ICIQ

Institut Català d'Investigació Química

2011 Seminar Program

Av. Països Catalans, 16, Campus Sescelades (St. Pere i St. Pau), Tarragona. Tel. 977920200

Bioactive Organometallic Compounds with Natural-Product-Like Structural Complexity

Prof. Eric Meggers

Philipps University, Marburg (Germany)

Friday 01st July, 2011. ICIQ Auditorium, 12 p.m.

Professional career

1999-2002: Postdoctoral fellow with Prof. Peter G. Schultz. The Scripps Research Institute, USA.
Subject: Development of first artificial metal-mediated base pairs in DNA
May 1999: PhD in Organic Chemistry (summa cum laude), PhD thesis with Prof. Bernd Giese. University of Basel, Switzerland.
Subject: Unraveling of long distance charge transport mechanism in DNA by G-hopping
June 1995: Diploma in Chemistry (with highest honors), Diploma thesis with Prof. Eberhard Steckhan. University of Bonn, Germany.
Subject: Development of new electron transfer-catalyzed reaction (SOE 1)

Professional Appointments

July 2002 – June 2007: Assistant Professor, Department of Chemistry, University of Pennsylvania, USA
July 2007 – present: Adjunct Faculty Member, The Wistar Institute, Philadelphia, USA
April 2008 – present: Visiting Scholar, Depart. of Chemistry, Univ. of Pennsylvania, USA
July 2007 – present: Professor, Chair of Chemical Biology, Philipps-University Marburg, Germany

Research Interests

His research group is interested in the design and discovery of novel bioactive organometallic compounds and their application as tools in chemical biology and lead structures for the development of future medicines. Key focus of the Meggers lab is to exploit the unique structural opportunities provided by chemically inert metal complexes, in particular octahedral coordination geometries and apply them to difficult problems of biomolecular recognition. Along these lines, they reported over the last few years a series of inert organometallic compounds as highly potent and selective inhibitors for protein and lipid kinases, some of which also display promising anticancer activities.
A continued progress in this area of organometallic and inorganic medicinal chemistry also requires the development of strategies for the stereocontrolled synthesis of octahedral metal complexes. They therefore recently started a research program that aims in developing synthetic methods such as solid phase, combinatorial, diastereoselective, and asymmetric synthesis of complicated metal-containing compounds.