



Collaborative Research Centre 1076 AquaDiva

Understanding the Links between Surface and Subsurface Biogeosphere



Spokespersons: Prof. Kirsten Küsel, Prof. Susan Trumbore, Prof. Kai Uwe Totsche

Research Projects

A01

Phages as Vectors and Indicators of Biological Information: Selective Transport and Consequences for Nutrient Release and Cycling

Dr. L. Wick (UFZ) **Prof. A. Chatzinotas** (UFZ)

Konstanze Hild
Dr. Felipe Borim Corrêa Krupa Parmar
Dr. Nawras Ghanem (ass.)

A02

Tracing Metabolic and Organic Signals Through the Earth's Critical Zone

Prof. G. Pohnert (FSU) **Prof. G. Gleixner** (MPI-BGC)

Dr. Christian Zerfaß
Arina Ivanova
Wei Tang
Chen Huang

A03

Microbial Responses to Infiltration Inputs into Groundwater of the Hainich CZE

Prof. K. Küsel (FSU) **Prof. J. Popp** (FSU)
Dr. M. Taubert (FSU) **Dr. P. Rösch** (FSU)

Alisha Sharma
Lucia Winkler (ass.)
Beatrix Heinze (ass.)
Constantinos Xenophonos (ass.)
Dr. Ekaterine Gabashvili (ass.)
Sara Mostafapour
Ramya Motganhalli Ravikumar
Prof. Dr. Thomas Bocklitz (ass.)
Dr. Thomas Henkel (ass.)

A06

Viral Diversity, Viral De Novo Assembly, and Viral Half-life in Groundwater

Prof. M. Marz (FSU)

Dr. Paula Istvan
Dr. Maximilian Collatz
Fabian Droß
Md Hadi Noori Vareno
Alexander Eberhardt (ass.)
Dr. Janina Rahlf (ass.)
Dr. Christian Hoener zu Siederdisen (ass.)

A07

Subsurface Planctomycetes as sources for novel biotechnological applications

Prof. C. Jögler (FSU)

Madeleine Kündgen
Dr. Nicolai Kallscheuer (ass.)

B01

Interactions of Forest Structure and Plant Functional Biodiversity as Drivers of Water, Organic Matter, and Nutrient Fluxes

Prof. B. Michalik (FSU) **Prof. C. Römermann** (FSU)

Dr. Karin Potthast
Dr. Alexander Tischler (ass.)
Dr. Kerstin Näthe (ass.)
Dr. Luitgard Schwendenmann
Till J. Deilmann
Apl. Prof. Markus Bernhardt-Römermann (ass.)
Christian-David Gregori (techn.)

B02

Evolution of Water and Matter Cycles within the Earth's Critical Zone

Prof. A. Hildebrandt (FSU)

Dr. Ruth Magh
Tiana Hammer (techn.)

B03

Sources and Sinks of Gases in the Earth's Critical Zone: In Situ Sensors and Isotopic Constraints

Prof. S. Trumbore (MPI-BGC) **Prof. T. Frosch** (IPHT)

Beatrix Heinze
Qiwen Zhang (ass.)
Dr. Valérie Schwab-Lavric (ass.)
Robert Domes
Sebastian Wolf
Anne Sieburg

B04

Exploratory Modeling of Water and Biogeochemical Dynamics in the Earth's Critical Zone

Prof. S. Attinger (UFZ) **Dr. M. Thullner** (UFZ)

Dr. Friedrich Bohn
Simon Lüdke
Thanh Q. Duong

B05

From the Forest Canopy to the Aquifer: Role of Microbial Processes in the Origin and Fate of Nitrate in the Earth's Critical Zone

Dr. M. Herrmann (FSU)

Md Atikur Rahman
Markus Krüger
Dr. Nadine Möbius (ass.)

FSU Friedrich Schiller University Jena



UFZ Helmholtz Centre for Environmental Research



MPI-BGC Max Planck Institute for Biogeochemistry



IPHT Leibniz Institute of Photonic Technology



ass. associated
techn. technician
coord. coordinator

C03

Biogeochemistry in Zones of Fluctuating Groundwater: Alteration of Rock Surfaces and Interactions with Subsurface Colloids

Prof. K. U. Totsche (FSU)

Rebecca Heß
Andreas Pihan
Dinusha C. Eshvara Arachchige
Dr. Katharina Lehmann (ass.)
Katharina Stolze (ass.)

C05

Monitoring Migration Pathways in the Subsurface Using Tailored Polymer Tracer Libraries

Dr. T. Ritschel (FSU) **Prof. U. S. Schubert** (FSU)

Nimo Kwarkye
Prof Dr. Ivo Nischang (ass.)
Michaela Rupp

C07

Retroaction of Geochemical Perturbations and Critical Zone Media Reactivity on Trace Element Speciation and Transport Parameters

Prof. T. Schäfer (FSU)

Ruth Ewouame
Dr. Dirk Merten (ass.)



Synthesis, Coordination, and Management

D01

Scientific Data Management and Integrative Data Analysis

Prof. B. König-Ries (FSU) **Prof. C. Steinbeck** (FSU)

Dr. Alsayed Algergawy
Hamdi Hamed
Sven Thiel
Dr. Ludmilla Figueiredo
Fabian Schreiter
Dr. Vinay Singh

D02

Integrated Research Training Group (IRTG) AquaDiva

Prof. A. Hildebrandt (FSU) **Prof. K. Küsel** (FSU)

Dr. Anke Hädrich (scientific coord.)

D03

Site Management, CZE Operation and Synoptic Synthesis

Prof. K. Totsche (FSU) **Prof. S. Trumbore** (MPI-BGC) **Prof. K. Küsel** (FSU)

Dr. Robert Lehmann
Dr. Michaela Aehnelt (ass.)
Heiko Minkmar (techn.)
Stefanie Wiede (techn.)
Toni Hofmann (techn.)
Dr. Simon Schroeter (ass.)
Dr. He Wang
Dr. A. Adjie Pratama (ass.)
Dr. Laura Schwab (ass.)
Dr. Olga Perez Carrascal (ass.)
Dr. Carl-Eric Wegner (ass.)
Falko Gutmann (techn.)
René Maskos (techn.)

D04

Central Tasks of the Collaborative Research Centre

Prof. K. Küsel (FSU) **Prof. S. Trumbore** (MPI-BGC) **Prof. K. Totsche** (FSU)

Dr. Maria Fabisch (scientific coord.)