

Dr. Norbert Wagner

(*10.04.1959)

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Team leader battery technology

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Curriculum vitae

1979 – 1983	Study of Chemistry, Babes-Bolyai University, Cluj, Romania
1984 – 1989	PhD Student, Friedrich-Alexander University Erlangen-Nürnberg, Germany
1989 – 2010	Research Scientist at the German Aerospace Center (DLR), Institute for Engineering Thermodynamics, Stuttgart
Since 2011	Head of Section Battery Energy Technology, German Aerospace Center (DLR), Institute for Engineering Thermodynamics, Stuttgart

Activities in the scientific community, honors, awards (selection)

Since 1990	Member of the German Chemical Society (GDCh)
Since 1993	Member of the International Society of Electrochemistry (ISE)
Since 2007	Member in the Working Society for Electrochemical Research Institutions; Arbeitsgemeinschaft elektrochemischer Forschungsinstitutionen e.V. (AGEF)
Since 2008	Member of the scientific board of the International Symposium on Electrochemical Impedance Spectroscopy (EIS)
Since 2009	Member of the scientific board of the International Workshop on Electrochemical Impedance Spectroscopy (IWIS)

Research fields

- *Metal-Sulfur, Metal-Air, Li-Ion Batteries, CO₂ Reduction Reaction, Gas Diffusion Electrodes*
- *Electrochemical diagnostic methods for batteries*
- *In-situ characterization of batteries*
- *Reaction and degradation mechanism*
- *Dry coating techniques*

Selected publications from 453 publications and 42 patent applications

D.-W. Park, N.A. Cañas, N. Wagner, K.A. Friedrich, Novel solvent-free direct coating process for battery electrodes and their electrochemical performance, J. Power Sources, 306 (2016) 758-763.

M. Steinhauer, S. Risse, N. Wagner, K.A. Friedrich, Investigation of the Solid Electrolyte Interphase Formation in Lithium-Ion Batteries with Electrochemical Impedance Spectroscopy, Electrochim. Acta, 228 (2017) 652-658.

N. Wagner, "Electrochemical power sources – Fuel cells" in Impedance Spectroscopy: Theory, Experiment, and Applications, 3rd Edition, Edited by Evgenij Barsoukov and J. Ross Macdonald, John Wiley&Sons, Inc., ISBN: 978-1-119-07408-3, 2018

F. Bienen, A. Löwe, J. Hildebrand, S. Hertle, D. Schonvogel, D. Kopljär, N. Wagner, E. Klemm and K.A. Friedrich, Degradation study on tin- and bismuth-based gas-diffusion electrodes during electrochemical CO₂ reduction in highly alkaline media, Journal of Energy Chemistry, 62 (2021) 367-376)

A. Kube, N. Wagner and K.A. Friedrich, Influence of organic additives for Zn-air batteries onto cathode stability and performance, Journal Electrochemical Society, 168 (2021) 050531

R. Richter, J. Häcker, Z. Zhao-Karger, T. Danner, N. Wagner, M. Fichtner, K.A. Friedrich and A. Latz, Degradation Effects in Metal-Sulfur Batteries, ACS Applied Energy Materials, 4 (2021) 2365–2376.