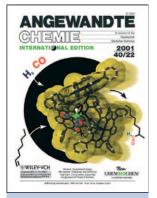
Author Profile



J. N. H. Reek

The author presented on this page has recently published his 10th article since 2000 in Angewandte Chemie: "Singly Hydrogen Bonded Supramolecular Ligands for Highly Selective Rhodium-Catalyzed Hydrogenation Reactions": P.-A. R. Breuil, F. W. Patureau, J. N. H. Reek, Angew. Chem. 2009, 121, 2196–2199; Angew. Chem. Int. Ed. 2009, 48, 2162–2165.



J. N. H. Reek has also featured on the cover of Angewandte Chemie:
"Assembly of Encapsulated Transition Metal Catalysts":
V. F. Slagt, J. N. H. Reek,
P. C. J. Kamer, P. W. N. M. van Leeuwen, Angew.
Chem. 2001, 113; 4401–4404; Angew. Chem. Int.
Ed. 2001, 40, 4271–4274.

Joost N. H. Reek

Date of birth: 23 June, 1967 **Nationality:** Dutch

Position: Full Professor Supramolecular and Homogeneous Catalysis, Van 't Hoff Institute for Molecular

Sciences, University of Amsterdam

Education: 1986–1991 MSc, Chemistry, University of Nijmegen

1992–1996 PhD with R. J. M. Nolte, "Synthesis, binding properties and reactivity of molecular

clips", University of Nijmegen

1992 4 months PhD research training computational Chemistry, Organon 1996–1998 Postdoctoral Fellow with Prof M. J. Crossley, Sydney (Australia)

Professional 2003 Associate Professor, University of Amsterdam associations: 2006 Full Professor, University of Amsterdam 2006 Scientific director and founder of Cat-fix by

2005 Elected member of the young Dutch Academy of Science (KNAW)

Awards: 1999 Young Chemist research award

2003 Vici Research award

Current research Transition-moderates: supramolecu

Hobbies:

Transition-metal catalysis and supramolecular chemistry; development and application of supramolecular methods for the design and understanding of catalytic processes; ligand design,

DFT calculations, combinatorial approaches and in situ spectroscopy; supramolecular transition-metal-catalyst encapsulation, self-assembled ligands, supramolecular anchoring,

switchable catalysts, and cooperative dinuclear catalysts

Spending time with my children, ATB biking, motorcycling, photography, reading, music

The biggest challenge facing scientists is...finding technology for green energy. If I could have dinner with three famous scientists from history, they would be...Bohr, Einstein, and Heisenberg.

The three things I would take to a desert island would be...my family, a surf board, and an ipod. The most important future applications of my research are...new approaches for catalyst development and recyling.

My most exciting discovery to date has been...the self-assembly of ligands for transition-metal catalysis.

n a nutshell, my research involves...the application of supramolecular strategies in transition-metal catalysis.

The most exciting thing about my research is...that beauty and function are combined in one catalyst.

My work is significant because...the new concepts translate into real solutions to catalytic problems.

The secret of being a successful scientist is...that there is no secret; you should follow your intuition.

The part of my job which I enjoy the most is...to experience and share the excitement of a discovery.

If I could be a piece of lab equipment, I would be...the coffee machine; it always works and everybody needs it.

The biggest challenge facing chemists is...to change the public opinion of chemistry.

My 5 top papers:

- "Robotic Screening of a Supramolecular Catalyst Library in the Search for Selective Catalysts for the Asymmetric Hydrogenation of a Difficult Enamide Substrate": X.-B. Jiang, L. Lefort, P. E. Goudriaan, A. H. M. de Vries, P. W. N. M. van Leeuwen, J. G. de Vries, and J. N. H. Reek, Angew. Chem. 2006, 118, 1245-1249; Angew. Chem. Int. Ed. 2006, 45, 1223-1227.
- "High-Precision Catalysts: Regioselective Hydroformylation of Internal Alkenes by Encapsulated Rhodium Complexes": M. Kuil, T. Soltner, P. W. N. M. van Leeuwen, J. N. H. Reek, J. Am. Chem. Soc. 2006, 128, 11344–11345.
- "Templated Encapsulation of Pyridyl-Bian Palladium Complexes: TunableCatalysts for CO/4-tert-Butylstyr-

- ene Copolymerization": J. Flapper, J. N. H. Reek, *Angew. Chem.* **2007**, *119*, 8744–8746; *Angew. Chem. Int. Ed.* **2007**, *46*, 8590–8592.
- "METAMORPhos: Adaptive Supramolecular Ligands and Their Mechanistic Consequences for Asymmetric Hydrogenation": F. W. Patureau, M. Kuil, A. J. Sandee, J. N. H. Reek, Angew. Chem. 2008, 120, 3224-3227; Angew. Chem. Int. Ed. 2008, 47, 3180-3183.
- "Self-Assembled Biomimetic [2Fe2S]-Hydrogenase Based Photocatalyst for Molecular Hydrogen Evolution": A. M. Kluwer, R. Kapre, F. Hartl, M. Lutz, A. L. Spek, A. M. Brouwer, P. W. N. M van Leeuwen, J. N. H. Reek, *Proc. Natl. Acad. Sci. USA.* 2009, DOI:10.1073/pnas.0809666106.

DOI: 10.1002/anie.200901804

