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Prof. Ruediger-A. Eichel

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Ruediger-A. Eichel holds a chair for Energy Conversion and Storage at RWTH Aachen University, Germany, as full professor. In a joint appointment, he acts as scientific director of the Institute of Energy and Climate Research (IEK-9 - Fundamental Electrochemistry) at Forschungszentrum Juelich, Germany. Prof. Eichel is founding director of the "Competence Center Electrochemistry" (ELECTRA) of the State of North-Rhine-Westphalia (NRW) for Sustainable Electrochemical Process Engineering.

He acts as coordinator of the national flagship project "Kopernikus P2X – Research, Validation and Implementation of 'Power-to-X' Concepts" and the Helmholtz Network of Excellence "Electrochemical CO₂-Valorization". In the field of battery research, Prof. Eichel is spokesperson of the topic "Electrochemical Energy Storage" within the research program "Storage and Cross-linked Infrastructures" (SCI) of the Helmholtz Society. He is principal investigator of the Helmholtz Institute Muenster "Ionics in Energy Storage" (HI-MS) and the Cluster of Excellence "The Fuel Science Center – Adaptive Conversion Systems for Renewable Energy and Carbon Sources" (FSC).

Prof. Eichel earned his diploma in solid-state physics at the University of Cologne, Germany, and obtained his Ph.D. degree in physical chemistry at the Swiss Institute of Technology (ETH) in Zuerich, Switzerland. Prof. Eichel was qualified as a university lecturer (*venia legendi*) in Physical Chemistry at Darmstadt Technical University with a habilitation thesis on "Nano-scale properties of functional ceramics".

Current research interests focus on electrochemical energy conversion and storage technologies and their integration in sustainable value chains. In particular, he works on advanced Lithium-ion and post-Lithium concepts for energy storage with batteries (solid-state and metal-air batteries), as well as energy conversion by Power-to-X (reversible electrolyzer / fuel cells and co-electrolysis).

Prof. Eichel is member of the World Energy Council Germany and member of the Managing Board of the German Renewable Energy Research Association (FVEE). He is elected panel member of the review board "Physical Chemistry of Solids and Surfaces" of the German Science Foundation (DFG). Furthermore, he is member of the German Physical Society (DPG, section Energy), the German Society for Materials Research (DGM, section Materials for Energy), and the German Chemical Society (GDCh, section Applied Electrochemistry).