

Prof. Dr. Karsten Meyer, FRSC

Karsten Meyer studied chemistry (October 1989 – 1994) at the Ruhr-University of Bochum (Germany) and received his Diploma in May 1995. Starting in summer 1995, he performed his PhD thesis work under the direction of Professor Karl Wieghardt at the Max-Planck-Institute in Mülheim / Ruhr (Germany) and received his Ph.D. (Dr. rer. nat., *summa cum laude*) in January 1998. With a DFG postdoctoral fellowship, Karsten proceeded to gain research experience in the laboratory of Professor Christopher Cummins at the Massachusetts Institute of Technology (1998 – 2000, MIT, Cambridge, MA, USA). In January 2001, he was appointed to the faculty of the University of California, San Diego (UCSD) as an Assistant Professor and was named an Alfred P. Sloan Fellow in 2004. In 2006, he accepted an offer (C4/W3) to be the Chair of the Institute of Inorganic & General Chemistry at the Friedrich-Alexander-University of Erlangen-Nürnberg (FAU), Germany.

Professional Career

Oct. 1989	Study of Chemistry at the Ruhr-University-Bochum in Germany
May 1995	Diploma (Ruhr-University-Bochum)
July 1995	PhD Studies at the Max-Planck-Institute in Mülheim/Ruhr, Germany under the supervision of Prof. Dr. Karl Wieghardt
Jan. 1998	Dissertation (Dr. rer. nat., <i>summa cum laude</i>) “Molecular and Electronic Structure of High-Valent Transition-Metal Nitrido Complexes”
Feb. 1998	Postdoctoral Studies at the Max-Planck-Institute Mülheim/Ruhr (Germany)
Oct. 1998	Postdoctoral Studies at the Massachusetts Institute of Technology (MIT) under the direction of Prof. Christopher C. Cummins, USA
Jan. 2001	Assistant Professor at the University of California, San Diego (UCSD), USA
Jan. 2006	University Full Professor (W3/C4) Chair of Inorganic and General Chemistry (FAU)

Editorial Activities

2005	Volume Editor, Elsevier “Comprehensive Organometallic Chemistry III, Vol. 2”
2009	International Advisory Board, Wiley-VCH “European Journal of Inorganic Chemistry”
2011	International Advisory Board, ACS “Inorganic Chemistry” (2-yr term)
2013	Guest Editor, Wiley-VCH “European Journal of Inorganic Chemistry”
2014	International Advisory Board, Taylor & Francis “Journal of Coordination Chemistry”
2014	Associate Editor, ACS “Organometallics”
2019	Editor-in-Chief, Elsevier “Comprehensive Organometallic Chemistry-IV”

Awards & Honors

2002	Hellman Fellow, Christ & Warren Hellman Young Faculty Award, USA
2003	Faculty Career Development Award, UC Academic Senate, USA
2004	Alfred P. Sloan Award, USA
2009	Israel Chemical Society, Lifetime Honorary Member, IL
2009	Visiting Professorship, University of Manchester, UK
2009	Japanese Society for the Promotion of Science Award (JSPS), JP
2010	Dalton Transactions European Lectureship Award, RSC, UK
2010	MBRAUN Lecturer, Pacificchem 2010, Honolulu Hawaii, USA
2011	Fellow of the Royal Society of Chemistry, FRSC, UK
2012	Visiting Professor, Université Paul Sabatier, Toulouse, F
2015	Visiting Professor, Nagoya Institute of Technology, JP
2015	JSPS Professorship “Brain Circulation Project” Nagoya Institute of Technology, JP
2017	Elhuyar-Goldschmidt Award, Royal Society of Chemistry of Spain
2017	Ludwig-Mond Award, Royal Society of Chemistry, UK
2017	Chugaev Commemorative Medal, Kurnakov Institute, Moscow, Russian Academy of Sciences
2018	Guest Professor, ETH Zürich, CH
2022	XingDa Lecture, Peking University, China

Publications and Invitations

Karsten Meyer has published 250+ publications in peer-reviewed journals, leading to an *h*-Index of 60 with a total of 11,000+ citations, and an average citation per item of 40. The list of publications includes, among others, reports and articles in *Science*, *Nature*, *Nature Chem.*, *Chem*, *Journal of the American Chemical Society*, *Angewandte Chemie*, and *Chemical Science*. He has given more than 200 invited talks, including opening and plenary lectures, at conferences as well as research and academic institutions worldwide.

Ten Selected Publications

1. "Ligand Tailoring Toward an Air-Stable Iron(V) Nitrido Complex"
M. Keilwerth, L. Grunwald, W. Mao, F.W. Heinemann, J. Sutter, E. Bill and K. Meyer
J. Am. Chem. Soc. **2021**, *143*, 1458 – 1465
2. "A Series of Iron Nitrosyl Complexes {Fe–NO}⁶⁻⁹ and a Fleeting Intermediate {Fe–NO}¹⁰ en Route to a Metallacyclic Iron Nitrosoalkane"
M. Keilwerth, J. Hohenberger, F.W. Heinemann, J. Sutter, A. Scheurer, H. Fang, E. Bill, F. Neese, Shengfa Ye and K. Meyer*
J. Am. Chem. Soc. **2019**, *141*, 17217 – 17235
3. "Uranium-Mediated Electrocatalytic Dihydrogen Production from Water"
D. P. Halter, F. W. Heinemann, J. Bachmann and K. Meyer*
Nature **2016**, *530*, 317 – 321
4. "Isolation and Structural and Electronic Characterization of Salts of the Decamethylferrocene Dication"
M. Malischewski*, M. Adelhardt, J. Sutter, K. Meyer* and K. Seppelt
Science **2016**, *353*, 678 – 682
5. "Synthesis and Characterization of a Uranium(II) Monoarene Complex Supported by δ Backbonding"
H.S. La Pierre, A. Scheurer, F.W. Heinemann, W. Hieringer and K. Meyer*
Angew. Chem. Int. Ed. **2014**, *53*, 7158 – 7162
6. "Crystal Structure Determination of the Nonclassical 2-Norbornyl Cation"
F. Scholz, D. Himmel, F.W. Heinemann, P.v.R. Schleyer, K. Meyer* and I. Krossing*
Science **2013**, *341*, 62 – 64
7. "Synthesis, Structure, and Reactivity of an Iron(V) Nitride"
J.J. Scepaniak, C.S. Vogel, M.M. Khusniyarov, F.W. Heinemann, K. Meyer* and J.M. Smith*
Science **2011**, *331*, 1049 – 1052
8. "Carbon Dioxide Activation with Sterically Pressured Mid- and High-Valent Uranium Complexes"
S.C. Bart, C. Anthon, F.W. Heinemann, E. Bill, N.M. Edelstein and K. Meyer*
J. Am. Chem. Soc. **2008**, *130*, 12536 – 12546
9. "Towards Uranium Catalysts"
A.R. Fox, S.C. Bart, K. Meyer and C.C. Cummins
Nature **2008**, *455*, 341 – 349
10. "A Linear, O-Coordinated η^1 -CO₂ Bound to Uranium"
I. Castro-Rodriguez, H. Nakai, L. N. Zakharov, A.L. Rheingold and K. Meyer*
Science **2004**, *305*, 1757 – 1759

For a complete and up-to-date list of publications, please see:
<https://www.inorgchem2.nat.fau.de>

ORCID.org/0000-0002-7844-2998
ResearcherID: G-2570-2012

