





N. Cramer

The author presented on this page has published more than 10 articles since 2000 in Angewandte Chemie, most recently:
"Enantioselective Rhodium(I)-Catalyzed [3+2] Annulations of Aromatic Ketimines Induced by Directed C—H Activations": D. N. Tran, N. Cramer, Angew. Chem. Int. Ed. 2011, 123, 11294–11298; Angew. Chem. Int. Ed. 2011, 50, 11098–11102.

Nicolai Cramer

Date of birth: November 20, 1977

Position: Assistant Professor for Organic Chemistry at EPFL Lausanne (Switzerland)

E-mail: Nicolai.cramer@epfl.ch
Homepage: http://lcsa.epfl.ch/

Education: 1998–2003 Studies of Chemistry, University of Stuttgart (Germany) 2003–2005 PhD with Sabine Laschat, University of Stuttgart

2003–2005 PhD with Sabine Laschat, University of Stuttgart 2006–2007 Postdoc with Barry M. Trost, Stanford University (USA) 2007–2010 Habilitation with Erick M. Carreira, ETH Zurich (Switzerland)

Awards: 2009 Solvias Ligand Contest Winner; 2009 ADUC Habilitation-price; 2010 EUChems Young

Chemist Award Gold Medal; 2010 ORCHEM Price for young academics; 2010 Bayer Early

Excellence in Science Award

Current research We work on the development of broadly applicable catalytic methods for the selective functionalization of relatively inert C–H and C–C bonds with different transition-metal

complexes. Despite significant advances over the past years, numerous challenges remain largely unsolved. The fascination and at the same time the key lies in the possibility of altering the reactivity and selectivity of the metal complexes in an almost unimaginable way by using tailored ligands. We seek to access new possibilities that lead us to their specific use in the synthesis of complex bioactive natural products through different ligand and reactivity concepts.

Hobbies: Hiking, cooking

If I won the lottery, I would ... wonder how on earth my name appeared on the ticket.

The greatest scientific advance in the next decade will be ... the discovery of a second habitable earth.

The biggest problem that scientists face is ... to maintain complete independence towards politics, economy, and other funding sources.

The most exciting thing about my research is ... the moment you realize the significance of an unexpected result of a failed experiment.

The best stage in a scientist's career is ... hopefully still to come.

The best advice I have ever been given is ... "If you have an idea in the middle of the night, get up and write it down! In the majority of cases it will be gone in the morning".

A good work day begins with ... a clear view of the Mont Blanc from my office window.

The most amusing chemistry adventure in my career was ... a foaming and never-ending volcano caused by a run-away diazocoupling during the synthesis of Para Red during my studies.

My 5 top papers:

- "syn-Selective Rhodium(I)-Catalyzed Allylations of Ketimines Proceeding through a Directed C-H Activation/Allene Addition Sequence": D. N. Tran, N. Cramer, Angew. Chem. 2010, 122, 8357-8360; Angew. Chem. Int. Ed. 2010, 49, 8181-8184. (Access to highly functionalized indenyl amines with a free primary amino group from readily available unsubstituted arylketimines and terminal allenes.)
- "Rhodium-Catalyzed C-C Bond Cleavage: Construction of Acyclic Methyl-Substituted Quaternary Stereogenic Centers":T. Seiser, N. Cramer, J. Am. Chem. Soc. 2010, 132, 5340-5342. (By the choice of a sterically very demanding ligand, selective access to acyclic quaternary stereogenic centers with a methyl substituent is possible.)
- 3. "Enantioselective Palladium-Catalyzed Direct Arylations at Ambient Temperature: Access to Indanes with Quaternary Stereocenters": M. R. Albicker, N.

- Cramer, *Angew. Chem.* **2009**, *121*, 9303–9306; *Angew. Chem. Int. Ed.* **2009**, *48*, 9139–9142. (Palladium-catalyzed arylations following the CMD-pathway can be rendered enantioselective.)
- 4. "Enantioselective C-C Bond Activation of Allenyl Cyclobutanes: Access to Cyclohexenones with Quaternary Stereogenic Centers": T. Seiser, N. Cramer, Angew. Chem. 2008, 120, 9435-9438; Angew. Chem. Int. Ed. 2008, 47, 9294-9297. (First paper in a series dealing with rhodium-catalyzed enantioselective β-carbon eliminations from tert-cyclobutanols giving highly reactive alkylrhodium intermediates.)
- "Synthesis and Biological Activity of Largazole and Derivatives": T. Seiser, F. Kamena, N. Cramer, Angew. Chem. 2008, 120, 6583-6585; Angew. Chem. Int. Ed. 2008, 47, 6483-6485. (This is the very first independent publication and describes a modular synthesis of the HDAC inhibitor largazole.)

DOI: 10.1002/anie.201106649