

Summer school 2011 October 4<sup>th</sup>-14<sup>th</sup>

## Functions of microbial communities in soils : sustainable use of biotic resources.

We are pleased to inform you that following the last edition held in Nancy (France) a new edition of the French–German Summer school supported by the French–German University, the Helmholtz graduate school for Environmental Health (HELENA), the EU network EVOLTREE and devoted to the Functions of Microbial Communities in Soils will be held from October 4<sup>th</sup> to October 14<sup>th</sup> in Munich (Germany). The aim is to give insights and to discuss the new topics of the ecology (dynamics and functions) of microbial communities in soils under different use (forest, agricultural, native soils).

The lectures, seminars, practical works and discussion will concern the impact of different levels of development, anthropogenic impact and drought of soils and their sustainable use in relation to plant production and environmental functions of the soils. They will concern main microbial functions in relation to the different habitats and niches and also to human activities. New knowledge and major methodological progresses will be presented in the fields of molecular and biochemical research (genomic, proteomic, signalling).

Morning lectures will be followed by practical sessions (field measurements or analysis from pre-installed incubations and demonstration) and visits of experimental and field sites (forest and farms with experimental simulation tools and remote sensing caption).

The topics will be the following and will focus on the current methodological possibilities in environmental microbiology:

- Nitrogen cycle in soils at different levels development (Glacier forefield, artificial water catchment)
- Redox gradients (from oxic to anoxic)
- Different associations and functions in the rhizosphere
- Transformation of organic substances (natural and from anthropic origin)
- Microbial communities and gene transfer
- Microbial communities at different habitat scales and expressions of functions
- Microbial communities and behaviour of pollutants.

### Location:

Helmholtzzentrum München, Institute of Soil Ecology, Ingolstaedter Landstrasse 1, D-85674 Neuherberg, Germany.

### Organisation committee:

**Prof. Dr. J.C. Munch**, Tech. Univ. Munich & Helmholtzzentrum München, Neuherberg, Germany

**Dr. K. Pritsch**, Soil Ecology, Helmholtzzentrum München, Neuherberg, Germany

**Prof. Dr. M. Schloter**, Soil Ecology, Helmholtzzentrum München, Neuherberg, Germany

**Dr. C. Leyval**, Nancy University-CNRS, LIMOS, Nancy, France

**Dr. J. Berthelin**, Nancy University-CNRS, LIMOS, Nancy, France

**Dr. T. Beguiristain**, Nancy University-CNRS, LIMOS, Nancy, France

The sessions are led by a team of German, French and other lecturers and will be of interactive nature. PhD students, postdocs and scientists who are entering the field or want to deepen their knowledge of the subject are invited to apply for participation. The summer school registration fees are free. Accommodation will be provided at reasonable price levels in the surrounding of the Center. For programme, detailed information and registration (deadline for application: June 30<sup>st</sup> 2011), please contact Karin Pritsch ([pritsch@helmholtz-muenchen.de](mailto:pritsch@helmholtz-muenchen.de)). List of selected participants will be available by July 10<sup>th</sup>.



Summer school 2011 October 4<sup>th</sup>-14<sup>th</sup>

*Functions of microbial communities in soils: sustainable use of biotic resources.*

## Application Form

(deadline for application: June 30<sup>st</sup>)

### PERSONNAL INFORMATION

Title:  Mr  Ms  Dr  Prof

Status:  Ph D student ( 1<sup>st</sup> year  2<sup>nd</sup> year  3<sup>rd</sup> year)

Postdoc

Other (precise):

First Name:

Last Name:

Organisation:

Department:

Address:

City:

Postal Code / Zip:

Country:

Phone:

Fax:

E-mail:

### PERSONNAL INTEREST IN THE FIELD:

*please describe briefly (in a few lines) your interest in the field*

*Please send the application form and a short CV by email to:*

**pritsch@helmholtz-muenchen.de**