Call for papers

If you are interested in giving a lecture or in presenting a poster referring to one of the topics, please send us your abstract written in English before 31 December 2005. All abstracts submitted will be carefully reviewed by the scientific committee.

Deadline for submitting abstracts: 31 Dec. 2005

Instructions for preparing abstracts

1. State the topic your abstract belongs to.
2. State whether it is a lecture or a poster abstract.
3. The abstract must include name(s) of author(s), complete address (incl. fax and e-mail) of the contact author, title of paper, statement of objectives, principal results, and conclusion.
4. Please use a **common file format (doc, rtf, no pdf).**
5. The abstract should not be longer than 400 words.
6. Please submit your abstract per e-mail to:
   iseb-eseb-jseb2006@fu-confirm.de

There will be a poster session with poster award and poster short presentations. The conference language is English.

Scientific committee

Garabed Antranikian
Technical University Hamburg-Harburg, Germany

Harold L. Drake
University of Bayreuth, Germany

Thomas Egli
EAWAG, Switzerland

Hauke Harms
UFZ Centre for Environmental Research Leipzig-Halle, Germany

Annele Hatakka
University of Helsinki, Finland

Stefanie Heiden
Deutsche Bundesstiftung Umwelt (DBU), Germany

Matthias Kästner
UFZ Centre for Environmental Research Leipzig-Halle, Germany

Ken Killham
University of Aberdeen, UK

Maia Kivisaar
University of Tartu, Estonia

Murray Moo-Young
University of Waterloo, Canada

Lars Peter Nielsen
University of Aarhus, Denmark

Hisao Ohtake
Osaka University, Japan

Eugenia Olguin
Ecology Institute Xalapa, Mexico

Juan L. Ramos
CSIC, Spain

Eliora Ron
University of Tel Aviv, Israel

Ulrich Stottmeister
UFZ Centre for Environmental Research Leipzig-Halle, Germany

Irena Twardowska
Polish Academy of Sciences, Poland

Mikhail B. Vainshtein
IBPM, Russia

Jay Valdes
US Army RDECOM, USA

Willy Verstraete
University of Ghent, Belgium

Davide Zannoni
University of Bologna, Italy

Conference fees

The organizers

Murray Moo-Young
President of International Society of Environmental Biotechnology

Thomas W. Egli
Chairman Section Environmental Biotechnology of the European Federation of Biotechnology

Hisao Ohtake
President of Japanese Society of Environmental Biotechnology

Conference chairs, local organizers

Hauke Harms	*hauke.harms@ufz.de*
Matthias Kästner	*matthias.kaestner@ufz.de*
Ulrich Stottmeister	*ulrich.stottmeister@ufz.de*

Local committee

Antonis Chatzinotas, Hermann Heipieper, Peter Kuschk, Thomas Maskow, Anja Miltner, Ivonne Nijenhuis, Marcell Nikolausz, Dietmar Schlosser, Heinz Seidel, Karin Wendlandt, Lukas Wick

Conference fees

The conference fee includes welcome reception, conference dinner in the Moritzbastei, coffee breaks, and conference materials.

	before March 1	after March 1
Regular fee	€ 350	€ 400
Students	€ 200	€ 250
Excursions		
Berlin	€ 40	€ 60
Dresden	€ 40	€ 60
Guided historical city walk	€ 10	€ 15
Research Project SAFIRA	€ 20	€ 30
Südraum Leipzig - Remediation and sustainable use of mining lakes	€ 20	€ 30

Further information and registration form on our webpage:
http://www.ufz.de/iseb-eseb-jseb2006

For questions concerning organization

ISEB / EFB / JSEB conference secretary:

Ms. Ogarit Uhlmann MSc.
F&U confirm
Permoserstr. 15,
04318 Leipzig, Germany

Phone: +49 341 235 2264 Fax: +49 341 235 2782

E-Mail: *iseb-eseb-jseb2006@fu-confirm.de*

International Symposium on Environmental Biotechnology Leipzig 2006

Final Call for Papers 3rd Announcement

ISEB International Society of Environmental Biotechnology

EFB European Federation of Biotechnology

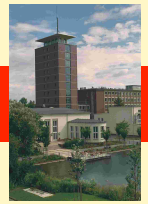
JSEB Japanese Society of Environmental Biotechnology

July 9 - 13, 2006

Foto: A. Künzelmann

UFZ Centre for Environmental Research Leipzig-Halle
Conference Centre "Leipziger KUBUS"
Permoserstr. 15, 04318 Leipzig, Germany

Welcome



The “global village“ relies on one common environment (air, water, land) transcending national boundaries. Growing concern on protection and restoration of environmental quality demands technologies for the prevention of polluting releases and the treatment of extant pollution. Biotechnology offers natural ways for making industrial processes work more efficiently, creating less pollution, and providing biological replacements for synthetic chemicals. Environmental biotechnology is the way to address environmental problems ranging from the identification and monitoring of biohazards to bioremediation techniques for industrial, agricultural and municipal effluents and residues. Control of relevant environmental processes requires understanding of natural processes, profound engineering expertise, prospective environmental regulations and resource management strategies to tackle the global challenges identified for this decade. Application of molecular methodologies may provide avenues to more sustainable, efficient solutions to environmental problems.
We cordially invite you to join this event in the beautiful, modern and traditional city of Leipzig.

Programme

Sunday July 9, 2006

Registration 5 p.m. - 6 p.m.

Opening Session 6 p.m. - Greetings of the organizers

Lecturer A.J.B. Zehnder, Switzerland: Water resources - Feeding a growing human population accelerates local and global nutrient cycles

Football world championship broadcasting in the conference centre! 8 p.m.

General-/sub-topics, and keynote lecturers

1 Microbial diversity – Global challenges

Characterization of microbial communities
J. Prosser, UK: Molecular characterisation of microbial communities and their ecosystem function

Biofilms
M.C.M. van Loosdrecht, The Netherlands: Developments in aerobic granular sludge systems

Adaptation and stress response
K. N. Timmis, Germany/UK: Psychrophily and chaperones

In situ activity assessment
M. Kästner, Germany: New approaches for assessment of microbial activity *in-situ* – soil, sediments, and freshwater

2 Environmental processes

Gene transfer
J. L. Ramos, Spain: Life of Pseudomonas putida in the plant rhizosphere: metabolic versatility via gene transfer

Topics

N-, S-, P- turnover
H. L. Drake, Germany: Earthworms: Transient heaven for N_2O-producing terrestrial microbes

Metals (incl. heavy metals)
P. Lens, The Netherlands: Heavy metals in anaerobic environments: bioavailability, precipitation and removal

Organic contaminants
A. Hatakka, Finland: Role of fungi and their enzymes in the degradation of recalcitrant compounds in soil

Trace compounds: pharmaceuticals, personal care products, endocrine disruptors
T. Ternes, Germany: Fate of pharmaceuticals and personal care products in sewage treatment plants and river sediments

Alternative electron acceptors, electron shuttles
B. Schink, Germany: Redox reactions in anoxic environments: pathways, energetics, and biochemical consequences

Oligotrophic environments
T. Egli, Switzerland: Microbial growth and competition at low nutrient concentrations: On our way from single substrates to the complex environment

Transport and bioavailability
H. Harms, Germany: Homogenizing contaminated soil without touching it

Ecological modelling and engineering
M. Tullner, Germany: Modeling of microbial processes in the subsurface

3 Biomonitoring of natural and engineered processes

Stable isotope probing and biomarkers
M. J. Bailey, UK: The use of stable isotope probing to link microbial diversity with function

Functional genes
J. R. van der Meer, Switzerland: A la carte engineering of transcription activators for whole cell living bacterial bioreports

Phylogenetic genes
R. Amann, Germany: Phylogenetic genes as tools for studying the diversity and function of environmental microorganisms

Chip technology
J. Zhou, USA: Functional gene arrays for environmental studies: current status, challenges and future

Biosensors
S. Belkin, IL: On-chip canaries for toxicity monitoring

4 Treatment of water, soil and waste

Groundwater: natural attenuation and enhanced attenuation
C. Holliger, Switzerland: Reductive dechlorination: Result of horizontal gene transfer and common effort of different populations?

Topics

Reactive biobarriers
P. Adriaens, USA: Scaling of sediment bioremediation processes and applications

Waste water treatment, constructed wetlands
M. Jetten, The Netherlands: Application and metabolism of new N cycle bacteria

Waste treatment, composting
P. Weiland, Germany: Biomass digestion - Successful pathway for energy production and waste treatment

Soil bioremediation, phytoremediation
J. Vangronsveld, Belgium: Role of plant associated bacteria to improve phytoremediation of contaminated soils

Biosafety, biohazards, military related wastes
C. Smalla, Germany: Effect of veterinary medicines on the abundance, diversity and transferability of antibiotic resistance genes

Environmental process engineering
J. Puhakka, Finland: Environmental bioprocess engineering for recovery and control of metals

Bioprocess control
U. v. Stockar, Switzerland: Methods for predicting microbial growth yields based on thermodynamic analysis

5 Technical processes and industrial applications

Cleaner production - manufacturing with less pollution
A. Schmid, Germany: Microbial metabolism and biotechnology for a sustainable chemistry

Use of renewable feed stocks and resources
G. Antranikian, Germany: Extremozymes, a new generation of biocatalysts

Alternative fuels and bulk chemicals
W. Verstraete, Belgium: Microbial fuel cells relative to other fermentations for biomass to energy conversion

Biotransformation in non aqueous systems
H. Ohtake, Japan: Bio-based production toward sustainable industrial development

Novel bioreactor systems and process scale up

6 Governmental regulations on environmental quality

Environmental law

Landscape and resource management

Water resources

7 Perspectives of biotechnology

Workshop and round table discussion