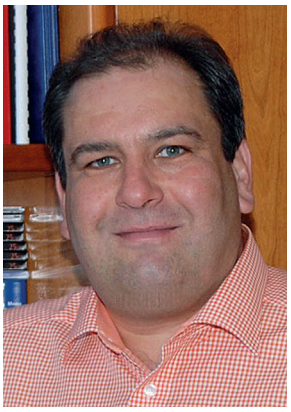

K. Meyer

*The author presented on this page has recently published his **25th article** since 2000 in Angewandte Chemie:* "Influence of the nacnac Ligand in Iron(I)-Mediated P_4 Transformations": F. Spitzer, C. Graßl, G. Balázs, E. M. Zolnhofer, K. Meyer, M. Scheer, *Angew. Chem. Int. Ed.* **2016**, *55*, 4340; *Angew. Chem.* **2016**, *128*, 4412.

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Awards:	**2004** Alfred P. Sloan Research Fellowship; **2009** Lifetime Honorary Member, Israel Chemical Society; **2009** *Dalton Transactions* European Lectureship Award; **2009** Japanese Society for the Promotion of Science (JSPS) Award; **2011** Fellow of the Royal Society of Chemistry; **2015** JSPS Professorship, Nagoya Institute of Technology
Current research interests:	Synthesis and spectroscopy of d-block and uranium complexes; small-molecule activation; synthesis of tailored ligand environments for selective reactions; charge- and light-driven catalysis relevant to sustainable energy cycles
Hobbies:	Nature and macro photography, scuba diving, driving my car on a closed circuit

My favorite drink is red wine, especially pinot noir.

The most significant historic event of the past 100 years was the discovery of penicillin by Alexander Fleming.

My favorite quote is "a life's work in the agony and sweat of the human spirit, not for glory and least of all for profit, but to create out of the materials of the human spirit something which did not exist before" (William Faulkner, Nobel Banquet Speech, 1950).

Young people should study chemistry because chemistry is the essence of life! There is no life without molecules—that's a fact!

The biggest challenge facing scientists is to overcome the daily frustration of failed experiments and tight funding agencies.

If I were a car I would be a BMW M3 CSL. The "L" as in "light" is wishful thinking.

In a spare hour, I enjoy spending "quality time" with my son Niklas.

My biggest inspiration is given in a book by Jules Verne: "Yes, my friends, I believe that water will one day be employed as fuel, that hydrogen and oxygen, which constitute it, used singly or together, will furnish an inexhaustible source of heat and light, of an intensity of which coal is not capable … Water will be the coal of the future." (*The Mysterious Island*, 1874)

I advise my students to enjoy their PhD studies; they will never again have so much freedom to playfully explore the unknown.

The secret of being a successful scientist is that there is no secret—it is simply hard work with a pinch of luck here and there!

My favorite molecule is $[U^{V}(dbabh)_6]^{-}$; my first uranium complex. It does nothing but is very pretty and exhibits T_h symmetry.

If I could be a piece of lab equipment, I would be a magnetic stir bar as it stands for endurance and reliability.

If I won the lottery, I would invite my best friends and dearest colleagues to found an independent research institution, located on a cliff with an ocean view. We would do nothing but basic research without having to worry about the bills.

If I could be described as an animal it would be a big brown bear (so I am told).

My greatest achievement has been the synthesis of a natural product by teamwork: 100% yield, 51 cm, 3550 g—a baby boy.

How is chemistry research different now than at the beginning of your career?

Research at the bench has not changed—synthetic chemistry is still tedious work that can only be done with talented students who are willing to commit themselves. What has changed is the politics that require the principal investigators to focus on the "selling points" of the research more than on solving the actual scientific problem. Research excellence initiatives transcending the field, networking, committee work, and public relations are all very time-intensive but appear to be musts for anyone to wants to be acknowledged as a major player in the field. Science performed in the "ivory tower" of the university is no longer an option.

What is the secret to publishing so many high-quality papers?

Striving to be a scientific "trendsetter", rather than a "follower", is the best strategy for making significant discoveries in fundamental research that will be published in high-quality journals and, hopefully, even make it into chemistry textbooks. Being a university professor, creating fundamental textbook knowledge is one of the major driving forces in my life as a teacher. The basis of all high-quality work is a skilled research team with stamina and endurance to carry on even when the results are hard to come by. Throughout my career, I was lucky to have the privilege to work with a number of first-class mentors, co-workers, and collaborators.

My 5 top papers:

1. "A Linear, O-Coordinated η^1-CO_2 Bound to Uranium": I. Castro-Rodríguez, H. Nakai, L. N. Zakharov, A. L. Rheingold, K. Meyer, *Science* **2004**, *305*, 1757.
   This publication of an activated CO_2 ligand bound in a previously unknown coordination mode was the first of a number of reports on CO_2 activation and functionalization chemistry.
2. "An Iron Nitride Complex": C. Vogel, F. W. Heinemann, J. Sutter, C. Anthon, K. Meyer, *Angew. Chem. Int. Ed.* **2008**, *47*, 2681; *Angew. Chem.* **2008**, *120*, 2721.
   This paper reports the long-sought structural characterization of a molecular iron nitride complex; work that I started as a PhD student but couldn't fully accomplish during my time in Mülheim. Eventually, tripodal N-heterocyclic carbene ligands paved the way for a number of reactive transition-metal complexes with unusual electronic structures and reactivity, including the fully characterized Fe^V nitride, published later in collaboration with my colleague Jeremy Smith.
3. "Crystal Structure Determination of the Nonclassical 2-Norbornyl Cation": F. Scholz, D. Himmel, F. W. Heinemann, P. von R. Schleyer, K. Meyer, I. Krossing, *Science* **2013**, *341*, 62.
   This paper may be considered the final chapter on the long and controversial debate over the exact molecular structure of the 2-norbornyl cation. The project was pure academic delight, reminded me of the value of collaborative research, and was an opportunity to work with extraordinary scientists.
4. "Synthesis and Characterization of a Uranium(II) Monoarene Complex Supported by δ Backbonding": H. S. La Pierre, A. Scheurer, F. W. Heinemann, W. Hieringer, K. Meyer, *Angew. Chem. Int. Ed.* **2014**, *53*, 7158; *Angew. Chem.* **2014**, *126*, 7286.
   Having learned from my postdoctoral advisor that δ symmetry backbonding might represent a vehicle for gaining access to a divalent uranium synthon, I proposed the synthesis and chemistry of a U^{II} coordination complex during my interviews for a faculty position. It took 15 years and a number of very talented students, postdocs, and other scientific co-workers to accomplish the synthesis and characterization of the proposed molecule.
5. "Uranium-mediated electrocatalytic H_2 production from water": D. P. Halter, F. W. Heinemann, J. Bachmann, K. Meyer, *Nature* **2016**, *530*, 317.
   The recognition of uranium compounds as potentially useful catalysts is a long-term goal of our research and this paper is a small but fundamental step toward Jules Verne's vision "water will be the coal of the future".

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