

ICB seminar series 2017/18

chairman: Prof. Dr. Andrew deMello

POWER-TO-X-TECHNOLOGIES AND SECTOR COUPLING

Prof. Kurt Wagemann

DECHEMA, Gesellschaft für Chemische Technik und Biotechnologie e.V. (Society for Chemical Engineering and Biotechnology)

ETH Hönggerberg, 31/01/2018 HCI J 4, 17.00 h

The Seminar will be followed by an Apéro

Abstract. Renewable energies are increasingly gaining ground in the electricity sector. In Germany, pushed by the renewable energy act, their share is already exceeding 30%. Nevertheless a system relying on the fluctuating sources wind power und PV requires solutions both for "Dunkelflauten" and periods with electricity generation beyond the current needs. Key to mastering this are power-to-X-technologies. They also are the key for the defossilisation of other sectors like transport and chemicals production. The lecture will describe technological options and large scale research activities in Germany.

Speaker highlights. Since 2010 he holds the position of DECHEMA's Executive Director. Starting in 1989 he headed some of the large departments at the DECHEMA, including those for Research Planning, Congresses and for Research Management and Administration. He is one of the coordinators of the Kopernikus Project P2X: Exploration, Validation and Implementation of "Power-to-X"-Concepts funded by the German Federal Ministry for Education and Research. Besides this he serves as head of the advisory council for the Renewable Energies Program at the Karlsruhe Institute of Technology as well as for the Board of Trustees at the Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg, in the position of the Vice Chairman. In February 2011 he was appointed to honorary professor at the University of Stuttgart, where he has been fulfilling a teaching assignment on "Technical Chemistry and Technical Biochemistry – Biorefineries" since 2006.



