

SCIENTIFIC STEERING COMMITTEE

Prof Peter Braesicke

Karlsruhe Institute of Technology, Germany

Prof Achim Brauer

Helmholtz Centre Potsdam GFZ German Research Centre for Geosciences, Germany

PD Dr Hendrik Elbern

University of Cologne and Forschungszentrum Jülich, Germany

Dr Klaus Grosfeld

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany

Prof Michael Kunz

Karlsruhe Institute of Technology, Germany

Prof Mojib Latif

GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany

Prof Peter Lemke

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany

Prof Beate M. W. Ratter

University of Hamburg/Helmholtz-Zentrum Geesthacht Centre for Materials and Coastal Research, Germany

Dr Annette Rinke

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Potsdam, Germany

Prof Torsten Sachs

Helmholtz Centre Potsdam GFZ German Research Centre for Geosciences, Germany

Dr Ingo Sasgen

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany

Prof Hans Peter Schmid

Karlsruhe Institute of Technology, Garmisch-Partenkirchen, Germany

Dr Renate Treffeisen

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany

CONFERENCE VENUE

The 'Umweltforum' is located at the heart of Berlin near the famous Alexanderplatz. The church that forms the majority of the building is over one hundred years old. Ornate ceilings, galleries and the organ loft make the venue truly unique. Equipped with cutting-edge eco-technologies that make it possible to host carbon-neutral events, the Umweltforum is the ideal choice for Green Meetings.

REGISTRATION INFORMATION

Registrations for the international scientific conference (23–25 September 2019) must be made in advance; on-site registration is not available. Online registration for the conference will remain open until 8 September 2019.

Deadline for submitting abstracts: 31 May 2019

The conference fee must be paid in advance. In the online registration form you can select from two options: registration with or without a paper proposal.

CONFERENCE FEE:

Full fee:

380 euros (including lunch, coffee break and ice breaker)

Student fee:

230 euros (including lunch, coffee break and ice breaker)

Early bird discount:

350 euros (full), 200 euros (students); until 30 June 2019

A limited number of travel grants will be available to help students attend the conference. For further details, please visit our conference website.

www.reklim-conference-2019.de

HELMHOLTZ RESEARCH FOR
GRAND CHALLENGES

OUR CLIMATE 2019 OUR FUTURE

**2nd INTERNATIONAL
CONFERENCE**

REGIONAL PERSPECTIVES
ON A GLOBAL CHALLENGE

BERLIN, 23–25 SEPTEMBER



www.reklim-conference-2019.de

WHAT THIS CONFERENCE IS ABOUT:

One of the declared aims of the Paris Agreement is to limit global warming to no more than 1.5°C above pre-industrial levels, changing the context for policy-relevant research and posing a major challenge for researchers. In response, today's climate research is largely focused on analysing and understanding the regional effects of global climate change, especially to describe the impacts of climate change on a socially relevant scale.

This is where the Helmholtz Climate Initiative REKLIM comes in: since October 2009, experts from the nine Centres in the Helmholtz Association's research field Earth and Environment have been collaborating on eight research topics. Working hand in hand with university partners, the Helmholtz Research Centres can effectively pool their regional climate change expertise. Regional observations and process studies, together with simulations, will help to refine regional and global climate models, which in turn provide a solid basis for informed climate-related decision-making. In addition, REKLIM fosters interdisciplinary regional climate research in Germany.

Looking back on ten successful years and looking ahead to the next funding period, REKLIM will host the 2nd International Conference.

The conference's main goal is to provide a forum where scientists from around the globe can present and discuss the latest findings on regional climate research in connection with REKLIM's focus areas.

The scientific conference will be followed by a public engagement day on 26 September 2019, which will focus on promoting dialogue (in German) between scientists and decision makers from the political and administrative sectors as well as at professional associations.

OUR CLIMATE – OUR FUTURE
REGIONAL PERSPECTIVES ON A GLOBAL CHALLENGE
BERLIN, 23–25 SEPTEMBER 2019

WHICH TOPICS WILL BE ADDRESSED:

I COUPLED REGIONAL MODELLING

Annette Rinke, Burkhardt Rockel

How does the development of the climate depend on the interaction between atmosphere, ocean, ice and land surfaces? What are the key processes and feedbacks that determine regional climate variability and change?

II SEA-LEVEL RISE IN A WARMING CLIMATE: FROM GLOBAL DRIVERS TO COASTAL IMPACTS

Klaus Grosfeld, Birgit Hünicke, Peter Lemke, Ingo Sasgen

How can we consistently connect observations and simulations of sea-level rise and their impacts across temporal and spatial scales? How do global ice, ocean and atmospheric drivers, as well as land motion, influence mean and extreme sea levels along coastlines? What can we learn from the past? How do natural and anthropogenic sea-level variations affect (societal) coastal risks and ecosystem changes?

III LAND-ATMOSPHERE INTERACTIONS: FROM MEASUREMENTS TO MODELLING

Birgit Heim, Andreas Marx, Heidrun Matthes, Torsten Sachs, Hans Peter Schmid

How do climate and land use affect ecosystems, water resources, agriculture and forestry? What are the effects of global climate change on climate-sensitive regions (e.g., mountain areas, highly populated regions, arid/semi-arid regions, the Arctic and permafrost regions)? How can our understanding of climate-relevant processes be advanced by new technologies and methods for measurement, data science and modelling?

IV ATMOSPHERIC COMPOSITION AND CLIMATE: INTERACTIONS BETWEEN GLOBAL AND REGIONAL SCALES

Peter Braesicke, Hendrik Elbern, Rolf Müller, Bernhard Vogel

What are the dominant regional feedback mechanisms between atmospheric chemistry and circulation, including emissions and surface processes? What are the most important factors shaping interactions between regional climate change and atmospheric composition? What are the potential impacts of climate change and air-quality changes on human health and ecosystems?

V EXTREME EVENTS ACROSS SCALES (PAST – PRESENT – FUTURE)

Achim Brauer, Frauke Feser, Michael Kunz, Ralf Tiedemann

How and why has the severity and frequency of extreme weather events changed over the past few decades? What can be expected from the future climate? Which mechanisms, processes and regional climate patterns intensify abrupt climate changes during interglacials and glacial-interglacial transitions? How do these patterns differ compared to the last interglacial, the Eemian, when the average temperature was roughly 1–2°C higher than it is now?

VI CLIMATE CHANGE ADAPTATION AS SOCIETAL CHALLENGE

Beate Ratter, Reimund Schwarze

What societal risks does climate change entail? Which socio-cultural barriers to adaptation have to be overcome? How can adaptation measures, disaster prevention and mitigation strategies be successfully combined to tackle climate change? How can scientific findings be transformed into societal action?