ICIQ

Institut Català d'Investigació Química

2012 Seminar Program

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Single-Molecule Tools for Synthetic Chemists & Dual Catalysis with Gold

Prof. Suzanne A. Blum

University of California, Irvine (USA)

Friday 22nd June, 2012. ICIQ Auditorium, 12 p.m.

Professional Career

Assistant Professor of Chemistry, July 1, 2006-present
University of California, Irvine, Irvine, CA
National Institutes of Health Postdoctoral Fellow, 2004-2006
Harvard Medical School, Boston, MA
Research Advisor: Prof. Christopher T. Walsh
Department of Biological Chemistry and Molecular Pharmacology
Area of Study: Mechanism of Novel Epimerase Activity in Syringomycin Biosynthesis
University of Michigan, Ann Arbor, B.S. in Chemistry, Highest Honors, 2000
University of California, Berkeley, NSF Graduate Fellow, Ph.D., Chemistry, 2004
Advisors: Robert G. Bergman and Jonathan A. Ellman
Harvard Medical School, NIH Postdoctoral Fellow, Mechanistic Enzymology, 2004-06

Research Interests

Research in the Blum Group focuses on the development of new catalysts and metal-mediated reactions with applications in organic synthesis. We are also developing single-molecule techniques to image catalytic reactions at individual transition metal centers. These single-molecule techniques are part of a big-picture, ground-breaking project to change the way chemists think about studying chemical reaction mechanisms: by actually watching reactions live, one molecule at a time. Ultimately, we are interested in learning about the reactivity of transition metals such that those lessons can be applied broadly to the development of new methods. These studies provide an excellent platform for testing mechanistic hypotheses and for building new fundamental understanding of metal-based reactivity.