

Mid-term meeting on achievements and further steps of the Russian-German joint project “CarboPerm” in the frame of the Scientific and Technological Cooperation (WTZ) of Russia and Germany financed by the Federal Ministry of Education and Research (BMBF) (Funding ID: 03G0836).

Hamburg
18-20 February 2015

Venue: ZMAW building, room 022/023
Bundesstraße 53, 20146 Hamburg

[Tuesday, 17 February 2015](#)

Arrival and transfer to a hotel

Internal workshop of Work Package 4 at the Institute of Soil Science, Allende-Platz 2

[Wednesday, 18 February 2015](#)

Arrival, transport to and check-in in a hotel

12:00-14:00 Registration in ZMAW building, Tanja Döbler

13:15-14:00 **Small “welcome lunch”**

14:00-14:30 Opening of the CarboPerm meeting

Chair: Prof. Dr. Eva-Maria Pfeiffer

Welcome greeting by Prof. Dr. Heinrich Graener, Dean of the MIN faculty at the Universität Hamburg

Welcome greeting by Dr. Barbara Tanner, Project Management Jülich

Welcome greeting and perspectives by the CarboPerm speakers Prof. Dr. E.-M. Pfeiffer, Dr. I. Fedorova, Prof. Dr. H.-W. Hubberten, Prof. Dr. D. Bolshyanov, Dr. M. Grigoriev

14:30-18:15 Work Packages (WP) report: achievements, results and further goals, aims and approaches

Chair: Prof. Dr. Gesine Mollenhauer

14:30-15:00 *WP 1: Scientific and logistical coordination (30 min.)*

G. Schwamborn et al.: "Bolshoy Lyakhovsky 2014; preparing, coring, measuring and lab subsampling" (10 minutes)

S. Zubrzycki et al.: "CarboPerm networking, publication of data in the PANGAEA database, and a short CarboPerm WebGIS presentation" (10 minutes)

I. Fedorova et al.: "Planned Masters Program and International Summer Field School on Ladoga Lake" (10 minutes)

15:00-16:00 *WP 2: Fossil carbon – origin, properties and dynamics (60 min.)*

L. Schirrmeister / S. Wetterich: "WP2 short summary - objectives, research topics, networking and outlook" (12 minutes)

P. Overduin: "Results of the 2012 Buor Khaya drilling campaign (BK-8, BK-2)" (12 minutes)

M. Fuchs: "Luminescence analyses for dating sediments in permafrost environments" (12 minutes)

S. Schennen: "Geophysical surveying on Bol'shoy Lyakhovsky: activity report and data examples" (12 minutes)

H. Zimmermann: "Paleogenetic analyses of permafrost sediments and plant macrofossils from Buor Khaya" (12 minutes)

16:00-16:15 **short coffee break with coffee for "to go" to the next report**

Chair: Dr. Irina Fedorova

16:15-17:15 *WP 3: Age and quality of organic matter (60 min.)*

J. Rethemeyer et al.: "Objectives of TP3: Organic matter composition and carbon dynamic in permafrost soils" (7.5 minutes)

S. Höfle et al.: "Microbial turnover of organic carbon pools in the active layer" (17.5 minutes)

M. Winterfeld et al.: "Age and quality of organic matter currently exported through the Lena Delta" (17.5 minutes)

G. Mollenhauer et al.: "Objectives and ongoing work of TP3 - Export of carbon from land to the ocean" (7.5 minutes)

A. Prokushkin et al.: "DOC and POC dynamics in Central Siberia" (10 minutes)



17:15-18:15 *WP 4: Modern carbon exchange processes in permafrost landscapes (60 min.)*

Lars Kutzbach: "Scientific objectives of CarboPerm work package 4: Modern carbon exchange processes in permafrost landscapes" (5 minutes)

Irina Fedorova, Antonina Chetverova, Olga Bobrova: "Hydrological and hydrochemical investigations in the Lena River Delta" (10 minutes)

Mikhail Grigoriev, Georgii Maksimov: "Mobilization of organic matter in unfrozen and permafrost deposits under the channels of the Lena Delta" (10 minutes)

Alexander Sabrekov and Mikhail Glagolev: "CH₄ emission from dry seeps in the middle taiga of Western Siberia: degradation of relict permafrost as a possible explanation" (5 minutes)

Min Jung Kwon and Tim Eckhardt: "CO₂ and CH₄ exchange processes at the microscale: chamber flux measurements in highly structured tundra landscapes" (10 minutes)

Fanny Kittler and Norman Rößger: "CO₂ and CH₄ exchange processes at the landscape scale: eddy-covariance flux measurements at different tundra types" (10 minutes)

Ina Burjack and Mathias Göckede: "Synthesis and up-scaling of station-based carbon cycle results from the Lena River Delta and the Kolyma region" (10 minutes)

18:30 **Joint dinner in the Geological-Paleontological Museum, Geomatikum, Bundesstraße 55**

Thursday, 19 February 2015

- 09:00-09:15** **Morning discussions with a coffee**
- 09:15-11:15** **WPs report: achievements, results and further goals, aims and approaches, cont.**
Chair: Dr. Sebastian Zubrzycki
- 09:15-10:15* *WP 5: Microbial carbon transformation in permafrost soils and sediments (60 min.)*
- J. Stapel, N. Torres Reyes, J. Walz, C. Knoblauch, K. Mangelsdorf, D. Wagner:**
"Microbial induced transformation of organic matter in modern and fossil permafrost-affected soils and sediments - a multidisciplinary research approach" (30 minutes)
- S. Evgrafova:** "Microbial populations in cryogenic soils depending on permafrost regime: tundra and forest ecosystems" (15 minutes)
- I. Grodnitskaya:** "The composition of the microbial communities in different peat soils in permafrost zones of Siberia" (15 minutes)
- 10:15-11:15* *WP 6: Process-oriented modeling of carbon dynamics (60 min.)*
- Christian Beer:** "WP objectives short overview" (2 minutes)
"What do we learn from soil incubation experiments?" (3 minutes)
- Sonja Kaiser:** "Process-based modelling of the methane balance in periglacial landscapes" (15 minutes)
- Fabio Cresto-Aleina:** "Mechanistic soil carbon transport-reaction modeling within the MPI-ESM" (10 minutes)
- Thomas Kleinen:** "Carbon in permafrost soils - a modeling perspective" (15 minutes)
- V. Brovkin:** "Simulating high-latitude carbon dynamics of the last 4 glacial cycles using CLIMBER model" (15 minutes)
- 11:15-11:30** **short coffee break with coffee for "to go" to the next session**
- 11:30-13:00** **Cooperations and synergies with other related projects: presentations by external guests.**
Chair: Prof. Dr. Lars Kutzbach
- G. Grosse:** "The ERC PETA-CARB Project" (10 minutes)

T. Schneider von Deimling: "Modelling of carbon release from deep permafrost carbon deposits with accounting for thermokarst activity" (15 minutes)

M. Leibman et al.: "Gas-emission crater in Central Yamal, West Siberia, Russia, a new permafrost feature" (15 minutes)

S. Liebner: "The molecular key to the carbon cycle in Arctic environments" (15 minutes)

C. Fiencke: "Microbial nitrogen transformation in permafrost soils of the Lena Delta" (15 minutes)

A. Fague: "Shallow-surface electrical methods in Lena River Delta" (10 minutes)

L. Tsibizov: "Magnetic and geothermal survey in Samoilov island vicinity (Lena River Delta)" (10 minutes)

13:00-14:00 **Individual lunch**

14:00-16:00 **Breakout sessions of the individual WPs: organization of their WPs, précising scientific plans for the next field season, compiling and refining of the interim report for BMBF / PTJ**

16:00-16:15 **short coffee break with coffee for "to go" to the next session**

16:15-17:45 **Conclusions and a follow-up of the breakout sessions by all WP leaders**

Chair: Prof. Dr. Hans-Wolfgang Hubberten

Session summary, Specification of cross WP activities and synergies. Max. 13 minutes per WP.

An overall conclusion by Prof. Dr. H.-W. Hubberten

18:00-19:00 **Public evening lecture within the frame of activities for the International Year of Soils 2015, ZMAW building, room 022/023**
Chair: Prof. Dr. Eva-Maria Pfeiffer

L. Kutzbach and E. Abakumov: "Joint Russian-German research in the Arctic: Permafrost-affected Soils in a Changing Climate"

19:15 **Joint dinner in the ZMAW building**



Friday, 20 February 2015

09:00-09:15

Morning discussions with a coffee

09:15-12:30

Discussion on additional special topics:

Chair: Prof. Dr. Eva-Maria Pfeiffer

- ICOP 2016 – own, co-organised session
- “Essentials” of the first CarboPerm period
- CarboPerm Expeditions in 2015 (logistics, transport of samples and equipment)
- Scientific driven education exchange
- Joint lab and field courses
- Next meeting in Potsdam
- others

12:30

Meeting closure by H.-W. Hubberten, D. Bolshiyarov, M. Grigoriev and E.-M. Pfeiffer

Departure

OPTIONAL:

13:00-14:00

Individual lunch

14:30-17:30

Excursion: Hamburger Wasserkunst

19:00

Individual dinner

Saturday, 21 February 2015

Departure