

**Monday, March 23, 2015 at the Embassy Suites Denver Downtown Hotel, Crystal Ballroom B/C:** “New Trends in Cross-Coupling Catalysis in Industry and Academia”, hosted by the American Chemical Society’s Divisions of Business Development and Management (BMGT) & Industrial & Engineering Chemistry (I&EC) in honor of Dr. Thomas Colacot and receipt of the 2015 ACS Award in Industrial Chemistry.

**Symposium Description:** The 2010 Nobel Prize winning technology, namely “Palladium catalyzed cross coupling” has become the reaction of the 21<sup>st</sup> century due to its wide utilization in drug synthesis, electronic applications such as liquid crystals and OLED, agro chemical applications and total synthesis. Both academia and industry played a vital role in accelerating the developments of this area. This one-day technical symposium in honor of Dr. Thomas Colacot for the 2015 ACS Award in Industrial Chemistry highlights the newer developments in this area by leading academic and industry experts.

**8:00– 8:05 Welcoming Remarks – BMGT Representative to introduce Morning Session Moderator: Srinivasan Chandrasekaran**

- 1) 8:05 – 8:35 am - John F. Hartwig, University of CA, Berkeley. *Metal-Mediated and Metal-Catalyzed Coupling for Incorporation of Fluorine into Aromatic Molecules*
- 2) 8:35 – 9:05 am - Mark Lautens, University of Toronto. *Metal Catalyzed Carbohalogenation Reactions through Reversible Oxidative Addition*
- 3) 9:05 – 9:35 am - Franziska Schoenebeck, RWTH Aachen, Aachen, Germany. *Understanding and Design of Organopalladium Reactivity with Experimental and Computational Tools*

**Break: 9:35 – 9:45**

- 4) 9:45 – 10:30 am - Plenary Lecture: Barry Trost, Stanford University. *Asymmetric C-C Bond Formation in Outer Sphere Pd Catalyzed Processes*
- 5) 10:30 – 11:00 am - Javier Magano, Pfizer. *Applications of Pd and Ni catalysis to Pfizer’s portfolio*
- 6) 11:00 – 11:30 am - Timothy Noël, Eindhoven University of Technology. *Carbon-carbon and carbon-heteroatom bond forming reactions in continuous flow*
- 7) 11:30 – Noon - T.V. Rajanbabu, The Ohio State University. *Cross-Coupling without Redox Changes at the Metal - Enantioselective Heterodimerization of Alkenes*

**Lunch Break: Noon – 1:15:** Speakers, Moderators & Special Guests are invited to share in a hosted boxed-lunch with each other.

**1:15 – 1:25 pm – Welcoming Remarks – BMGT to Introduce Session & Moderators:**

- 8) 1:25 – 2:15 pm – Plenary Lecture: 2010 Nobel Laureate Ei-ichi Negishi, Purdue University. *On the Magical Power of d-Block Transition Metals as Exemplified by ZACA (Zr-Catalyzed Asymmetric Carboalumination of Alkenes) – Lipase-Catalyzed Acetylation – Transition Metal-Catalyzed Cross-Coupling for Highly Enantioselective Synthesis of Various Types of Chiral Organic Compounds*

**Break: 2:15 – 2:30 – Afternoon Moderator: John Gladysz**

- 9) 2:30 – 3:00 pm – Gregory C. Fu, California Institute of Technology. *Photoinduced, Copper-Catalyzed Coupling Reaction*
- 10) 3:00 – 3:30 pm – Victor Snieckus, Queen’s University. *Connecting Directed ortho Metalation – Transition Metal Catalyzed Chemistries*
- 11) 3:30 – 4:00 pm – Chris Senanayake, Boehringer-Ingelheim. *Important Catalytic Transformations for Drug Development*
- 12) 4:00 – 4:30 pm – Bruce Lipshutz, University of CA – Santa Barbara. *ppm-Level Pd-Catalyzed Cross-Couplings in Water at Room Temperature*

**4:30 – 4:40 Introduction & Remarks – Janet Brvant, BMGT Councilor & Organizer, Bruce Lipshutz**

**AWARD Keynote 4:40 – 5:25 pm - Thomas Colacot, Johnson Matthey. *The Story of Pd-Catalyzed Coupling: The Reactions of the 21st Century***

**5:25 – 5:30 pm – Adjournment**

**5:30 – 7:30 pm – Reception & Book Signing: "New Trends in Cross Coupling: Theory and Applications" same Room: Crystal Ballroom B/C**