Organic Reactions, Inc.
Previous Lecturers

2011 - Matthew Gaunt, University of Cambridge, England
2009 - Benjamin List, Max Planck Institute, Mülheim, Germany
2005 - Mark Rizzacasa, University of Melbourne, Australia
2002 - Shu Kobayashi, University of Tokyo, Japan
1999 - Alois Fürstner, Max Planck Institute, Mülheim, Germany
1997 - Paul Knochel, University of Marburg, Germany
1995 - Philip Kocienski, University of Southampton, England
1993 - Ian Paterson, University of Cambridge, England
1991 - Manfred Reetz, University of Marburg, Germany
1989 - Hisashi Yamamoto, Nagoya University, Japan
Magnus Rueping

Magnus Rueping studied at the Technical University of Berlin, Trinity College Dublin and ETH Zürich, where he completed his diploma thesis under the direction of Professor Dieter Seebach. He stayed in the Seebach group and obtained his Ph.D. from the ETH in 2002 working on the synthesis and structural and biological aspects of oligo(hydroxybutanoates) and of beta- and gamma-peptides. He then moved to Harvard University to work with Professor David A. Evans on enantioselective transition-metal catalysis. In August 2004 he was directly appointed associate professor, the Degussa Endowed Professorship of Synthetic Organic Chemistry, at the University Frankfurt. After four years in Frankfurt he received several offers of academic positions and decided to accept a Chair and Full Professorship of Organic Chemistry at RWTH Aachen University.

He is the recipient of several awards including the AstraZeneca Award for Organic Chemistry, Novartis Young Early Career Award, ORCHEM Prize of the German Chemical Society, Academy Prize of the Academy of Sciences Göttingen, “Dozentenstipendium” of the German Chemical Industry as well as the European Research Council Starting Grant Award. In addition he has held appointments as a visiting Professor and received several named lectureships.

His group's research activities are directed toward the development and simplification of synthetic catalytic methodology and technology, and their application in the rapid synthesis of diverse functional natural and unnatural molecules, not only to address chemical, biological and physical problems but also to generate new molecules with potentially interesting properties. Recent research predominantly focuses on asymmetric organo-, metal-, and biocatalysis and combinations thereof, the development of light-driven reactions, as well as the advancement of self-optimizing reaction systems.

Organic Reactions

Organic Reactions was conceptualized at the 1939 National Organic Symposium as the brainchild of Roger Adams and some of the Organic Syntheses editorial board members. Organic Reactions was conceived as a collection of articles about specific reactions with which the authors had firsthand experience. The unique features of Organic Reactions distinguishing it from other review vehicles include exhaustive literature surveys, complete compilation of extant examples and representative, detailed experimental procedures.

Adams served as president and editor in chief from 1942 until 1960 when Volume 10 was published. A. C. Cope succeeded Adams until his death in 1966, when W. G. Dauben assumed that position followed by A. S. Kende, L. A Paquette, L. E. Overman, and currently S. E. Denmark. The original editorial board was separated into a board of editors and a board of directors as the responsibilities of managing the publication and its functions grew.

In defining the goals and mission of Organic Reactions, Adams wrote: "In the course of nearly every program of research in organic chemistry the investigator finds it necessary to use several of the better-known synthetic reactions. To discover the optimum conditions for the application of even the most familiar one to a compound not previously subjected to the reaction often requires an extensive search of the literature; even then a series of experiments may be necessary...The volumes of Organic Reactions are collections of chapters each devoted to a single reaction, or a definitive phase of a reaction, of wide applicability. The subjects are presented from the preparative viewpoint, and particular attention is given to limitations, interfering influences, effects of structure, and the selection of experimental techniques. Each chapter includes several detailed procedures illustrating the significant modifications of the method.”

From 1942 to the 1980’s the challenge that Organic Reactions successfully addressed was the difficulty in compiling an authoritative summary of preparatively useful organic reactions from the primary literature. However, as abstracting services entered the electronic age, the challenge for the practitioner was no longer to locate all of the literature on the subject, but rather, how to critically and efficiently digest it. Organic Reactions chapters are much more than a surfeit of primary references; they constitute a distillation of an avalanche of information into the knowledge needed to correctly implement a reaction. It is in this capacity, namely to provide focused, scholarly, and comprehensive overviews of a given transformation, that Organic Reactions takes on even greater significance for the practice of chemical experimentation in the 21st century.

The authors of articles in Organic Reactions receive no royalties, and the editors do their work as a public service. The success of this enterprise involves the dedicated efforts of many prominent chemists who devote their efforts to the time consuming job of editing of chapters and producing volumes. It is remarkable that Adams’ legacy of interest in organic chemistry, in organic chemists, and in students still motivates those who carry this important resource forward.

Scott E. Denmark