

Summer School on Hyporheic Zone Processes



22 June 2015 - 26 June 2015

Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB), Berlin, Germany

About the summer school

Hyporheic zones are dynamic and complex transition regions between rivers and aquifers. They are characterized by the simultaneous occurrence of multiple physical, biological and chemical processes. Turnover and degradation of nutrients and pollutants are among the prominent ecological services of these systems.



About the the hypoTRAIN project

HypoTRAIN is the acronym for "**hypo**rheic zone processes – A **TRAIN**ing network for enhancing the understanding of complex physical, chemical and biological process interactions". The project is funded by the European Commission as a Marie Skłodowska -Curie action.

The summer school, as part of the EU funded training network "hypoTRAIN", provides lectures and hands-on exercises to understand general hydrological and biogeochemical mechanisms ruling hyporheic zone processes. Furthermore, multidisciplinary research methods and techniques are introduced to measure, model and quantify these processes. As an innovative training network (ITN) it has a strong focus on training of young researchers. Overall 16 PhDs will work on different sub-topics at research institutions all over Europe. The quantification of water fluxes and the fate of organic pollutants in these highly dynamic interfaces are key aspects in the hypoTRAIN research activities.







Workshops

Day 1 (22 June 2015)

- Cross-culture and cross-disciplinary communication
- Introduction to ITN hypoTRAIN

Day 2 (23 June 2015)

- Tracing hyporheic exchange
- Sampling and analytical methods

Day 3 (24 June 2015)

- Biogeochemistry
- Hyporheic ecology

Day 4 (25 June 2015)

- Organic micropollutants
- Modelling hyporheic processes

Day 5 (26 June 2015)

 Bringing it all together: Development of a conceptual model of hyporheic zone processes



Preliminary speakers list

Brandenburgische Technische Universität, Germany Michael Mutz

Royal Institute of Technology, Sweden Anders Wörman

IWW Water Centre, Germany Axel Bergmann, David Schwesig

University of Birmingham, UK Stefan Krause

Northwestern University, USA Aaron Packman

Eawag, Switzerland Juliane Hollender, Rolf Kipfer

University of Bayreuth, Germany Marcus Horn

Ben-Gurion University, Isreal Shai Arnon

University of Roehampton, UK Julia Reiss, Anne Robertson

Naturalea, Spain Albert Sorolla



River Restoration Centre, UK Jenny Mant

Stockholm Universtity, Sweden Jonathan Benskin

Flinders University, Australia Okke Battelaan

Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Germany Jörg Lewandowski, Gunnar Nützmann

École Polytechnique Fédérale de Lausanne, Switzerland Tom Battin

Booking

Registration fee for external delegates: 750 €

(including all workshops, as well as daily lunch and bed and breakfast in a nearby accomodation)

For all bookings and enquiries please contact: Karin Meinikmann

Tel.: +49(0)30 641 81 671 Fax: +49(0)30 641 81 663 Email: meinikmann@igb-berlin.de

