ETH zürich

ETH CHEMICAL ENGINEERING MEDAL 2024

Friday, 17 January 2025, 4 pm, HCI G 3

In recognition of his cutting-edge research on absolute sustainability and the planetary boundaries framework,

Prof. Dr. Johan Rockström

Director of the Potsdam Institute for Climate Impact Research and Professor in Earth System Science, University of Potsdam,

will be awarded the 2024 ETH Zurich Chemical Engineering Medal by the ETH Zürich Rector, Prof. Dr. Günther Dissertori

After the ceremony, the awardee will give a talk on

ADVANCING THE PLANETARY BOUNDARY FRAMEWORK FOR WORLD STEWARDSHIP OF EARTH

Abstract. The Planetary boundaries framework sets out to quantify the safe operating space for humanity on Earth, for all the biogeochemical and physical processes and systems that regulate the state, resilience and life-support on Earth. The science is translated - through many methods and approaches, to science based targets, that can be operationalised for nations, businesses, cities, sectors. This talk provides a scientific update of Earth system risks, planetary boundaries science, explores future directions of science, and highlights key transformations towards a safe landing on Earth.

CV. Professor Johan Rockström is an internationally recognized scientist on global sustainability and Earth resilience. He led the development of the Planetary Boundaries framework for human development in the current era of rapid global change. He is deeply involved in research on the future trajectory of the Anthropocene and tipping points in the Earth system. With more than 25 years experience in applied water research in tropical regions, he is also a leading scientist on global water resources. Professor Rockström is a driving force behind myriad international scientific initiatives, including the Earth Commission and the Planetary Boundaries Science Initiative, as well as actively consulting on global sustainability issues for national and multilateral government organisations and business networks.

ICB Institute for Chemical and Bioengineering

DCHAB Department of Chemistry and Applied Biosciences