

报告人姓名:

Alois Fürstner

报告人工作单位:

Max-Planck-Institut für Kohlenforschung, Germany

报告人实验室网页链接:

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



报告人的简要介绍、学术成就:

Alois Fürstner 教授是德国有机化学领域的顶尖科学家, 在世界范围内享有很高的声誉。Fürstner 教授的研究涉及有机化学的多个领域: 烯炔以及炔炔的复分解反应, π -酸催化, 铁催化, 天然产物全合成等。Fürstner 教授获得过多个重要的国际奖项, 他曾经担任过德国马普所的常务所长 (Managing Director), 以及目前担任 *Angewandte Chemie* 杂志编委会主席。

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 NHK-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

“Habilitation” in Organic Chemistry at the Technical University Graz, Austria

1990-1991

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

1987

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

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., Roşca, 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 π -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](#)