Minisymposium in New Organic Chemistry

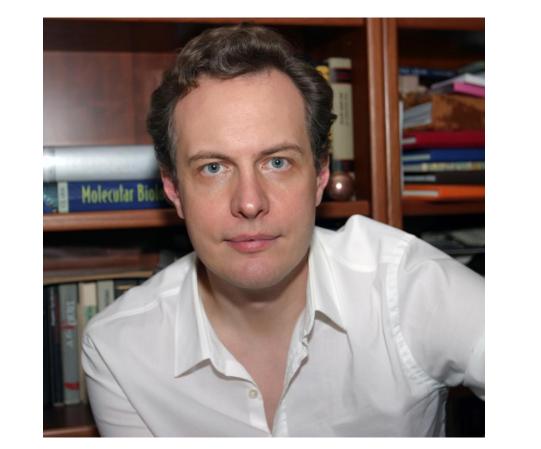
9:00-12:00, Dec. 11th, 2013 Location: Meeting Room 301, Chemical Building (化学老馆301) Department of Chemistry, Tsinghua University.

Department of Pharmacology and Pharmaceutical Sciences, School of Medicine, Tsinghua University.

Agenda

9:00 – 9:45 AM	Taking Risks in Complex Synthesis Design Prof. Erik J. Sorensen
9:45 – 10:00 AM	Discussion
10:00 – 10:45 AM	Catalysis and Complexity: From Fleeting Intermediates to Useful Function

Prof. Valery V. Fokin



Valery V. Fokin, Ph.D. Department of Chemistry The Scripps Research Institute 10550 North Torrey Pines Road, La Jolla, California 92037 phone (858)784-7515 fax (858)784-7562 fokin@scripps.edu http://www.scripps.edu/fokin

Prof. Valery V. Fokin 10:45 – 11:00 AM Discussion 11:00 – 11:45 AM Power of Catalysis - Homogeneous, Heterogeneous and in between Prof. F. Dean Toste 11:45 – 12:00 AM Discussion

Prof. Erik J. Sorensen



Erik J. Sorensen Arthur Allan Patchett Professor in Organic Chemistry Princeton University Department of Chemistry 132 Frick Laboratory Princeton, NJ 08540 Email: <u>ejs@princeton.edu</u> Phone: 609-258-8135 Fax: 609-258-1980

Valery Fokin was born in Nizhny Novgorod, Russia. After completing his undergraduate studies at the N.I. Lobachevsky University of Nizhny Novgorod (Diploma with Honors, 1993) and Calvin College (BSc, 1993), and graduate work at University of Southern California (PhD, 1998), Fokin joined TSRI as a postdoctoral fellow in 1998 and became a faculty member in 2000.

The research in Valery Fokin's group at The Scripps Research Institute is centered on discovery of catalysis and new chemical reactivity and on applying it to the studies of biological and macromolecular phenomena. Current project involve new reaction development, studies of the organic and organometallic mechanisms, medicinal chemistry, and materials science.

The group's work has contributed to the discovery and development of widely used catalytic processes. Among those are the copper and ruthenium-catalyzed azide-alkyne cycloaddition reactions (CuAAC, often called "click reaction" and its sister, RuAAC) and catalytic transformations of 1,2,3-triazoles which proceed via the intermediacy of rhodium azavinyl carbene species. The group currently involved in using these processes in the synthesis of pharmaceutically relevant compounds, probes for cellular and tissue imaging and targeted drug delivery, and functional polymeric materials.

Prof. Fokin has authored and co-authored over one hundred publications, eight book chapters, co-edited a book, and is an inventor on seventeen patents and patent applications. Several of his articles are among the most cited and accessed papers, and in 2011 Thomson-Reuters ranked him among the top ten chemists of the decade worldwide based on the impact of his published work. In 2013, the same agency named him a Citation Laureate.

Professor Sorensen was born and raised in upstate New York and received his B. A. degree in Chemistry from Syracuse University, where he performed undergraduate research with Professor Roger Hahn. In 1989, he began his graduate studies in chemical synthesis at the University of California, San Diego. Under the direction of Professor K. C. Nicolaou, he synthesized a novel family of DNA cleaving, 10-membered ring enediynes, contributed to a laboratory synthesis of the cancer drug taxol and co-authored a book titled Classics in Total Synthesis, and obtained his Ph. D. degree in 1995. From 1995-1997, he was a National Science Foundation postdoctoral fellow in the laboratory of Professor Samuel Danishefsky at The Memorial Sloan-Kettering Cancer Center in New York, where he contributed to total syntheses of the epothilone class of antitumor agents. In 1997, he started his independent career at The Scripps Research Institute and became an Associate Professor with tenure in 2001. In 2003, he moved his research group to Princeton University where he is the Arthur Allan Patchett Professor in Organic Chemistry.

The Sorensen laboratory is interested in the field of complex chemical synthesis, questions about the structural origins of architecturally unique natural products, and evaluating hypotheses about the chemical basis of the biological activities of natural products and non-natural molecules. His research aims to increase the capabilities of organic synthesis through the development of powerful reactions and strategies.

For his achievements in chemical research and education, Professor Sorensen received a Beckman Young Investigator Award, a Camille Dreyfus Teacher-Scholar Award, the AstraZeneca Award for Excellence in Chemistry, the Lilly Grantee Award, the Pfizer Global Research Award for Excellence in Organic Chemistry, and the Bristol-Myers Squibb Unrestricted Grant in Synthetic Organic Chemistry. In 2001, Professor Sorensen was a Woodward Scholar at Harvard University. In 2007, he was the Givaudan/Karrer Distinguished Visiting Professor at the University of Zürich. In 2009, he received the Arthur C. Cope Scholar Award from the American Chemical Society.

Prof. F. Dean Toste



F. Dean Toste 627 Latimer Hall Tel: (510) 642-2850 Department of Chemistry Fax: (510) 643-1460 University of California email: fdtoste@berkeley.edu Berkeley, CA, 94720-1460 website URL: www.cchem.berkeley.edu/~toste/

Dean was born in 1971 in Tercelra, Azores, Portugal, but soon moved to Canada. While at the University of Toronto, he majored in Chemistry and Biochemistry and went on to obtain a M.Sc. in Organic Chemistry. He then pursued his Ph.D. with Barry Trost at Stanford and a post-doctoral appointment with Robert Grubbs at Caltech. Dean is currently a Professor of Chemistry at UC Berkeley.

Positions

Professor Department of Chemistry University of California, Berkeley Lawrence Faculty Scientist Chemical Science Division **Berkeley National Lab**

June 2009 to present

Associate Professor Department of Chemistry University of California, Berkeley July 2006 to June 2009

July 2007 to present

Assistant Professor Department of Chemistry University of California, Berkeley Aug 2002 to June 2006

