

Challenges in Organic Chemistry

ISACS19



20-23 March 2016
University of California,
Irvine (USA)

Sunday 20 March

12:45	Registration (Tea and coffee – Atrium)
14:15	Welcome and Introductions
	Session 1: Total synthesis Session Chair: Dean Toste
14:30	Target-Driven Total Synthesis <u>Seth Herzon</u> <i>Yale University</i>
15:15	In search of biologically active compounds using the tools of chemical synthesis <u>Andrei K. Yudin</u> <i>University of Toronto</i>
16:00	Tea break
	Session 1 continued: Total synthesis Session Chair: Darren Dixon
16:30	Ligand-accelerated C-H activation reactions: distance and geometry <u>Jin-Quan Yu</u> <i>Scripps Research Institute</i>
17:15	Synthetic efforts aimed at the briarane diterpenoids <u>Andrew Harned</u> <i>Texas Tech University</i>
17:35	Unlocking the Mysteries of Amyloid Diseases with Chemical Model Systems <u>James Nowick</u> <i>University of California, Irvine</i>
18:20	Welcome Reception
19:30	Close (Free evening)

Monday 21 March

08:45	Registration
	Session 1 continued: Total synthesis Session Chair: Seth Herzon
09:00	New Catalytic Approaches for Simplifying Complex Target Synthesis <u>Darren Dixon</u> <i>University of Oxford</i>
09:45	Enantioselective Synthesis of the Steroidal Core of Batrachotoxin <u>Jacob DeForest</u> , Justin A. Hilf, Maureen K. Reilly and Scott D. Rychnovsky <i>University of California, Irvine</i>
10:05	Structure Elucidation and Total Synthesis of the Kalimantanacin Antibiotics <u>Freya Bull</u> , Iain R. G. Thistlethwaite and Christine L. Willis <i>University of Bristol</i>

10:25	Coffee Break
	Session 2: Catalysis Session Chair: Kami Hull
11:00	Synthetic biology approaches to new fluorine chemistry <u>Michelle Chang</u> <i>University of California, Berkeley</i>
11:45	Development of New Catalysts toward Utilization of Renewable Resources <u>Kyoko Nozaki</u> <i>University of Tokyo</i>
12:30	Lunch
	Session 2 continued: Catalysis Session Chair: Andrei Yudin
14:00	Transition Metal-Catalyzed Amination and Amidation Reactions <u>Kami Hull</u> <i>University of Illinois at Urbana-Champaign</i>
14:45	The New Roles of Diboron in Organic Synthesis <u>Qiuling Song</u> <i>Huaqiao University</i>
15:05	Flash Poster Session (by invitation only)
15:35	Coffee Break and Poster Session (ODD NUMBERED POSTERS ONLY)
	Session 2 continued: Catalysis Session Chair: Shu-Li You
17:05	From Simple Hydrocarbons to N-containing Compounds through Nitrogenation Strategy <u>Ning Jiao</u> <i>Peking University</i>
17:50	Palladium/Phosphaadamantane Catalyst Enables an Exclusively trans-Selective Chlorocarbonylation of Alkynes <u>Christine Le</u> , Xiao Hou, Theresa Sperger, Franziska Schoenebeck and Mark Lautens <i>University of Toronto</i>
18:10	Catalytic C-H Bond Functionalization and Access to Fluorinated Compounds Pan Xu, Weipeng Li, Jin Xie and <u>Chengjian Zhu</u> <i>Nanjing University</i>
18:30	Close (Free evening)

Tuesday 22 March

	Session 3: Sugars Session Chair: Yamuna Krishnan
09:00	Automated Glycan Assembly Enables Molecular Glycobiology and Material Science <u>Peter Seeberger</u> <i>Max-Planck Institute of Colloids and Interfaces</i>
09:45	Synthesis and Late-Stage Reducing-end Modification of Heparan Sulfate-like Oligosaccharides Utilising a [2.2.2] Iduronic Lactone <u>Robin Jeanneret</u> , Charlotte E. Dalton, Jordi Bella, Gordon C. Jayson and John M. Gardiner <i>The University of Manchester</i>
10:05	Synthesis of Labelled Heparan Sulfate Oligosaccharides for Single Molecule Investigation of Protein Binding <u>Charlotte E. Dalton</u> , Steven D. Quinn, Robin A. Jeanneret, Laura E. Baltierra-Jasso,

	Aidan Rafferty, Michael J. Morten, Steven W. Magennis and John M. Gardiner <i>University of Manchester</i>
10:25	Coffee Break (Foyer area)
	Session 3 continued: Sugars Session Chair: Peter Seeberger
11:00	Challenges in Oligosaccharide Analysis and Synthesis <u>Nicola Pohl</u> <i>Indiana University</i>
11:45	Naturally inspired peptide therapeutics <u>Alison Hulme</u> <i>University of Edinburgh, UK</i>
12:30	Lunch
	Session 4: Theory & Mechanism Session Chair: Vy Dong
14:00	A Light and Chemically Driven Molecular Machine Imitating the Arm Movements of a Human Breaststroke Swimmer Gebhard Haberhauer, <u>Christoph Burkhart</u> , Sascha Woitschetzki <i>University of Duisburg-Essen</i>
14:20	Computational approach to develop phosphoramidite ligand applied to Rh-catalysed asymmetry cycloisomerization and Cu-catalysed asymmetry conjugate addition <u>Qian Peng</u> and Robert. S. Paton <i>University of Oxford</i>
14:40	Dimerization of Two Alkyne Units: Model Studies, Intermediate Trapping Experiments, and Kinetic Studies <u>Sven Fabig</u> , Gebhard Haberhauer and Rolf Gleiter <i>Universität Duisburg-Essen</i>
15:00	Flash Poster Session (by invitation only)
15:30	Coffee Break and Poster Session (EVEN NUMBERED POSTERS ONLY)
	Session 4 continued: Theory & Mechanism Session Chair: May Copsey
17:00	Transition State Modeling in Asymmetric Cooperative Catalysis: Insights on Mechanism and Stereoselectivity <u>RB Sunoj</u> <i>IIT Bombay</i>
17:45	Close (free evening)

Wednesday 23 March

	Session 5: Peptides Session Chair: May Copsey
09:00	Organic chemistry applied to proteins: The case of ubiquitination and deubiquitination <u>Ashraf Brik</u> <i>Technion - Israel Institute of Technology</i>
09:45	Chemical Science Lecture Synthetic DNA devices quantitate protein activity in living organisms <u>Yamuna Krishnan</u> <i>University of Chicago</i>

10:30	Coffee Break
	Session 5 continued: Peptides Session Chair: Alison Hulme
11:15	Minute Perturbations of Glutamate 22 in Alzheimer's Aβ Induce Distinct Aggregation Profiles Christopher J. A. Warner, Subrata Dutta, Victoria Klein, Eefei Chen and <u>Jevgenij Raskatov</u> <i>University of California, Santa Cruz</i>
11:35	Imidazole-peptide foldamers: switching of the driving forces within the helix <u>Abdulselam Adam</u> and Gebhard Haberhauer <i>Universität Duisburg-Essen</i>
11:55	Closing Remarks
12:00	Grab-box packed lunch

The Underline denotes the presenting author to whom the affiliation applies