



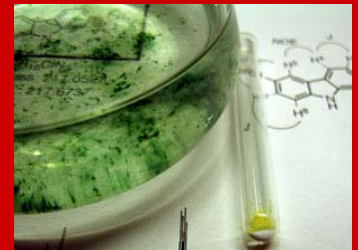
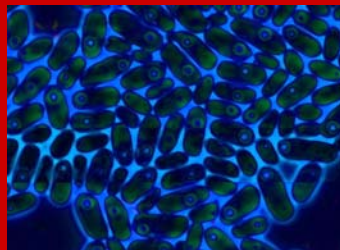
Swiss Society for Microbiology



3<sup>rd</sup> Meeting

Swiss Microbial Ecology

Einsiedeln (CH)  
28 - 30 January 2009



Organization:

Dr. Thomas Posch & Astrid Kunz

Dr. Blom & Prof. Dr. Pernthaler  
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Swiss Academy of Sciences  
Akademie der Naturwissenschaften  
Accademia di scienze naturali  
Académie des sciences naturelles



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Microsynth

## Dear participants of the SME2009 Meeting in Einsiedeln!

We are surprised and happy about the immense feedback. Altogether 95 participants will attend the meeting, the scientific program is based on 30 talks, 38 poster presentations and 6 invited talks. We are pleased to inform that besides well known scientists also many young researchers (Master students, PhD students, and Post-Docs) join the meeting.

The goal of the meeting is to bring together scientists from Switzerland who study a large diversity of topics within microbial (bacteria & protists) ecology in order to promote scientific exchange between distanced subjects (e.g., research in soil, air and aquatic habitats, symbiosis, etc.), to discuss common approaches and standardize methods. The meeting should help to establish new fruitful collaborations. The meeting place offers many possibilities also for social get-together (a billiard room, a bowling alley, a small bar, etc).

January 2009, Einsiedeln

### Dr. Thomas Posch & Astrid Kunz

#### Organizing committee

Dr. Judith Blom  
Prof. Dr. Jakob Pernthaler  
Dr. Michaela Salcher  
Prof. Dr. Ferdinand Schanz  
Dipl. Ing. Michael Zeder  
Ing. Eugen Loher

#### Co-helper

Ester Eckert & Bettina Eugster & Esther Kohler & Stefan Neuenschwander  
Tatiana Shabarova & Seraina Tgetgel & Yannick Zimmermann  
Markus Steinkellner & Angela Mechsner  
Olivier Vanholsbeeck (webmaster)

#### Sponsors



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## Meeting place

The meeting will be held at the Schweizer Jugend- und Bildungszentrum (SJBZ), Lincolnweg 23, CH-8840 Einsiedeln  
<http://www.sjbz-online.com/>

All participants who booked the accommodation by us are located in the same building. Booking included 2 overnight stays, inclusive lunch & dinner for two days (you will receive vouchers for lunch & dinner).



The house can be reached from the railway station by foot in 20 min. There is a bus (Postauto) starting from the railway station (Direction: Unteriberg or Willerzell, Bus stop: Friedhof).

The house can also be reached by car, and there are enough free parking places for the participants of the meeting.

For further travel information see: <http://www.sjbz-online.com/> or find the meeting place at <http://map.search.ch/>

## Check-in for the meeting

The table for the check-in is situated at the main entrance of the Bildungszentrum. Meeting materials and name badges can be picked up on **Wednesday 28, January** at the registration desk **between 8:00 and 10:00**. Registration will be opened until 12:00 for late arrivals. For a check-in during the meeting, please contact any member of the organizing committee (red badges).

Meeting materials include a printed program, a list of participants and the abstracts booklet. In addition, you receive the confirmation of participation and payment.

Each participant will receive a voting card for the best poster contribution (Posterstimmzettel) – after a careful look at all posters, please fill in this voting card and put it in the voting box. We have **awards** for the **two best posters** (sponsored by the *Hydrobiologie-Limnologie Stiftung für Gewässerforschung in Zürich*).

## Check-in for the accommodation

The check-in for your booked accommodation is possible at the reception of the Bildungszentrum.

## Meeting events

All talks will be held in the large seminar room of the Bildungszentrum. Posters will be on display in the Bildungszentrum during the whole duration of the meeting. There are fixed poster sessions planned in the program, but it is also up to you to have a look at these contributions as often as you wish.

## Instructions for Poster Presenters

Posters are numbered (please see program for your personal poster number). The Poster space will be A0 portrait format (A0 Hochformat). Posters should be mounted on Wednesday (28 January) during the meeting check-in (8:00-10:00). Several members of the organizing committee (red badges) will help you to find your poster place. Each participant with a poster should present his/her contribution also in front of the audience (in the large seminar room). For these **short presentations** we reserved **3 minutes** per speaker, presentations can be given only **by some words** or **maximal 3 power-point slides**.

Please have a look at the program, when you should give this short presentation. Times for the normal poster sessions (i.e. standing in front of your poster and talking a lot) can be found in the program.

In the case you want to present your poster with some powerpoint slides (maximal 3 slides), please save your short **presentation on CD (labelled with your name and poster number)**. To ensure a continuous program, **give your CD** to the responsible people for projections **at the check-in** (Eugen Loher & Michael Zeder – green badges!). We will accept both, presentations for Apple and PC-systems. Please avoid using the newest Powerpoint-versions (4 letter file extensions) – such files cause a lot of troubles with Windows XP. Due to the dense program, we can **not accept presentations with your own laptop!**

### Instructions for Oral Presenters

With the exception of invited talks, oral presentations will be a total of 15 minutes in length, including set-up, questions, and discussion. Please plan to allow at least 3 minutes for questions and discussion time, i.e. **12 minutes of talk and 3 minutes for discussion**. Session chairs have been instructed to strictly adhere to the schedule. Please bring your contribution on **CD (labelled with your name)**. We will accept both, Apple and PC-presentations. Please avoid using the newest Powerpoint-versions (4 letter file extensions) – such files cause a lot of troubles with Windows XP. To ensure a continuous program, please **give your CD** to the responsible people for projections **at the check-in** (Eugen Loher & Michael Zeder – green badges!). Due to the dense program, we can **not accept presentations with your own laptop!** Your contribution will be stored on a central computer and deleted after you gave your talk.

### Social event

The social event will be held at  
Klostergarten Gastbetriebe **(1st floor!)**

<http://www.klostergarten.ch/>

Ilgenweidstrasse 14

Am Kosterplatz (easy to find – in front of Kloster Einsiedeln), 8840 Einsiedeln

People of the organizing committee will act as guides to find this place.

It starts at around 18:00 with an Apéro, followed by dinner. We will have a live-band (DRUMLIN), giving us a rather private concert between 21:00-22:00, just between main dish and dessert. Please have a short look at the additional information about DRUMLIN. Later in the evening we will continue with some music for listening and dancing. The dining room of Klostergarten is a smoking-free area, but the bar of Klostergarten is a good place for extensive beer-drinking and smoking.

### Einsiedeln

For further information about Einsiedeln we refer to the following webpage:

<http://www.einsiedeln.ch/>

Please consider that Einsiedeln is known for a lot of snow and cold temperatures during winter time!



<http://www.einsiedeln.ch/Wetter-Schnee-und-Pisteninf.2349.0.html>

## DRUMLIN, zünftiger Folk mit würzigen Zutaten



Einen Vorwurf muss sich diese Vier-Mann-Folk-Gruppe gefallen lassen: Dass sie untertreibt. „Kleine Trommel“ heisst Drumlin auf keltisch, aber einmal in Fahrt, bietet Drumlin ein grosses, wirbeliges Vergnügen und liefert den Beweis, dass Musik verschmutzt sein kann. Wie das?

Die Untertreibung hat System und bereitet die musikalische Überraschung vor. Leadsänger und Gitarrist Markus Rüeger singt mit napolitanischem Seelenschmerz und messerscharfer Zürischnurre todtraurig ein Requiem - für einen Wurstsalat. Urs Bösiger treibt seine Schlegel schwer konzentriert über 125 Hackbrett-Saiten, und heraus perlt die reinste Leichtigkeit. Christian Jordi scheint ganz beherrscht-seriös, um dann aus seiner Fiedel, der natürlichen Verlängerung seines Körpers, die unbändigsten Girlanden abzufeuern. Und Dominik Lendi, der Kontrabassist, setzt mit der Miene des Unschuldslammes einen Grundbeat, der in die Lenden fährt. A propos beherrschen: Alle vier singen auch, und wie. Das Resultat ist Mund-Art vom Feinsten, in vielen Sprachen.

Trügerisch ist auch der Drumlin-Auftritt. Auf der Bühne stehen nichts als vier gestandene Männer mit ihren traditionellen Folk-Saiteninstrumenten. Kein Show-Gehopse, kein sich windendes Front-Girl, nicht mal elektronische Verstärkung. Wer dabei an Langeweile denkt und glaubt, es gebe nichts fürs Auge, täuscht sich gleich nochmals. Denn von Drumlin bekommt man das Allerbeste, was Musik zu bieten hat: Zusammen-Spiel. Sie spielen, und zwar so spielerisch und so zusammen, dass es funkelt. Das ist höchst vergnüglich, umso mehr, weil es nicht oberflächlich ist, sondern Tradition witzig interpretiert, mit Standards und Eigenkompositionen. Drumlin-Sound ist unmittelbar wie Jazz, fetzig wie Rock, groovig wie Salsa und eingängig wie Pop. Aber es ist Folk, zünftig und würzig, virtuos, komisch, melancholisch, verspielt, tänzerisch und oft einfach lustig. Man muss dabei sein. CDs sind in Ordnung und Drumlin haben auch welche, aber in ihrem Fall verhalten sie sich zum Live-Auftritt wie ein Weinführer zum Wein. Nicht vergebens heisst „live“ direkt, lebhaft und original. Drumlin ist live!

**Drumlin: Markus Rüeger – Liedgesang und Gitarre. Urs Bösiger – Hackbrett und Gesang. Christian Jordi – Geige, Mandoline und Gesang. Dominik Lendi – Kontrabass und Gesang**  
Kontakt: [info@drumlin.ch](mailto:info@drumlin.ch), 079 487 30 77, [www.drumlin.ch](http://www.drumlin.ch)

**Wednesday, 28 January 2009, Morning**

8:00-10:00 Registration at the Bildungszentrum Einsiedeln

10:00-10:15 Welcome (Posch Thomas & Egli Thomas)

10:15-11:00 Key lecture	<b><u>Gademann Karl</u></b> To Live and Let Die in The Big Blue.
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**Methods****Chair: Pernthaler Jakob**

11:00-11:15 **Braissant Olivier, Wirz D, Goepfert B, Daniels AU**  
Dynamic analysis of bacterial growth and activities by closed-ampoule isothermal microcalorimetry (IMC).

11:15-11:30 **Brandl Helmut**  
Differentiation of microorganisms by infrared spectroscopy.

11:30-11:45 **Huang Jen-How, Lazzaro Anna, Zeyer Josef, Kretzschmar Ruben**  
Microbial mobilization of adsorbed arsenic by *Shewanella putrefaciens* CN-32.

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11:45-12:00 **Short presentation of posters (P 1 – P 4)**

- P 1 **Rezzonico Fabio, Tonolla Mauro, Vogel Guido, Duffy Brion**  
Rapid and reliable identification of *Pantoea agglomerans* by MALDI-TOF Mass Spectrometry based protein fingerprinting.
- P 2 **Johnson David R, Chèvre Nathalie, van der Meer Jan Roelof**  
Flow cytometric analysis of the effects of triclosan, penconazole, and metalaxyl on *Caulobacter crescentus* and a freshwater microbial community.
- P 3 **Czechowska Kamila, van der Meer Jan Roelof**  
Fast method to detect compound toxicity at the single cell level - ethidium bromide assays on flow cytometer.
- P 4 **Posch Thomas, Franzoi Josef, Prader Martin, Salcher Michaela M**  
Image analysis as tool to study biomass and morphotypes of three major bacterioplankton populations in an alpine lake.

12:00-13:30 Lunch

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## Wednesday, 28 January 2009, Afternoon

### Proteomics

Chair: t.b.a.

13:30-14:15 Key lecture	<b>Riedel Kathrin</b> Exploring and exploiting microbial proteomes - proteomics as a powerful tool to investigate complex processes in single organisms & communities.
14:15-14:30	<b>Knief Claudia, Delmotte N, Innerebner G, Chaffron S, von Mering C, Vorholt JA</b> Similarities and dissimilarities of bacterial communities in the plant phyllosphere unraveled by a proteogenomic approach.
14:30-14:45	<b>Schneider Thomas, Gerrits Bertran, Eberl Leo, Riedel Kathrin</b> Environmental Proteomics – Identification of Biodegradative Enzymes and Characterization of Mesocosm Proteins.
14:45-15:15	<b>Short presentation of posters (P5 - P12)</b>
P 5	<b>Ruffner Beat, Péchy-Tarr Maria, Rochat Laurène, Keel Christoph, Maurhofer Monika</b> Insecticidal activity in plant-associated beneficial <i>Pseudomonads</i> .
P 6	<b>Wagg Cameron, van der Heijden Marcel</b> Arbuscular mycorrhizal fungal diversity drives plant community productivity.
P 7	<b>Innerebner Gerd, Knief Claudia, Vorholt Julia</b> Identification of Plant Probiotic Bacteria in the Phyllosphere.
P 8	<b>Cho Rang, Schroth Martin, Zeyer Josef</b> Methane Turnover in the Rice Root Zone: A Novel Quantification Tool.
P 9	<b>Shani Noam, Rossi P, Holliger C</b> Presence and activity of bacterial communities in a contaminated aquifer: influence of environmental factors.
P 10	<b>Krapf Tamara, Kuhn Roger, Gantenbein-Demarchi Corinne</b> Development of rapid test method for detection of (faecal) indicator organisms in drinking water.
P 11	<b>Lautenschlager Karin, Hammes Frederik, Egli Thomas</b> Microbial regrowth during overnight stagnation in household taps.
P 12	<b>Beggah Möller Siham, Tecon Robin, Czechowska Kamila, van der Meer Jan Roelof</b> Bacterial bioreporter assays for oil components.
15:15-15:45	<b>COFFEE</b>
<b>Fungi &amp; Soil</b>	
Chair: Widmer Franco	
15:45-16:00	<b>Schneider Salome, Widmer Franco, Enkerli Jürg</b> Fungal molecular ecology in agricultural soils.
16:10-16:15	<b>Fournier Anselme, Widmer Franco, Keller Siegfried, Enkerli Jürg</b> Winter survival of the entomopathogenic fungus <i>Pandora neoaphidis</i> in soil.
16:15-16:30	<b>Enkerli Jürg, Schwarzenbach Kaspar, Widmer Franco</b> Assessing potential effects of the <i>Beauveria brongniartii</i> biological control agent on fungal community structures in soil microcosms.

▼ CONTINUED ▼

16:30-17:30

**Short presentations of posters (P 13 – P 28)**

- P 13 **Bagnoud Alexandre, Humbert S, Conen F, Seth B, Zopfi J**  
Distribution, diversity and activity of anammox bacteria along a soil transect in the Jura Mountains in Bellefontaine (F).
- P 14 **Bindschedler Saskia, Millièrè L, Cailleau G, Job D, Verrecchia EP**  
Fungal implication in secondary calcium carbonate accumulation in soils and caves.
- P 15 **Brandes Ammann Andrea, Brandl Helmut**  
Diversity of *Bacillus* species in Soil.
- P 16 **Guggiari Matteo, Bloque Raphaël, Khammar Nadia, Aragno Michel, Verrecchia Eric, Job Daniel**  
In vitro calcium uptake, translocation, calcium oxalate formation, and biomineralisation of selected *Hymenomycetes* (*Basidiomycotina*) fungi.
- P 17 **Milleret R, Le Bayon R-C, Tarnawski Sonia, Gobat, J-M**  
How different soil organisms affect total and functional bacterial communities structures.
- P 18 **Dessimoz Mireille, Enkerli Jürg, Michel Vincent, Widmer Franco**  
Alternative control of *Verticillium* wilt in soil and its impact on non-target soil microorganisms.
- P 19 **Haderer Juliana, Schneider Salome, Widmer Franco, Enkerli Jürg**  
The influence of agricultural management and crop on soil fungal communities.
- P 20 **Guidi Valeria, Benagli Cinzia, DeRespinis Sophie, Tonolla Mauro**  
Development of a specific and rapid molecular method for the quantification of *Bacillus thuringiensis* var. *israelensis* in soils.
- P 21 **Meyer Joana, Keel C, Maurhofer M**  
Use of DGGE analysis to study the impact of genetically modified wheat on the genetic diversity of root-colonizing pseudomonads associated with soil fertility.
- P 22 **Kohler Hans-Peter E., Raina Vishakha, Rentsch Daniel, Buser Hans Rudolf, Holliger Christof, Lal Rup**  
Microbial Transformation of Hexachlorocyclohexane Isomers - New Insights on Old Pesticides.
- P 23 **Bürgmann Helmut, Vazquez Francisco, Jenni Sarina, Larsen Tove A, Udert Kai**  
Microbial population dynamics during nitrification/anammox treatment of urine.
- P 24 **Garcia Bravo Andréa, Mavingui Patrick, Ariztegui Daniel, Wildi Walter, Poté John**  
Evaluation of quantitative recovery bacterial cells and DNA from different sediment characteristics by Nycodenz density gradient centrifugation.
- P 25 **Walter Xavier Alexis, Mozo Antonio Picazo, Miracle Rosa-Maria, Vicente Edourdo, Camacho Antonio, Zopfi Jakob**  
A potential analog to the Neoproterozoic ocean? Iron cycling in the meromictic Lake La Cruz.
- P 26 **Köllner Krista, Carstens Dörte, Bürgmann Helmut**  
Microbial degradation of chitin in lacustrine systems linking microbiology to biogeochemistry.
- P 27 **Lazzaro Anna, Abegg C, Zeyer J**  
Primary succession bacterial communities in glacier forefields with contrasting physico-chemical characteristics.
- P 28 **Storelli Nicola, Tonolla Mauro**  
RuBisCO expression regulation and CO<sub>2</sub> fixation in a purple sulphur bacterium from the chemocline of Lake Cadagno.

17:30–19:00 Poster session (incl. beer and wine)

19:00 Dinner

<b>20:30</b>	<b><u>Corno Gianluca</u></b>
<b>Information</b>	<b>Promoting Microbial Ecology in Italy: challenging the highlanders.</b>

## Thursday, 29 January 2009, Morning

### Interactions / Competition

Chair: Blom Judith

8:30-09:15	<b>Overmann Jörg</b>
Key lecture	Phototrophic consortia: planktonic bacteria in inter-action.
9:15-9:30	<b>Salcher Michaela, Zeder Michael, Pernthaler Jakob, Posch Thomas</b> Seasonal and spatial distribution of bacterioplankton populations in an oligo-mesotrophic lake.
9:30-9:45	<b>Pernthaler Jakob, Zeder Michael, Peter Simone, Shabarova Tatiana</b> Cultivable planktonic <i>Flavobacteria</i> that are highly active during the spring phytoplankton bloom in Lake Zurich.
9:45-10:00	<b>Blom Dirk, Connor Edward, Schiestl Florian, Boller Thomas, Eberl Leo, Weisskopf Laure</b> Volatile-mediated impact of bacteria on plants and phytopathogenic fungi.
10:00-10:15	<b>Stecher Bärbel, Chaffron Samuel, von Mering Christian, Macpherson Andrew J, Hardt Wolf-Dietrich</b> Which bacteria in our gut flora protect against enteropathogen infection?
10:15-10:45	<b>COFFEE</b>
<b>Terrestrial habitats</b>	
Chair: Tonolla Mauro	
10:45-11:00	<b>Duc Laurence, Neuenschwander Stefan, Rehrauer Hubert, Zeyer Josef</b> Microarray and functional gene analyses reveal the impact of environmental factors on diazotrophic communities in young glacier forefields soils.
11:00-11:15	<b>Frey Beat, Rüdts A, Lüscher P</b> Soil physical and microbial properties in compacted forest soils by logging machinery.
11:15-11:30	<b>Humbert Sylvia, Tarnawski S, Conen F, Seth B, Bagnoud A, Mallet M-P, Fromin N, Aragno M, Zopfi J</b> Terrestrial anammox bacteria: distribution, diversity and activity.

11:30-12:00

### Short presentation of posters (P 29 – P 38)

- P 29 **Smits THM, Rezzonico F, Pelludat C, Goesmann A, Frey JE, Duffy B**  
Genomic and phenotypic characterization of a non-pigmented variant of *Pantoea agglomerans* C9-1 lacking the 530 kb megaplasmid pPag3.
- P 30 **Fuchs Christoph, Hanselmann Kurt**  
BioSym: A computational modeling approach to systems biology.
- P 31 **Schafroth Stefan, Hanselmann Kurt**  
Analysis of Complex Biological Systems through Computational Mathematical Modeling.
- P 32 **Suter Hans Ulrich, Hanselmann Kurt**  
Bio-Thermodynamics: Understanding glycolysis with quantum chemistry.
- P 33 **Brammertz Stefan, Hanselmann Kurt**  
Modeling of metabolic networks: A computational approach to functional systems biochemistry and metabolic engineering.
- P 34 **Kälin Roman, Yuhana Munti, Hanselmann Kurt**  
Selection and adaptation in microbial communities: A computational modeling approach to ecosystem complexity.

▼ CONTINUED ▼

- P 35 **Lazzaretti-Ulmer Maja A., Kurt Hanselmann**  
Eco-genomics of rumen communities: How similar, in an evolutionary sense, are cellulases from different rumen microbes?
- P 36 **Benagli Cinzia, Dolina Marisa, Gaia Valeria, Petrini Orlando, Tonolla Mauro**  
Comparison of MALDI-TOF with BD PHOENIX for the identification of common bacterial isolates.
- P 37 **Benagli Cinzia, Demarta Antonella, Caminada Anna Paola, Tonolla Mauro**  
Taxonomy of Aeromonadaceae by matrix-assisted laser desorption/ionisation–time of flight mass spectrometry (MALDI-TOF MS).
- P 38 **De Respinis Sophie, Petrini Orlando, Samuels Gary J, Vogel Guido, Benagli Cinzia, Tonolla Mauro**  
Taxonomic studies on the genus *Trichoderma* using matrix-assisted laser desorption/ionisation–time of flight mass spectrometry (MALDI-TOF MS).

12:00-13:30 Lunch

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## Thursday, 29 January 2009, Afternoon

### Protist - Bacteria Interactions

Chair: Posch Thomas

13:30-14:15 Key lecture	<b><u>Görtz Hans-Dieter</u></b> On the diversity, biology and significance of intracellular microbial symbionts in <i>Paramecium</i> and other ciliates.
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14:15-14:30 **Amman Thomas, Pernthaler Jakob, Blom Judith F**  
Evidence for chemically induced aggregate formation of *Shingobium* sp. in the presence of *Poteroochromonas* sp.

14:30-14:45 **Corno Gianluca, Bertoni Roberto, Callieri Cristiana, Caravati Emanuele, Balseiro Esteban, Modenutti Beatriz**  
Spaghetti (South)Western: why filamentous bacteria should like to live in cold, uncomfortable Patagonian Lakes?

14:45-15:15 **COFFEE**

### Drinking water / Wastewater

Chair: Zopfi Jakob

15:15-16:00 Key lecture	<b><u>Egli Thomas</u></b> Everyday's menu for heterotrophic microbes in the aquatic environment: "Tutti frutti", but at very low concentrations!
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16:00-16:15 **Bosshard Franziska, Geiser C, Bucheli M, Schneider Thomas, Riedel Kathrin, Egli Thomas**  
Solar Disinfection (SODIS) causes an increase in protein carbonylation and protein aggregation in irradiated cells.

16:15-16:30 **Vital Marius, Hammes Frederik, Egli Thomas**  
Flow cytometry provides new insights into the growth of enteric pathogenic bacteria in natural freshwater.

16:30-16:45 **Morasch Barbara, Höhener Patrick, Hunkeler Daniel**  
Investigating the intrinsic biodegradation of environmental contaminants – potentials and limits of stable isotope-based methods and signature metabolite analysis.

16:45-17:00 **Lucas Françoise, Betelli L, Rocher V**  
Efficiency of primary coagulation/flocculation for bacterial removal from wastewater.

17:00-17:45 **Poster session**

17:45	<b>Walk to the Restaurant Klostergarten</b> (Klosterplatz, easy to find)
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18:00	Apéro at Restaurant Klostergarten & Dinner
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21:00-22:30	Live music by the band DRUMLIN
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23:30-?	Bar, Beer, Dancing, Music,.....
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## Friday, 30 January 2009, Morning

9:00-9:45 Key lecture	<b><u>Ibelings Bas</u></b> Coexistence and coevolution of phototrophic microorganisms.
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### Aquatic habitats Chair: Salcher Michaela

- 9:45-10:00 **Frossard Aline, Gerull Linda, Mutz Michael, Gessner Mark**  
Microbial enzyme activities as indicators of metabolic hot spots in newly formed streams.
- 10:00-10:15 **Shabarova Tatiana, Pernthaler Jakob**  
Investigation of bacterioplankton communities in aquatic karst pools in Bärenschacht cave of Bernese Oberland.
- 10:15-10:30 **Pronk M, Goldscheider N, Zopfi Jakob**  
Microbial communities in karst groundwater and their potential use for biomonitoring.
- 10:30-10:45 **Templer Stefanie, Stadnitskaia Alina, de Haas Henk, Bernasconi Stefano, Vasconcelos Crisogono, McKenzie Judith**  
Microbial Biodiversity in the Subsurface of Carbonate Mounds from the Gulf of Cadiz off Morocco.
- 10:45-11:15 **COFFEE**
- ### Aquatic habitats / Future Methods in Aquatic Microbiology Chair: Egli Thomas
- 11:15-11:30 **Van den Wyngaert Silke, Zeder Michael, Posch Thomas**  
Spatio-temporal dynamics of *Planktothrix rubescens*, picocyanobacteria and heterotrophic bacteria in Lake Zurich.
- 11:30-11:45 **Zeder Michael, Van den Wyngaert Silke, Pernthaler Jakob**  
A model-based object-oriented image analysis method for quantification and sizing of the filamentous cyanobacterium *Planktothrix rubescens*.
- 11:45-12:00 **Hammes Frederik, Goldschmidt Felix, Wang Yingying, Vital Marius, Egli Thomas**  
Bacterial ATP concentrations to estimate viable microbial biovolume in freshwater.
- 12:00-12:15 **Wang Yingying, Hammes Frederik, Boon Nico, Chami Mohamed, Egli Thomas**  
Discover the "unseen majority": Isolation and characterization of low nucleic acid content bacteria.

<b>END of the SME22009</b>
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