

AIMS AND SCOPE

While total synthesis reached extraordinary levels of sophistication in the last century, the development of practical and efficient synthetic methodologies is still in its infancy. The goal of achieving chemical reactions that are economical, safe, environmentally benign, resource- and energy-saving will demand the highest level of scientific creativity, insight and understanding in a combined effort by academic and industrial chemists.

Advanced Synthesis & Catalysis is designed to stimulate and advance that process by focusing on the development and application of efficient synthetic methodologies and strategies in organic, bioorganic, pharmaceutical, natural product, macromolecular and materials chemistry. The targets of synthetic studies can range from natural products and pharmaceuticals to macromolecules and organic materials. While catalytic methods based on metal complexes or enzymes play an ever increasing role in achieving synthetic efficiency, all areas of interest to the practical synthetic chemist fall within the purview of *Advanced Synthesis & Catalysis*, including synthesis design, reaction techniques, separation science and process development.

Contributions from industrial and governmental laboratories are highly encouraged. It is the goal of the journal to help initiate a new era of chemical science, based on the efforts of synthetic chemists and on interdisciplinary collaboration, so that chemistry will make an even greater contribution to the quality of life than it does now.

Advanced Synthesis & Catalysis

succeeding *Journal für praktische Chemie*
(founded in 1828)

New! Online Submission
now available at
<http://asc.wiley-vch.de>

2005, 347, 14, Pages 1711–1876

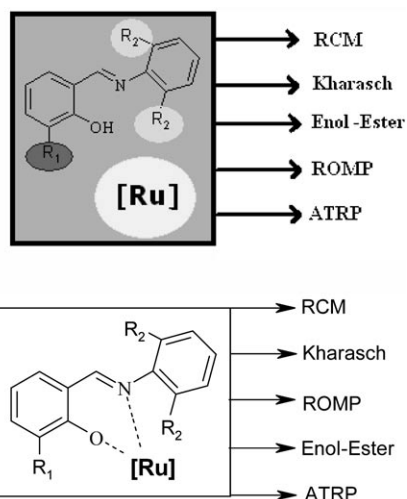
Issue 11–13/2005 was published online on October 20, 2005

REVIEW

Synthesis of Schiff Base-Ruthenium Complexes and Their Applications in Catalytic Processes

Adv. Synth. Catal. **2005**, 347, 1721–1743

Renata Drozdak, Bart Allaert, Nele Ledoux, Ileana Dragutan, Valerian Dragutan, Francis Verpoort*



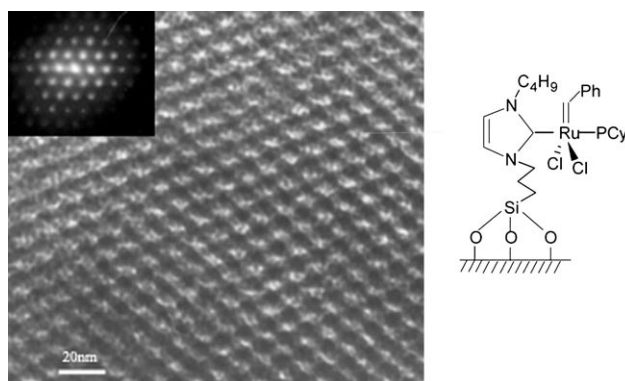
1721

COMMUNICATIONS

- 1745** A Highly Active and Reusable Heterogeneous Ruthenium Catalyst for Olefin Metathesis

Adv. Synth. Catal. **2005**, 347, 1745–1749

Liang Li, Jian-lin Shi*

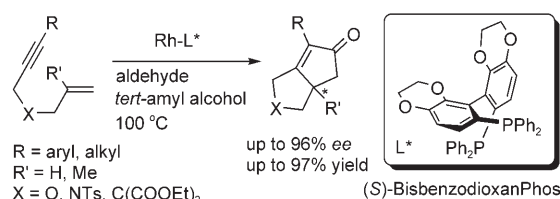


- 1750** Rhodium-BisbenzodioxanPhos Complex-Catalyzed Homogeneous Enantioselective Pauson–Khand-Type Cyclization in Alcoholic Solvents

Adv. Synth. Catal. **2005**, 347, 1750–1754



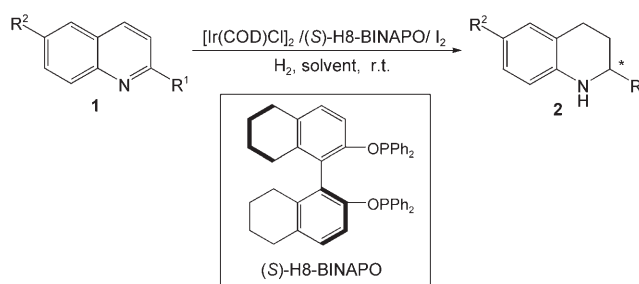
Fuk Yee Kwong,* Hang Wai Lee, Liqin Qiu, Wai Har Lam, Yue-Ming Li, Hoi Lun Kwong, Albert S. C. Chan*



- 1755** Highly Enantioselective Iridium-Catalyzed Hydrogenation of Quinoline Derivatives Using Chiral Phosphinite H8-BINAPO

Adv. Synth. Catal. **2005**, 347, 1755–1758

Kim Hung Lam, Lijin Xu,* Lichun Feng, Qing-Hua Fan,*
Fuk Loi Lam, Wai-hung Lo, Albert S. C. Chan*

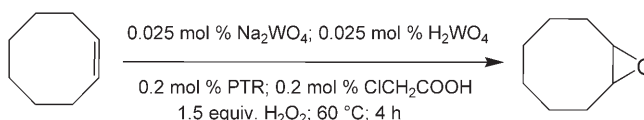


- 1759** A Na₂WO₄/H₂WO₄-Based Highly Efficient Biphasic Catalyst towards Alkene Epoxidation, using Dihydrogen Peroxide as Oxidant

Adv. Synth. Catal. **2005**, 347, 1759–1764



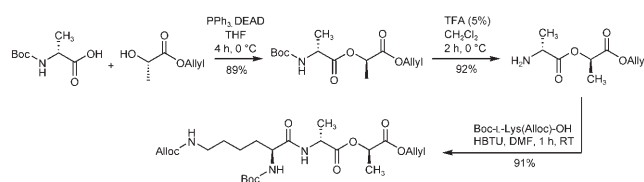
Palanisamy Uma Maheswari, Paul de Hoog, Ronald Hage, Patrick Gamez, Jan Reedijk*



- 1765** Efficient Synthesis of Lactate-Containing Depsipeptides by the Mitsunobu Reaction of Lactates

Adv. Synth. Catal. **2005**, 347, 1765–1768

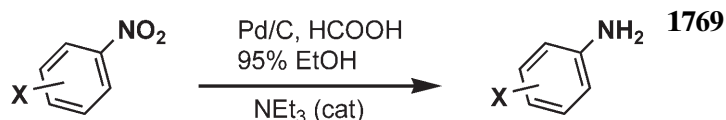
Tobias Grab, Stefan Bräse*



New Trends in Palladium-Catalyzed Transfer Hydrogenations Using Formic Acid

Adv. Synth. Catal. **2005**, 347, 1769–1773

Kapa Prasad,* Xinglong Jiang, Joel S. Slade, Jennifer Clemens, Oljan Repič, Thomas J. Blacklock



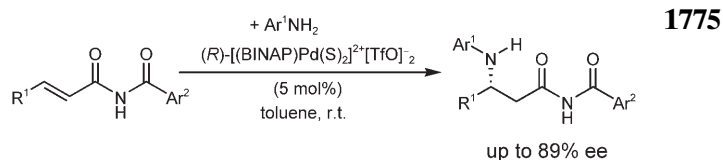
FULL PAPERS

Palladium-Catalysed Enantioselective Conjugate Addition of Aromatic Amines to α,β -Unsaturated *N*-Imides. Effect of the Chelating Moiety

Adv. Synth. Catal. **2005**, 347, 1775–1780



Pim Huat Phua, Johannes G. de Vries, King Kuok (Mimi) Hii*

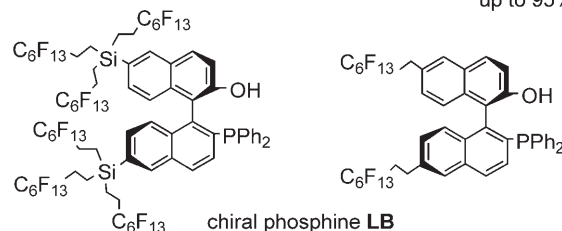
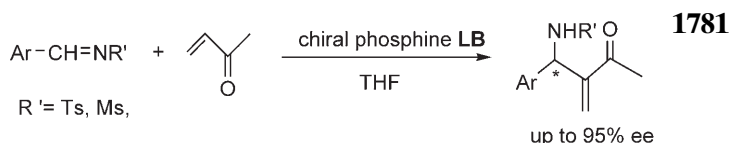


Asymmetric Aza-Morita–Baylis–Hillman Reaction of *N*-Sulfonated Imines with Methyl Vinyl Ketone Catalyzed by Chiral Phosphine Lewis Bases Bearing Perfluoroalkanes as “Pony Tails”

Adv. Synth. Catal. **2005**, 347, 1781–1789



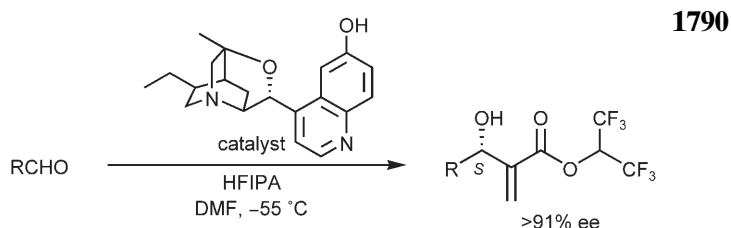
Min Shi,* Lian-Hui Chen, Wen-Dong Teng



Synthesis of an Enantiocomplementary Catalyst of β -Isocupreidine (β -ICD) from Quinine

Adv. Synth. Catal. **2005**, 347, 1790–1796

Ayako Nakano, Mina Ushiyama, Yoshiharu Iwabuchi, Susumi Hatakeyama*

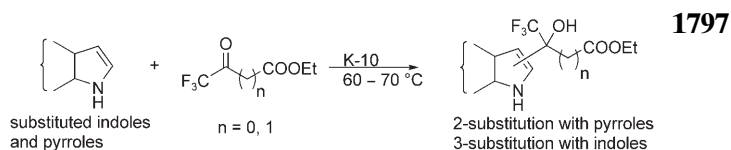


Synthesis of *N*-Heteroaryl(trifluoromethyl)hydroxyalkanoic Acid Esters by Highly Efficient Solid Acid-Catalyzed Hydroxyalkylation of Indoles and Pyrroles with Activated Trifluoromethyl Ketones

Adv. Synth. Catal. **2005**, 347, 1797–1803



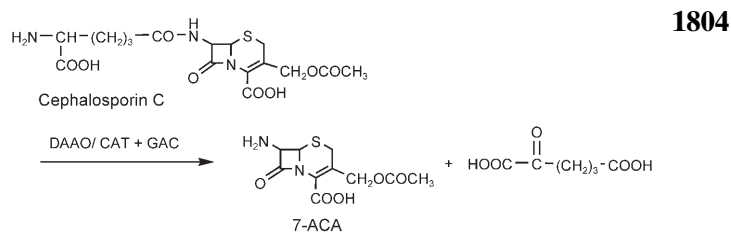
Mohammed Abid, Béla Török*



One-Pot Conversion of Cephalosporin C to 7-Aminocephalosporanic Acid in the Absence of Hydrogen Peroxide

Adv. Synth. Catal. **2005**, 347, 1804–1810

Fernando Lopez-Gallego, Lorena Batencor, Aurelio Hidalgo, Cesar Mateo, Roberto Fernandez-Lafuente,* Jose M. Guisan*



- 1811** Ionic Liquid as Catalyst and Reaction Medium: A Simple, Convenient and Green Procedure for the Synthesis of Thioethers, Thioesters and Dithianes using an Inexpensive Ionic Liquid, [pmIm]Br

Adv. Synth. Catal. **2005**, 347, 1811–1818

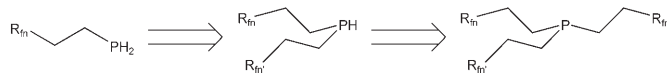
Brindaban C. Ranu,* Ranjan Jana



- 1819** Convenient Modular Syntheses of Fluorous Secondary Phosphines and Selected Derivatives

Adv. Synth. Catal. **2005**, 347, 1819–1826

Charlotte Emnet, Róbert Tuba, J. A. Gladysz*

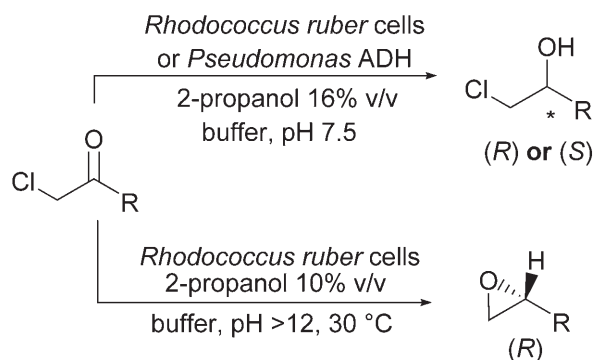


- 1827** Non-Racemic Halohydrins *via* Biocatalytic Hydrogen-Transfer Reduction of Halo-Ketones and One-Pot Cascade Reaction to Enantiopure Epoxides

Adv. Synth. Catal. **2005**, 347, 1827–1834



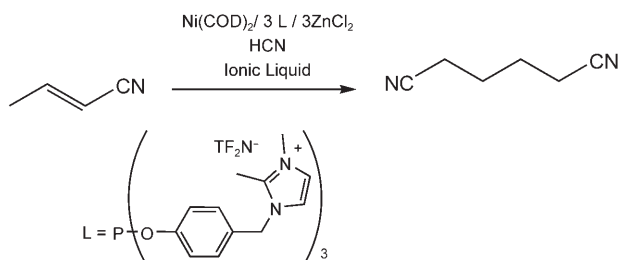
Tina M. Poessl, Birgit Kosjek, Ursula Ellmer, Christian C. Gruber, Klaus Edegger, Kurt Faber, Petra Hildebrandt, Uwe T. Bornscheuer, Wolfgang Kroutil*



- 1835** Design of Ionic Phosphites for Catalytic Hydrocyanation Reaction of 3-Pentenitrile in Ionic Liquids

Adv. Synth. Catal. **2005**, 347, 1835–1847

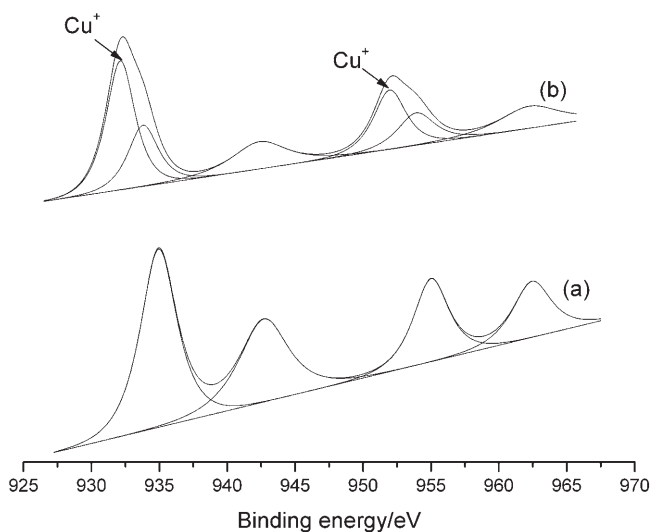
Christophe Vallée, Yves Chauvin, Jean-Marie Basset, Catherine C. Santini,* Jean-Christophe Galland*



- 1848** Effect of Rare Earth Doping on the Catalytic Activity of Copper-Containing Hydrotalcites in Phenol Hydroxylation

Adv. Synth. Catal. **2005**, 347, 1848–1854

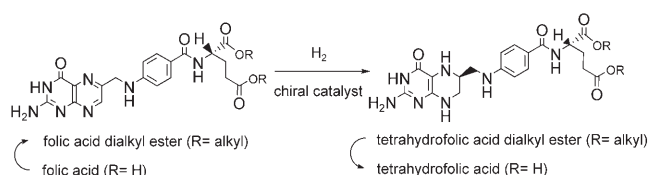
Chunxia Chen, Chenghua Xu,* Liangrong Feng, Zijian Li, Jishuan Suo, Fali Qiu,* Yingchun Yang



Stereoselective Hydrogenation of Folic Acid Dimethyl Ester Benzenesulfonate: A New Access to Optically Pure L-Tetrahydrofolic Acid

Adv. Synth. Catal. **2005**, 347, 1855–1862

Viola Groehn,* Rudolf Moser, Benoît Pugin

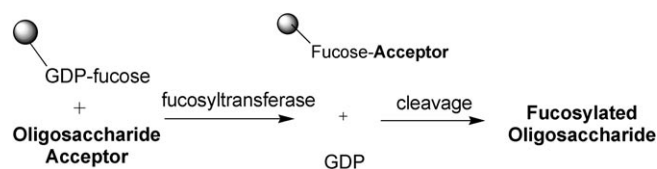


1855

Synthesis of GDP-Fucose on a Soluble Support: A Donor Substrate for the Fucosyltransferases

Adv. Synth. Catal. **2005**, 347, 1863–1868

Richard Daniellou, Christine Le Narvor*



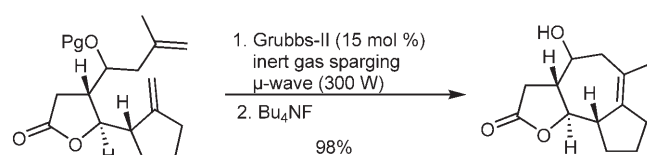
1863

UPDATE

Optimization of Ring-Closing Metathesis: Inert Gas Sparging and Microwave Irradiation

Adv. Synth. Catal. **2005**, 347, 1869–1874

Bernd Nosse, Andreas Schall, Won Boo Jeong, Oliver Reiser*



1869



Supporting information on the WWW (see article for access details).

*Author to whom correspondence should be addressed.



Fast, Individual, Popular...
REPRINTS
Available to order anytime!
Contact Carmen Leitner (e-mail: cleitner@wiley-vch.de)