Karlsruhe Institute of Technology

KIT Environment Lecture at the IFU Anniversary Symposium

July 16, 2014, 5 pm, Congress Centre (Olympiasaal), Garmisch-Partenkirchen

KIT CLIMATE AND ENVIRONMENT CENTER

KIT – University of the State of Baden-Wuerttemberg and
National Research Center of the Helmholtz Association

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KIT Climate and Environment Center
KIT Environment Lecture

Wednesday, July 16, 2014
5 pm

Congress Centre
Olympiasaal (Olympic Hall)
Richard-Strauss-Platz 1
82467 Garmisch-Partenkirchen
Germany

In the 21st century, living conditions on earth are changing as profoundly as never before. With more than 650 employees at about 30 institutes of KIT, the KIT Climate and Environment Center develops strategies and technologies to secure the natural bases of life. The future challenges to the earth`s resources and environment are subject of the KIT Environment Lectures.

Program

- **Laudation**
  Professor Hans Peter Schmid
  KIT Climate and Environment Center
- The 2014 KIT Environment Lecture:
  Ecosystem-Atmosphere Interactions: How Plants Respond to their Environment, and Vice Versa?
  Professor Dennis Baldocchi
  Department of Environmental Science, Policy and Management, University of California, Berkeley, USA
- **Reception**

Abstract

Changes in the state of the atmosphere and ecosystems depend upon fluxes of matter and energy, exchanged between one another. A full understanding of these interactions require that we take a hierarchical and multidisciplinary approach, coupling ideas of biophysics, ecophysiology, biogeochemistry and ecosystem dynamics. This talk describes how these fluxes are measured and then uses theory and data from the global FLUXNET project to examine the interactions between vegetation and the atmosphere. We then use this intellectual framework to address questions about the current and future state of exchange between the atmosphere and ecosystems in a changing world.

Professor Dennis Baldocchi

Dennis D. Baldocchi is a professor of Biometeorology at the University of California, Berkeley. He is a world renowned leader in research on physical, biological and chemical processes that control trace gas and energy exchange between vegetation and the atmosphere and the micrometeorology of plant canopies. Dennis Baldocchi's name stands for the success of FLUXNET, the global endeavor to measure vegetation-atmosphere exchange of carbon, water and energy by a network of over 500 flux-stations. He is a Fellow of the American Geophysical Union and has received numerous awards, including the Award for Outstanding Achievement in Biometeorology from the American Meteorological Society in 2009 and a Fulbright Fellowship in 2014. Professor Baldocchi is editor of numerous journals, is Editor-in-Chief of the Journal of Geophysical Research: Biogeosciences and is a member of advisory boards for national and international organizations and projects. He has over 200 peer-reviewed publications.

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