, D. Pietrzak, Gudalupe Prestamo: *High pressure processing for food safety*
- 18:05 M. Fonberg-Broczek: *Proposition of collaboration in the field of High Pressure Food Processing – High Pressure Institute of Polish Academy of Sciences – Food Research Activity*

Thursday, Nov. 18, Morning

Chairpersons: A. Dubin, P. Raspor

- 9:00 T. Twardowski: *Legal and social aspects of biotechnology*
- 9:35 Z. Jedliński: *Novel strategy in cancer chemotherapy. Synthesis of nanoparticles as novel drug carriers*
- 10:10-10:30 *Coffee break*
- 10:30 J. Dziuba, M. Darewicz: *The strategy of protein and bioactive peptide research*
- 10:45 F.A. Shah, M.I. Pathan: *Enhanced production of biogas through anaerobic treatment of distillery effluent*
- 11:00 M. Wojciechowski, S. Milewski, J. Mazerski, E. Borowski: *Glucosamine-6-phosphate synthase, a novel target for antifungal agents. Molecular modelling studies in drug design*
- 11:15 M. Bagiński, K. Sternal, J. Czub, E. Borowski: *Molecular modelling of membrane activity of Amphotericin B, the polyene macrolide antifungal antibiotic*
- 11:30 K. Pleban, D. Kaiser, S. Kopp, M. Peer, P. Chiba, G.F. Ecker: *Targeting drug efflux pumps – a pharmacoinformatic approach*
- 11:45 R.T. Sikorski: *New "fork"-structure polymers as immobilizing agent*
- 12:00 M. Kowalczyk: *Biodegradable polymeric materials for health and environment*
- 12:10 I.B.H. Wilson: *Definition of immunogenic carbohydrate epitopes*
- 12:25 *Closing address*