

Who Are We – And If Yes, Why and What for?

ZKU Has Asked Itself Key Questions Regarding the Basis and Orientation of Institutional Science



The lignite mining example: ZKU contributes to solutions to heal anthropogenic wounds in nature. (Photos: C. Hilgers, KIT)

The Climate and Environment Center (ZKU) collects data to understand processes. This is what climate and environmental sciences have always been standing for and this also is the DNA of ZKU. But what about solutions for the situations identified? "After I became Scientific Spokesperson in 2022, we sharpened and complemented our mission statement together with the researchers of ZKU," says Professor Christoph Hilgers.

The basic idea of ZKU was and still is to bring together researchers across disciplines. "ZKU wants to be home of KIT's applied researchers." Bringing together rather than dividing. ZKU is living what Leopoldina demands using the keyword of earth systems sciences: Understanding the Earth scientifically in its entirety and in the process of change.

Together with colleagues at ZKU, Hilgers started to rethink: "Who are we? Where are we standing today? Where do we want to be tomorrow? What are the steps needed to go there? And how do we want to go there?" This self-conception was laid down

jointly in the form of a vision, mission, and values: Studying climate and the environment, developing solutions. For a future worth living. Respectful discourse to advance responsible research.

ZKU topics have changed. In addition to the long established topics of atmosphere, water, ecosystems, natural hazards and risk management, and georesources, the new topics of data science, environmental technologies, and urban research have been launched. In the latter case, civil engineering and social sciences cooperate to study fundamentals and to transfer the findings to application.

Hilgers compares the commitment to using not only nature-based, but also technological solutions to reach the 17 sustainability goals with healthcare: "No matter to what an extent CO₂ emissions or energy- and resource-intensive industries are reduced at some places: Worldwide, emissions and use of the environment will unfortunately further increase. This and other interventions leave wounds in nature. Hence, we

also need interdisciplinary solutions and technologies to live with these interventions and to make these wounds heal as well as possible. Not only here, but also for people in other countries, who are not so well off."

This is also reflected by communication to the outside. New impetus in the current debate on climate and environmental issues will be provided via different channels, such as podcasts "Klimaforschung" (climate research) and "Umwelt. Wandel. Wissen.Nutzen" (Environment. Change. Knowledge. Use), newsletters, and events. "Data are reported. But still, a lot of information is provided without facts." For many persons, it is therefore difficult to distinguish data-based from opinion-based information. "The press strongly mixes data and opinions. To attract a maximum of attention, opinions are often listed only. But science does not work in this way. We create data. They exist and do not change ad hoc."

ZKU wishes to contribute to providing clarity: As an internal interdisciplinary science platform,

as an interface between science and society, as a contact partner for companies, authorities, schools, and as a companion in kickoffs – for the people in their environment.

In this sense, the public will be invited soon to meet the ZKU again or for the first time: On July 27, the Annual Conference of ZKU will take place with the presentation of the Sparkasse Environmental Award and the final certificates of the GRACE Graduate School as well as with a public lecture on CO₂ underground storage. Before that, from July 3 to 8, ZKU will organize the Wissenswoche Umwelt und Ressourcen "sicher.sauber.nutzen" (week of environmental and resources knowledge "safe. clean.use"). On July 6, the dialog Karlsruher Umweltimpulse "Rohstoffe, Ethik und Kreislaufwirtschaft" (environmental impulses in Karlsruhe "resources, ethics, and circular economy") will take place. The public is cordially welcome. ■

More information:

<https://www.klima-umwelt.kit.edu/english/index.php>