

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>

2004, 346, 11, Pages 1251–1396

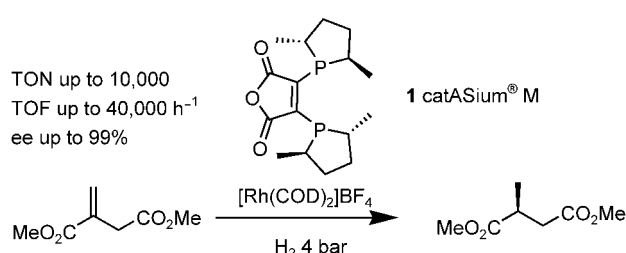
Issue 9 + 10/2004 was published online on September 21, 2004

COMMUNICATIONS

Highly Enantioselective Hydrogenation of Itaconic Acid Derivatives with a Chiral Bisphospholane-Rh(I) Catalyst

Adv. Synth. Catal. **2004**, 346, 1263–1266

Juan Almena,* Axel Monsees, Renat Kadyrov, Thomas H. Riermeier, Battsengel Gotov, Jens Holz, Armin Börner*

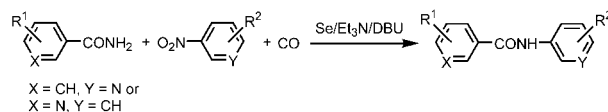


1263

N-Arylamides from Selenium-Catalyzed Reactions of Nitroaromatics and Amides in the Presence of Carbon Monoxide and Mixed Organic Bases

Adv. Synth. Catal. **2004**, 346, 1267–1270

Jinzhu Chen, Gang Ling, Zhengkun Yu,* Sizhong Wu, Xiaodan Zhao, Xiaowei Wu, Shiwei Lu*

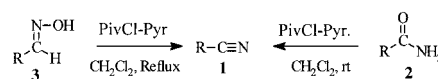


1267

An Efficient and Improved Method for the Preparation of Nitriles from Primary Amides and Aldoximes

Adv. Synth. Catal. **2004**, 346, 1271–1274

A. Venkat Narsaiah, K. Nagaiah*

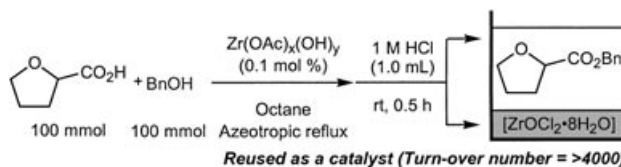


1271

- 1275** Water-Tolerant and Reusable Catalysts for Direct Ester Condensation between Equimolar Amounts of Carboxylic Acids and Alcohols

Adv. Synth. Catal. **2004**, 346, 1275–1279

Masaya Nakayama, Atsushi Sato, Kazuaki Ishihara,* Hisashi Yamamoto*

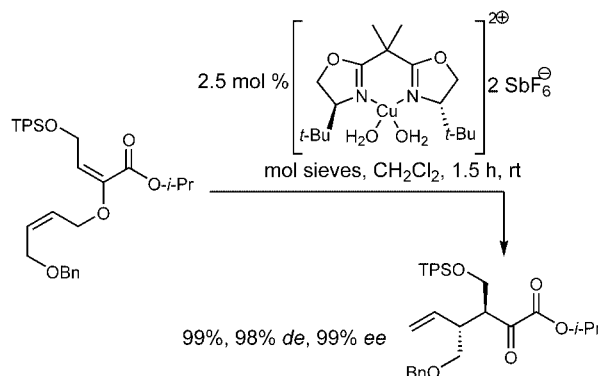


FULL PAPERS

- 1281** The Catalytic Diastereo- and Enantioselective Claisen Rearrangement of 2-Alkoxy carbonyl-Substituted Allyl Vinyl Ether

Adv. Synth. Catal. **2004**, 346, 1281–1294

Lars Abraham, Marleen Körner, Pia Schwab, Martin Hiersemann*

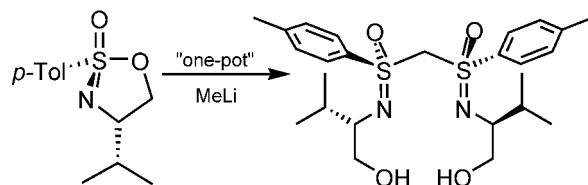


- 1295** Geminal Bis(sulfoximine)s: Synthesis and Applications in Asymmetric Catalysis

Adv. Synth. Catal. **2004**, 346, 1295–1306



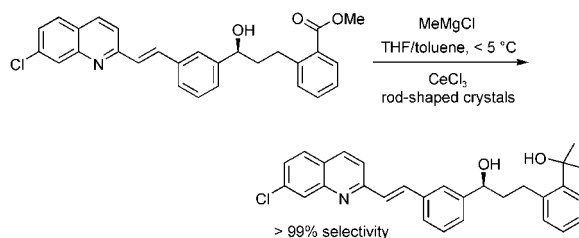
M. Reggelin,* H. Weinberger, V. Spohr



- 1307** Insights into the Cerium Chloride-Catalyzed Grignard Addition to Esters

Adv. Synth. Catal. **2004**, 346, 1307–1315

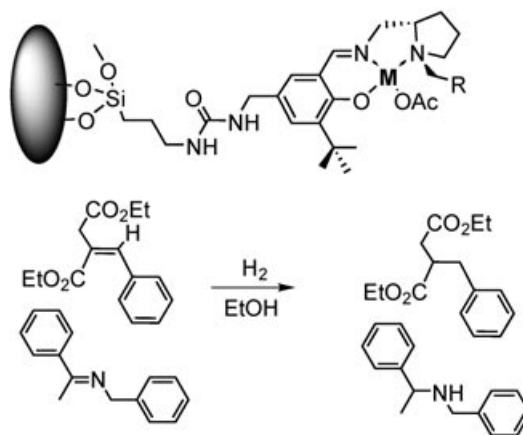
David A. Conlon,* Daniel Kumke, Charles Moeder, Michelle Hardiman, Gerri Hutson,[†] Laura Sailer[‡]



- 1316** Improved Palladium and Nickel Catalysts Heterogenised on Oxidic Supports (Silica, MCM-41, ITQ-2, ITQ-6)

Adv. Synth. Catal. **2004**, 346, 1316–1328

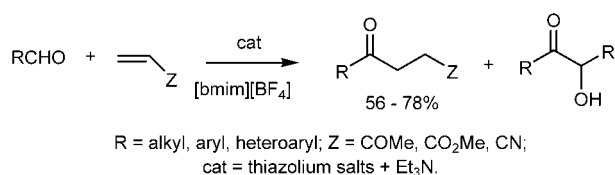
C. González-Arellano, A. Corma M. Iglesias,* F. Sánchez*



Stetter Reaction in Room Temperature Ionic Liquids and Application to the Synthesis of Haloperidol

Adv. Synth. Catal. **2004**, 346, 1329–1334

Siddam Anjaiah, Srivari Chandrasekhar, René Grée*

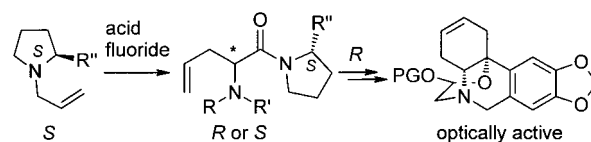


1329

Synthesis and Derivatization of Substituted (*R*)- and (*S*)-*C*-Allylglycines

Adv. Synth. Catal. **2004**, 346, 1335–1354

Nong Zhang, Winfried Münch, Udo Nubbemeyer*



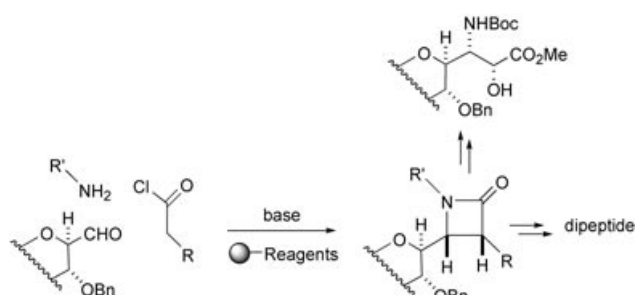
1335

Three-Component Staudinger-Type Stereoselective Synthesis of *C*-Glycosyl- β -lactams and their Use as Precursors for *C*-Glycosyl Isoleucines and Dipeptides. A Polymer-Assisted Solution-Phase Approach

Adv. Synth. Catal. **2004**, 346, 1355–1360



Alessandro Dondoni,* Alessandro Massi, Simona Sabbatini, Valerio Bertolasi

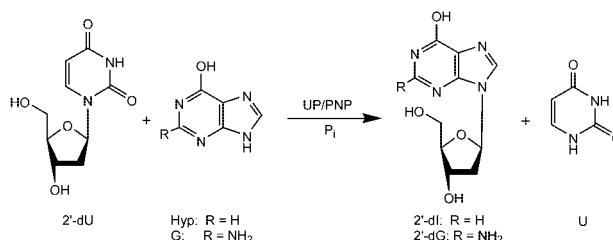


1355

Synthesis of 2'-Deoxynucleosides by Transglycosylation with New Immobilized and Stabilized Uridine Phosphorylase and Purine Nucleoside Phosphorylase

Adv. Synth. Catal. **2004**, 346, 1361–1366

Daniela Ubiali, Silvia Rocchietti, Francesca Scaramozzino, Marco Terreni, Alessandra M. Albertini, Roberto Fernández-Lafuente, José Manuel Guisán, Massimo Pregnotato*

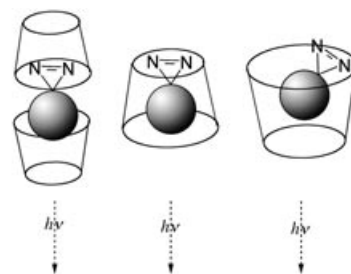


1361

Carbene Rearrangements, 60. Supramolecular Structure-Reactivity Relationships: Photolysis of a Series of Aziadamantane@Cyclodextrin Inclusion Complexes in the Solid State

Adv. Synth. Catal. **2004**, 346, 1367–1374

Daniel Krois, Lothar Brecker, Andreas Werner, Udo H. Brinker*



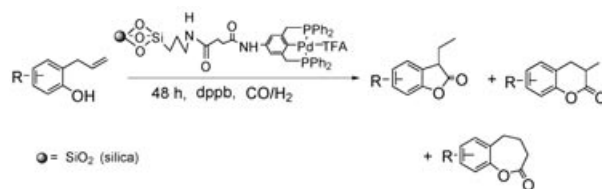
Photolysis of 2-aziadamantane within cyclodextrin hosts gives product distributions that largely depend on the type of cyclodextrin and thus the supramolecular structure.

1367

- 1375** Recyclable Tridentate Stable Palladium(II) PCP-Type Catalysts Supported on Silica for the Selective Synthesis of Lactones

Adv. Synth. Catal. **2004**, 346, 1375–1385

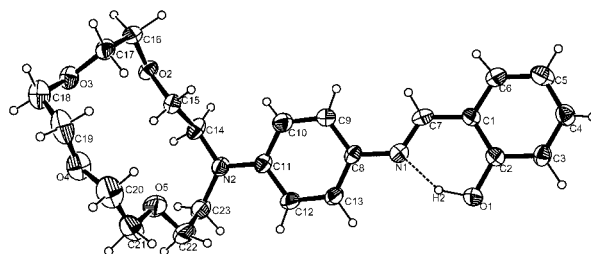
Ratana Chanthateyanonth, Howard Alper*



- 1385** Synthesis, Oxygenation and Catalytic Oxidation Performance of Crown Ether-Containing Schiff Base-Transition Metal Complexes

Adv. Synth. Catal. **2004**, 346, 1385–1391

Wei Zeng, Jianzhang Li, Zhihua Mao, Zhou Hong, Shengying Qin*

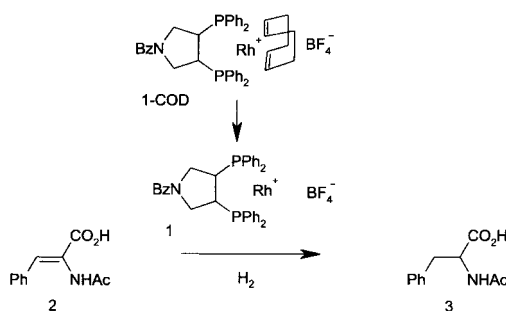


- 1392** Kinetic Study of Homogeneous Alkene Hydrogenation by Model Discrimination

Adv. Synth. Catal. **2004**, 346, 1392–1396



Lasse Greiner,* Michel Brik Ternbach



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

*Author to whom correspondence should be addressed.