

5. Gordon Research Conference

2006年のグリーンケミストリーに関する Gordon コンファレンスが 8月27日~9月1日に、オックスフォード大学で開催された。講演者およびその講演題目は以下の通りである。12のセクションで各2件の発表が行われているが、中国、韓国から各1件の報告があるにも拘らず日本からは発表が無い。残念ながら、要旨は公開されていないので題目の紹介に止める。

1) EMERGING ISSUES IN GREEN CHEMISTRY

"On Inventing Reactions for Atom Economy"

Barry Trost (Stanford University, CA, USA)

"Green Chemistry: a personal view of the challenges and an update on TAML activator chemistry" Terry Collins (Carnegie Mellon U., Pittsburgh, USA)

2) GREENER PROCESS DESIGN

"Green Chemistry at Pfizer"

Peter Dunn (Pfizer, Sandwich, UK)

"The Asymmetric Catalytic Hydrogenation of Unprotected Enamines Enables a Highly Efficient, Green Synthesis of Sitagliptin"

Joe Armstrong (Merck Inc., Rahway, NJ, USA)

3) PHOTOCHEMISTRY

"Carbon Dioxide-Neutral Production of Hydrogen by Photocatalytic Water Splitting"

Jae-Sung Lee (Pohang U. of Sci. & Technol., Korea)

"Green Photochemistry - The Solarchemical Production of Fine Chemicals with Sunlight"

Michael Oelgemler (Dublin City University, Ireland)

4) CHEMICAL IMPACT ON THE ENVIRONMENT

"New design signals for green chemistry from the environmental health sciences"

Pete Myers (Environmental Health Sciences, Charlottesville, VA, USA)

"Application of Life Cycle Assessment to Process Industry"

Anne-Marie Tillman (Chalmers University, Goeborg, Sweden)

5) GREENER PROCESSES IN IONIC LIQUIDS

"Use of ionic liquids to promote reactions with hydrolytically unstable reagents"

Chris Hardacre (Queen ' s University, Belfast, UK)

"Applications of SCFs and ILs in Chemical Reactions and Material Processing"

Buxing Han (Chinese Academy of Sciences, China)

6) GREENER PROCESSES IN NON-TRADITIONAL SOLVENTS

"Switching Solvents and Surfactants"

Philip Jessop (Queen ' s University, Canada)

"Ionic Liquids *in vacuo*"

Pete Licence (University of Nottingham, UK)

7) FINE CHEMICALS FROM SUSTAINABLE RAW MATERIALS

"Progress in the development of a general biomass-based chemistry"

Rawle Hollingsworth (Michigan State University, East Lansing, MI, USA)

"Green Chemistry and the Biorefinery"

James Clark (University of York, UK)

8) DESIGN OF COMPOUNDS FOR LOWER ENVIRONMENTAL IMPACT

"Predicting Biodegradation to Lower Environmental Impact"

Larry Wackett (University of Minnesota, Twin Cities, MN, USA)

"Aqueous Perhydrolysis · Enzymology, Structure and Applications"

Gregg Whited (Genencor Inc. Palo Alto, CA, USA)

9) NEW REACTION DISCOVERY

"Green Catalysis with Gold"

Graham Hutchings (Cardiff University, UK)

"Polymer-facilitated Separations in Synthesis"

David Bergbreiter (Texas A&M University, College Station, TX, USA)

10) METAL AND BYPRODUCT RECOVERY

"Catalysis and Methods for Improved Glycerol Hydrogenation"

Galen Suppes (U. of Missouri, Columbia, MO, USA)

"Recycling using Supercritical Water"

Andrew Burgess (Chematur, Karlskoga, Sweden)

11) DESIGNING GREENER PROCESSES

"Driving Chemical Product Innovations using Principles of Sustainability"

Eric Beckmann (U. of Pittsburgh, Pittsburgh, USA)

"One-pot multi-step synthesis: a challenge spawning innovation"

Tyler McQuade (Cornell U., Ithaca, NY, USA)

12) NEW OPPORTUNITIES IN GREEN CHEMISTRY

"The Enantioselectivity of Chiral Pesticides Presents a Green Chemistry Opportunity"

Wayne Garrison (US Environmental Protection Agency, Athens, GA, USA)

"Green Chemistry through the Entropic Control"

John Warner (U. of Massachusetts, Lowell, MA, USA)