

Alois Fürstner

Max-Planck-Institut für Kohlenforschung, Germany

<http://www.kofo.mpg.de/en/research/organometallic-chemistry>



Alois Fürstner

Fürstner

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Angewandte Chemie

Fürstner

Managing Director

Alois Fürstner's scientific interests relate to organometallic chemistry and homogenous catalysis, including applications thereof to target oriented synthesis. An early success was the development of the first NHC-reactions catalytic in chromium. Further notable lines of research comprise extensive studies on alkene- and alkyne metathesis, pioneering contributions to the field of π -acid catalysis based on platinum and gold, as well as the development and mechanistic investigating of iron-catalyzed reactions. These methods opened concise and flexible entries into many bioactive natural products.

His research was recognized by several awards, including the Leibniz Award of the German Science Foundation (1999), the IUPAC-Thieme Prize (2000), an ACS Arthur C. Cope Scholar Award (2002), the inaugural Mukaiyama Award (Japan, 2005), the Otto-Bayer-Prize of the German Chemical Society (2013), the Gay-Lussac/Humboldt Prize (France, 2014), and the ACS H. C. Brown Award (2016).

Vita

2009-2011

Managing Director of the Max-Planck-Institut für Kohlenforschung
since 1998

Director at the Max-Planck-Institut für Kohlenforschung and Professor at the
Technical University of Dortmund

1993-1998

Group leader at the Max-Planck-Institut für Kohlenforschung and Lecturer at
the University of Dortmund

1992

1990-1991

Postdoctoral fellow at the University of Geneva, Switzerland (W. Oppolzer)

1987

PhD at the Technical University Graz, Austria (H. Weidmann)

1962

born in Bruck/Mur (Austria)

Selected Recent Publications:

Casitas, A., Krause, H., Goddard, R., & Fürstner, A. (2015). Elementary Steps of Iron Catalysis: Exploring the Links between Iron Alkyl and Iron Olefin Complexes for their Relevance in C–H Activation and C–C Bond Formation. *Angewandte Chemie International Edition*, 54(5), 1521-1526. [doi:10.1002/anie.201410069](https://doi.org/10.1002/anie.201410069). » more

Rummelt, S. M., Preindl, J., Sommer, H., & Fürstner, A. (2015). Selective Formation of a Trisubstituted Alkene Motif by trans-Hydrostannation/Stille Coupling: Application to the Total Synthesis and Late-Stage Modification of 5,6-Dihydrocineromycin B. *Angewandte Chemie International Edition*, 54(21), 6241-6245. [doi:10.1002/anie.201501608](https://doi.org/10.1002/anie.201501608). » more

Rummelt, S. M., Radkowski, K., Ro ca, D.-A., & Fürstner, A. (2015). Interligand Interactions Dictate the Regioselectivity of trans-Hydrometalations and Related Reactions Catalyzed by [Cp*RuCl]. Hydrogen Bonding to a Chloride Ligand as a Steering Principle in Catalysis. *Journal of the American Chemical Society*, 137(16), 5506-5519. [doi:10.1021/jacs.5b01475](https://doi.org/10.1021/jacs.5b01475). » more

Fürstner, A. (2014). From Understanding to Prediction: Gold- and Platinum-Based -Acid Catalysis for Target Oriented Synthesis. *Accounts of Chemical Research*, 47(3), 925-938. [doi:10.1021/ar4001789](https://doi.org/10.1021/ar4001789). » more

Seidel, G., Gabor, B., Goddard, R., Heggen, B., Thiel, W., & Fürstner, A. (2014). Gold Carbenoids: Lessons Learnt from a Transmetalation Approach. *Angewandte Chemie International Edition*, 53(3), 879-882. [doi:10.1002/anie.201308842](https://doi.org/10.1002/anie.201308842). » more

Mailhol, D., Willwacher, J., Kausch-Busies, N., Rubitski, E. E., Sobol, Z., Schuler, M., Lam, M.-H., Musto, S., Loganzo, F., Maderna, A., & Fürstner, A. (2014). Synthesis, Molecular Editing, and Biological Assessment of the Potent Cytotoxin Leiodermatolide. *Journal of the American Chemical Society*, 136(44), 15719-15729. [doi:10.1021/ja508846g](https://doi.org/10.1021/ja508846g). » more

Wang, F., Mielby, J., Richter, F. H., Wang, G., Prieto, G., Kasama, T., Weidenthaler, C., Bongard, H.-J., Kegnæs, S., Fürstner, A., & Schüth, F. (2014). A Polyphenylene Support for Pd Catalysts with Exceptional Catalytic Activity. *Angewandte Chemie International Edition*, 53(33), 8645-8648. [doi:10.1002/anie.201404912](https://doi.org/10.1002/anie.201404912). » more