

# I: Catalysis and Light Harvesting

\* Invited paper

SESSION P11: Catalysis and Light Harvesting: Poster Session  
Tuesday Evening, June 28, 2011  
6:00 PM  
Ballroom (Marriott)

## P11.1

**Preparation and Electrocatalysis of Multilayer Composite Films Constructed from Transition Metal Substituted Polyoxometalate and Poly(amidoamine) Dendrimer.** Shen Lin, Shui Z. Li, Hong M. Luo, De Y. Shi and Feng X. Zhang; College of Chemistry and Materials Science, Fujian Normal University, Fuzhou, Fujian Province, China.

## P11.2

**Supported N-Alkylated Imidazole-Decorated Dendrons as Heterogeneous Catalysts for the Baylis-Hillman Reaction.** Kerem Goren and Moshe Portnoy; School of Chemistry and the Center for Nanoscience and Nanotechnology, Tel-Aviv University, Tel-Aviv, Israel.

## P11.3

**Synthetic Linear-dendritic Cofactors for Enzyme-catalyzed Polymerizations.** Lili Wang<sup>1</sup>, Nikolay G. Vladimirov<sup>2</sup>, James D. Soucy<sup>1</sup> and Ivan Gitsov<sup>1</sup>; <sup>1</sup>Chemistry, State University of New York ESF, Syracuse, New York; <sup>2</sup>Ashland Chemical, Newark, Delaware.

## P11.4

**Preparation of M-G4OH Nanocomposites in Aqueous Solution: Effect of Dialysis and pH Adjustment.** Eleni Kyriakidou<sup>1</sup>, Paul T. Fanson<sup>2</sup>, Oleg S. Alexeev<sup>1</sup> and Michael D. Amiridis<sup>1</sup>; <sup>1</sup>Department of Chemical Engineering, University of South Carolina, Columbia, South Carolina; <sup>2</sup>Toyota Technical Center USA, Inc., Ann Arbor, Michigan.

## SESSION I1:

Chairs: Martin Brechbiel and Ling Peng  
Wednesday Morning, June 29, 2011  
Lecture Room B

## 10:10 AM \*I1.1

**Self-assembly of Light-harvesting Antennae Based on Luminescent Dendrimers.** Paola Ceroni, Chemistry Ciamician, University of Bologna, Bologna, Italy.

## 10:40 AM \*I1.2

**Enhanced Optical Properties of Dendrimer Materials.** Theodore Goodson, Chemistry, University of Michigan, Ann Arbor, Michigan.

## 11:10 AM I1.3

**Immobilizing Water Soluble Dendritic Electron Donors (Phthalocyanines) and Electron Acceptors (Perylene-diimides) onto Single Wall Carbon Nanotubes.** Uwe Hahn<sup>1</sup>, Dirk M. Guldi<sup>2</sup> and Tomas Torres<sup>1</sup>; <sup>1</sup>Department of Organic Chemistry, Universidad Autonoma de Madrid, Madrid, Spain; <sup>2</sup>Department of Chemistry and Pharmacy, Friedrich-Alexander-University Erlangen-Nuremberg, Erlangen-Nuremberg, Germany.

## SESSION I2:

Chairs: Ted Goodson and Paola Ceroni  
Thursday Morning, June 30, 2011  
Lecture Room A

## 10:00 AM I2.1

**Coherent Phonons in a  $\pi$ -conjugated Antenna Subunit Molecule of Light-harvesting Dendrimers.** Ichiro Akai<sup>1</sup>, Tomoshige Shimamoto<sup>1</sup>, Kohe Yamashiro<sup>2</sup>, Mami Kobori<sup>2</sup>, Kazunori Iwamitsu<sup>2</sup> and Atsuhiko Fujii<sup>1</sup>; <sup>1</sup>Shockwave and condensed matter research center, Kumamoto University, Kumamoto, Kumamoto, Japan; <sup>2</sup>Graduate School of Science and Technology, Kumamoto University, Kumamoto, Kumamoto, Japan.

## 10:20 AM I2.2

**Designing Chiral Dendrimers for Homogeneous Asymmetric Hydrogenations.** Qing-Hua Fan, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China.

## 10:40 AM \*I2.3

**Core-shell Dendrimer-encapsulated Nanoparticles: Theory, Synthesis, Characterization, and Electrocatalysis.** Richard M. Crooks, Emily V. Carino and David F. Yancey; Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, Texas.

## 11:10 AM I2.4

**Immobilization of Dendrimers Encapsulated Pt Nanoparticles on Multiwalled Carbon Nanotubes and Carbon Micro Coils and Their Utilization to Electrochemical Bio/chemical Sensors.** Toyoko Imae and Ampornphan Siriviriyannun; National Taiwan University of Science and Technology, Taipei, Taiwan.

## 11:30 AM I2.5

**Fine Tuning of PPI Dendrimers for Controlled Synthesis of Subnano Pd Clusters.** Tomoo Mizugaki<sup>1</sup>, Zen Maeno<sup>1</sup>, Takayuki Kibata<sup>1</sup>, Takato Mitsudome<sup>1</sup>, Koichiro Jitsukawa<sup>1</sup> and Kiyotomi Kaneda<sup>1,2</sup>; <sup>1</sup>Graduate School of Engineering Science, Osaka University, Toyonaka, Osaka, Japan; <sup>2</sup>Research Center for Solar Energy Chemistry, Osaka University, Toyonaka, Osaka, Japan.

## 11:50 AM I2.6

**A Simple Synthesis Method for Gold Nano-plate and Nano-flower Fabrication using a Tree-type Multiple-amine Head Surfactant.** Long Jiang, Guanhua Lin, Wenfeng Jia and Wensheng Lu; Institute of Chemistry, Chinese Academy of Sciences, Beijing, China.

## 12:10 PM I2.7

**PPI Dendrimer Encapsulating Subnano Pd Clusters as a Nanoreactor for Allylic Substitution Reaction.** Takayuki Kibata<sup>1</sup>, Zen Maeno<sup>1</sup>, Takato Mitsudome<sup>1</sup>, Tomoo Mizugaki<sup>1</sup>, Koichiro Jitsukawa<sup>1</sup> and Kiyotomi Kaneda<sup>1,2</sup>; <sup>1</sup>Graduate School of Engineering Science, Osaka University, Osaka, Japan; <sup>2</sup>Research Center for Solar Energy Chemistry, Osaka University, Osaka, Japan.