

[*Org. Lett.*, 2, 331-333 (2000)]

[Lab. of Pharm. Synthetic Chemistry]

**Oxidative Photodecarboxylation of  $\alpha$ -Hydroxycarboxylic Acids and Phenylacetic Acid Derivatives  
with FSM-16.**

Akichika ITOH,\* Tomohiro KODAMA, Shinji INAGAKI and Yukio MASAKI

FSM-16, a mesoporous silica, was found to catalyze oxidative photo-decarboxylation of  $\alpha$ -hydroxy carboxylic acid and phenyl acetic acid derivatives to afford the corresponding carbonyl compounds. Furthermore, FSM-16 proved to be re-usable by re-calcination at 450°C after the reaction.

[*Synlett*, 406-408 (2000)]

[Lab. of Pharm. Synthetic Chemistry]

**Mannich-Type Reaction Catalyzed by Dicyanoketene Ethylene Acetal and the Related Polymer-Supported  $\pi$ -Acid: Aldimine-Selective Reactions in the Coexistence of Aldehydes.**

Nobuyuki TANAKA and Yukio MASAKI\*

Mannich-type reaction of aldimines and enolsilyl ethers proceeded with excellent aldimine-selectivity in the coexistence of aldehydes by means of dicyanoketene ethylene acetal (DCKEA) and the related polymer-supported dicyanoketene acetal as a recyclable  $\pi$ -acid catalyst.

[*Chem. Lett.*, 542-543 (2000)]

[Lab. of Pharm. Synthetic Chemistry]

**New Synthetic Method of Imides through Oxidative Photodecarboxylation Reaction of *N*-Protected  $\alpha$ -Amino Acids with FSM-16.**

Akichika ITOH,\* Tomohiro KODAMA, Shinji INAGAKI and Yukio MASAKI

FSM-16, a mesoporous silica, was found to promote the oxidative photodecarboxylation of *N*-acyl-protected  $\alpha$ -amino acids in hexane to afford the corresponding imides.

[*Chem. Pharm. Bull.*, 48, 1010-1016 (2000)]

[Lab. of Pharm. Synthetic Chemistry]

**Polymer-Supported Dicyanoketene Acetal as a  $\pi$ -Acid Catalyst: Monothioacetalization and Carbon-Carbon Bond Formation of Acetals.**

Nobuyuki TANAKA, Tsuyosi MIURA and Yukio MASAKI\*

Polymeric dicyanoketene acetals (DCKA) were synthesized by copolymerization of styrene and divinylbenzene or ethylene glycol dimethacrylate. These novel polymers could be used successfully as recyclable  $\pi$ -acid catalysts in monothioacetalization or carbon-carbon bond forming reaction of acetals.