

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.

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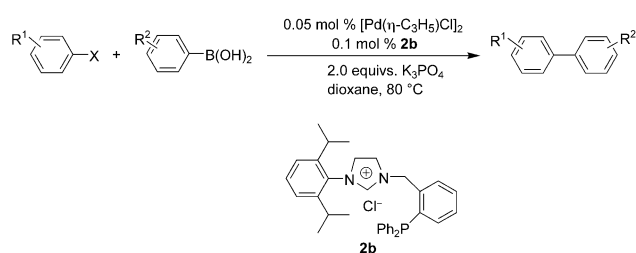
COMMUNICATIONS

Highly Efficient Suzuki Cross-Coupling Catalyzed by Palladium/Phosphine-Imidazolium Carbene System

Adv. Synth. Catal. **2004**, 346, 595–598



Ai-E Wang, Jun Zhong, Jian-Hua Xie, Kai Li, Qi-Lin Zhou*

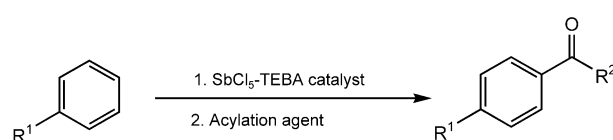


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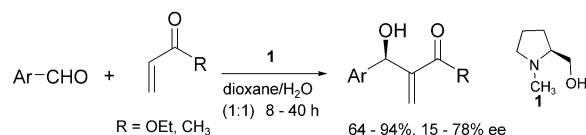
An-ping Huang, Xue-yuan Liu, Lian-hua Li, Xiao-li Wu, Wei-min Liu, Yong-min Liang*



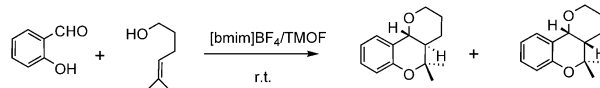
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603 *N*-Methylprolinol Catalysed Asymmetric Baylis–Hillman Reaction*Adv. Synth. Catal.* **2004**, *346*, 603–606

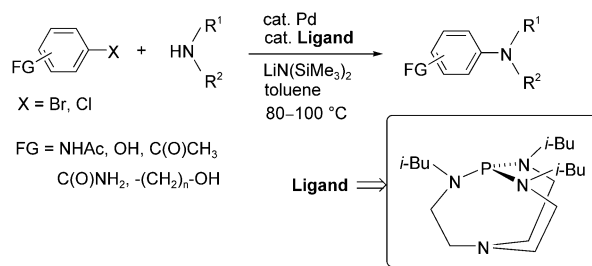
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**607** [4 + 2] Cycloaddition of *ortho*-Quinone Methides Promoted by Ionic Liquids: an Efficient and Mild Protocol for the Synthesis of Tetrahydropyranobenzopyrans*Adv. Synth. Catal.* **2004**, *346*, 607–610

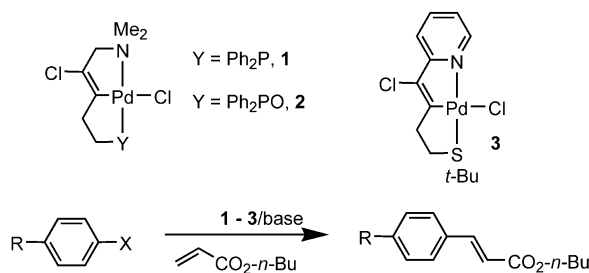
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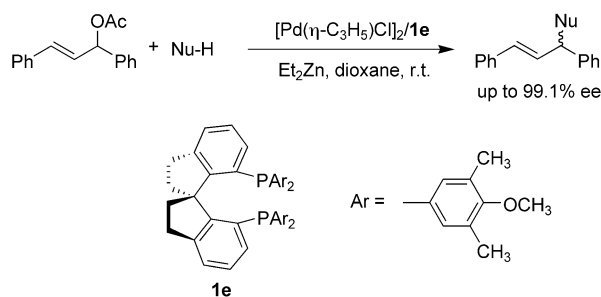
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**617** On the Use of Non-Symmetrical Mixed PCN and SCN Pincer Palladacycles as Catalyst Precursors for the Heck Reaction*Adv. Synth. Catal.* **2004**, *346*, 617–624

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**625** Application of SDP Ligands for Pd-Catalyzed Allylic Alkylation*Adv. Synth. Catal.* **2004**, *346*, 625–632

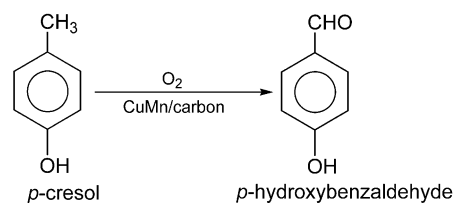
Jian-Hua Xie, Hai-Feng Duan, Bao-Min Fan, Xu Cheng, Li-Xin Wang, Qi-Lin Zhou*



Oxidation of *p*-Cresol to *p*-Hydroxybenzaldehyde with Molecular Oxygen in the Presence of CuMn-Oxide Heterogeneous Catalyst

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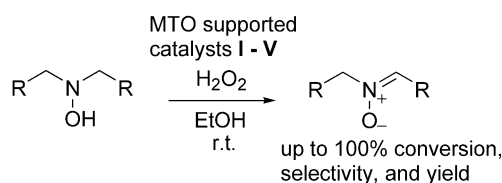


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Raffaele Saladino,* Veronica Neri, Francesca Cardona, Andrea Goti*

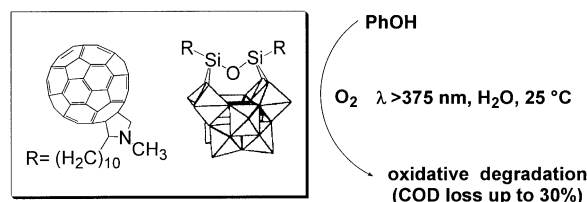


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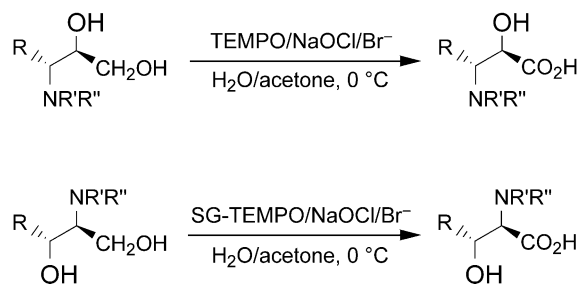


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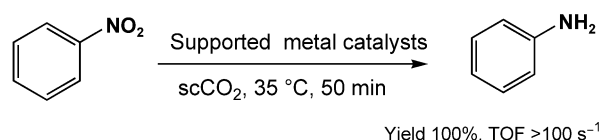


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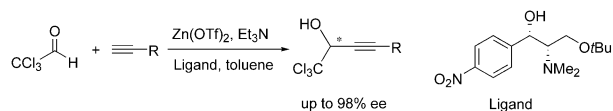
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Fengyu Zhao, Rong Zhang, Maya Chatterjee, Yutaka Ikushima,* Masahiko Arai



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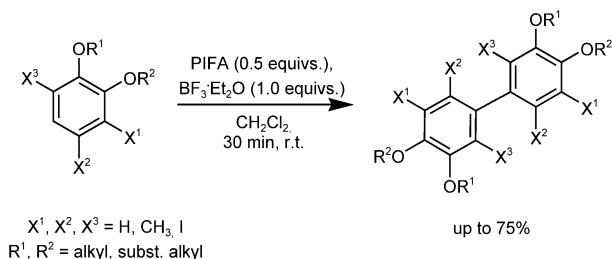
- 669** The First Highly Enantioselective Alkynylation of Chloral: A Practical and Efficient Pathway to Chiral Trichloromethyl Propargyl Alcohols



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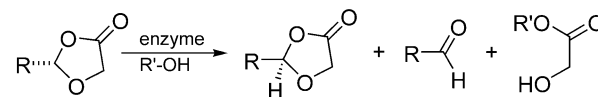
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Daniela Mirk, Alexander Willner, Roland Fröhlich, Siegfried R. Waldvogel*

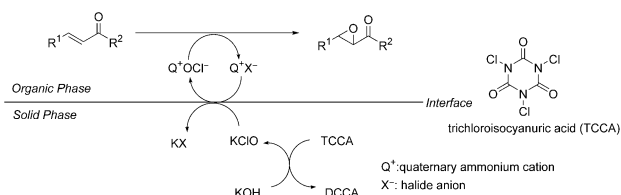
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- 691** Trichloroisocyanuric Acid: A Convenient Oxidation Reagent for Phase-Transfer Catalytic Epoxidation of Enones under Non-Aqueous Conditions



Adv. Synth. Catal. **2004**, 346, 691–696



Jinxing Ye, Yongcan Wang, Jiping Chen, Xinmiao Liang*



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