

References [immobilized catalysts](#).

Reviews:

M. J. Wilkinson, P. W. N. M. van Leeuwen, J. N. H. Reek* Perspective article "New directions in supramolecular transition metal catalysis" *Org. Bio. Chem.* **2005** 3, 2371.

J.N.H. Reek*, D. de Groot, G.E. Oosterom, P.C.J. Kamer, P.W.N.M. van Leeuwen, Core and periphery functionalized dendrimers for transition metal catalysis; a covalent and a non-covalent approach *Rev. Mol. Biotech.* **2002**, 90, 159.

G.E. Oosterom, J.N.H. Reek,* P.C.J. Kamer, and P.W.N.M. van Leeuwen,* Transition metal catalysis using functionalized dendrimers. *Angew. Chem. Int. Ed. Engl.* **2001**, 40, 1828.

P.W.N.M. van Leeuwen, A.J. Sandee, J.N.H. Reek and P.C.J. Kamer, Xantphos-based, silica-supported, selective, and recyclable hydroformylation catalysts: a review, *Journal of Molecular Catalysis A.* **2002**, 182-183, 107.

R. van Heerbeek, P.C.J. Kamer, P.W.N.M. van Leeuwen, J. N. H. Reek,* *Chem. Rev.*, **2002**, 102,3717.

Original contributions

A.J. Sandee, V.C. Slagt, J.N.H. Reek, P.C.J. Kamer and P.W.N.M. van Leeuwen A stable and recyclable supported aqueous phase catalyst for highly selective hydroformylation of higher olefins *Chem. Commun.* **1999**, 1633.

G.E. Oosterom, R.J. van Haaren, J.N.H. Reek, P.C.J. Kamer and P.W.N.M. van Leeuwen Catalysis in the core of a carbosilane dendrimer. *Chem. Commun.* **1999**, 1119.

A.J. Sandee, L.A. van der Veen, J.N.H. Reek, P.C.J. Kamer, M. Lutz, A.L. Spek and P.W.N.M. van Leeuwen A robust, environmentally benign catalyst for highly selective hydroformylation. *Angew. Chem. Int. Ed. Engl.* **1999**, 38, 3231.

D. de Groot, E.B. Eggeling, J.C. de Wilde, H. Kooijman, R.J. van Haaren, A.W. van der Made, A.L. Spek, D. Vogt, J.N.H. Reek, P.C.J. Kamer and P.W.N.M. van Leeuwen Palladium complexes of phosphine functionalised carbosilane dendrimers as catalysts in a continuous flow membrane reactor *Chem. Commun.* **1999**, 1623.

R. van Heerbeek, J.N.H. Reek, P.C.J. Kamer and P.W.N.M. van Leeuwen, Divergent synthesis of carbosilane wedges as dendritic building blocks: a new strategy towards core functionalised carbosilane dendrimers *Tetrahedron Lett* **1999**, 40, 7127.

M. Schreuder Goedheijt, B.E. Hanson, J.N.H. Reek, P.C.J. Kamer, P.W.N.M. van Leeuwen, Spontaneous Formation of Vesicles from Amphiphilic Diphosphines: A Highly Selective and Recyclable Rhodium Catalyst. *J. Am. Chem. Soc.* **2000**, *122*, 1650.

P. W.N.M van Leeuwen, P.C.J. Kamer and J.N.H. Reek, Water, the panacea in homogeneous catalysis. *CATTECH* **2000**, *6*, 164.

N.J. Meehan, A.J. Sandee, J.N.H. Reek, P.C.J. Kamer, P.W.N.M. van Leeuwen, M. Poliakoff, Continuous, selective hydroformylation in supercritical carbon dioxide using an immobilised homogeneous catalyst *Chem. Commun.* **2000**, 1497-1498.

D. de Groot, P. G. Emmerink, C. Coucke, J.N.H. Reek,* P.C.J. Kamer, and P.W.N.M. van Leeuwen,* Rhodium catalysed hydroformylation using diphenylphosphine functionalised carbosilane dendrimers, *Inorg. Chem. Commun.*, **2000**, *3*, 711.

A.J. Sandee, D.G.I. Petra, J.N.H. Reek,* P.C.J. Kamer, and P.W.N.M. van Leeuwen* Solid phase synthesis of homogeneous ruthenium catalysts on silica for the continuous asymmetric transfer hydrogenation reaction *Chem. Eur. J.* **2001**, *7*, 1202.

A.J. Sandee, R.S. Ubale, M. Makkee, J.N.H. Reek, P.C.J. Kamer, J.A. Moulijn, P. W.N.M. van Leeuwen ROTACAT: a rotating device containing a designed catalyst for highly selective hydroformylation. *Adv. Synt. Catal.* **2001**, *1*, 201.

J.N.H. Reek, A.J. Sandee, M. Schreuder Goedheijt, P.C.J. Kamer, P.W.N.M. Van Leeuwen, Recyclable hydroformylation catalysts of higher alkenes using immobilized catalysts and two-phase systems. *Erdoel, Erdgas, Kohle* **2001**, *117*, 134-138.

D. de Groot, B.F.M de Waal, J.N.H. Reek,* A.P.H.J. Schenning, P.C.J. Kamer, E.W. Meijer,* P.W.N.M. van Leeuwen, Noncovalently Functionalized Dendrimers as Recyclable Catalysts. *J. Am. Chem. Soc.* **2001**, *123*, 8453.

A.J. Sandee, J.N.H. Reek,* P.C.J. Kamer, and P.W.N.M. van Leeuwen*, A Silica-Supported, Switchable, and Recyclable Hydroformylation-Hydrogenation Catalyst *J. Am. Chem. Soc.* **2001**, *123*, 8468.

G.E. Oosterom, S. Steffens, J.N.H. Reek*, P.C.J. Kamer, P.W.N.M. van Leeuwen*, Core-functionalized Dendrimeric Mono- and Diphosphine Rhodium Complexes; Application in Hydroformylation and Hydrogenation, *Topics in Catalysis*, **2002**, *19*, 61.

D. de Groot, J.N.H. Reek*, P.C.J. Kamer, P.W.N.M. van Leeuwen*, Palladium Complexes of Phosphane-Functionalised Carbosilane Dendrimers as Catalysts in a Continuous-Flow Membrane Reactor *Eur. J. Org. Chem.* **2002**, 1085.

W.P. Mul, K. Ramkisoensing, P.C.J. Kamer, J.N.H. Reek, A.J. van der Linden, A. Marson, and P.W.N. M. van Leeuwen, New, highly efficient work-up protocol for sulfonated diphosphines. *Adv. Synth. Cat.* **2002**, *344*, 293.

A.J. Sandee, D. Dimitrijevic, R.J. van Haaren, J.N.H. Reek*, P.C.J. Kamer, P.W.N.M. van Leeuwen*, Silica immobilised palladium phosphine complexes as recyclable, regioselective catalysts for the allylic alkylation, *Journal of Molecular Catalysis A*. **2002**, 182-183, 309.

J.N.H. Reek*, D. de Groot, G.E. Oosterom, P.C.J. Kamer, P.W.N.M. van Leeuwen, Phosphine-functionalized dendrimers for transition-metal catalysis. *Comptes Rendus Chimie* **2003**, 6, 1061.

P. N. M. Botman, A. Amore, R. van Heerbeek, J. W. Back, H. Hiemstra, J.N.H. Reek,* J. van Maarseveen,* Dendritic phosphoramidite ligands in Rh-catalysed asymmetric hydrogenations, *Tet. Lett.* **2004**, 45, 5999.

R. P. J. Bronger, J. P. Bermon, J. N. H. Reek, P. C. J. Kamer, P. W. N. M. van Leeuwen, D. N. Carter, P. Licence, M. Poliakoff, The immobilisation of phenoxaphosphine-modified xanthene-type ligand on polysiloxane support and application thereof in the hydroformylation reaction, *J. Mol. Cat. A*: **2004**, 224, 145-152.

R. Chen, R.P.J. Bronger, P. C. J. Kamer, P. W. N. M. van Leeuwen, J. N. H. Reek* "Noncovalent anchoring of Homogeneous Catalysts to Silica Supports with well-defined Binding Sites" *J. Am. Chem. Soc.* **2004**, 126, 14557.

C. Muller, L. J. Ackerman, J. N. H. Reek,* P. C. J. Kamer, P. W. N. M. van Leeuwen* "Site-Isolation Effects in a Dendritic Nickel Catalyst for the Oligomerization of Ethylene" *J. Am. Chem. Soc.* **2004**, 126, 14960.

L. Leclercq, F. Hapiot, S. Tilloy, K. Ramkisoensing, J. N. H. Reek, P.W.N.M. van Leeuwen E. Monflier, "Sulfonated Xantphos ligand and Methylated Cyclodextrin: A winning combination for rhodium-catalyzed hydroformylation of higher olefins in aqueous medium", *Organometallics* **2005** 24 2070.