

[Tetrahedron Lett., 40, 4829-4832 (1999)]

[Lab. of Pharm. Synthetic Chemistry]

Enantiodivergent Synthesis of Both Enantiomeric Forms of Substituted Paraconic Acids Starting from D-Mannitol as a Chiral Pool.

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Acetamide-acetal Claisen rearrangement of the C₂-symmetric enediol easily derived from D-mannitol provided a chiral C₈-building block, which was demonstrated to be versatile for divergent synthesis of both enantiomeric forms of substituted paraconic acids.

[Synlett., 1999, 357-359 (1999)]

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Selective Deprotection of Triethylsilyl Group in the Presence of *t*-Butyldimethylsilyl Group with MCM-41/MeOH Heterogeneous System.

Akichika ITOH, Tomohiro KODAMA, Yukio MASAKI*

Triethylsilyl (TES) group of silyl ethers of several types is selectively and easily removed in the presence of *t*-butyldimethylsilyl group (TBS) with a mesoporous silica MCM-41/MeOH heterogeneous system. Comparison of the efficiency was carried out among several solvents, and among such promoters as common zeolites and ion-exchange resins.

[Synlett., 1999, 1277-1279 (1999)]

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Polymer-Supported Acid Catalyst in the Carbon-Carbon Bond Formation of Acetals with Silylated Nucleophiles.

Nobuyuki TANAKA, Yukio MASAKI*

Polymeric dicyanoketene acetal (DCKA), which was synthesized by co-polymerization of styrene monomer bearing dicyanoketene acetal functionality and ethylene glycol dimethacrylate, was found to be an effective and recyclable catalyst in the carbon-carbon bond formation of acetals with silylated nucleophiles.

[Synlett., 1999, 1960-1962 (1999)]

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Deprotection of Acetals and Silyl Ethers Using a Polymer-Supported π -Acid Catalyst: Chemoselectivity and Polymer Effect.

Nobuyuki TANAKA, Yukio MASAKI*

A polymeric dicyanoketene acetal (DCKA), prepared from a styrene monomer bearing dicyanoketene acetal functionality, was found to be an effective and recyclable catalyst in the chemoselective deprotection of acetals and silyl ethers. A remarkable acceleration accountable for the polymer effect was observed.