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2014 Seminar Program

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Mechanistic Studies in Asymmetric Organocatalysis: A Novel Paradigm for Stereocontrol

Prof. Donna G. Blackmond

The Scripps Research Institute, La Jolla (USA)

Wednesday 1st October, 2014. ICIQ Auditorium, 12 p.m.

Professional Career

Donna G Blackmond received a PhD in Chemical Engineering from Carnegie-Mellon University in 1984. She has held professorships in chemistry and in chemical engineering in the US, Germany, and the UK, and she has worked in industrial research in the pharmaceutical industry. In 2010 she moved from a research chair at Imperial College London to her present position as Professor of Chemistry at The Scripps Research Institute in La Jolla, California.

Professor Blackmond has received Royal Society of Chemistry awards in Physical Organic Chemistry and in Process Technology, a Royal Society Wolfson Research Merit Award and an ACS Arthur C. Cope Scholar Award. She has been a Woodward Visiting Scholar at Harvard and a Miller Institute Research Fellow at Berkeley. She received the Max-Planck-Society's Award for Outstanding Women Scientists and she was an NSF Presidential Young

Investigator. She has received the Paul H. Emmett Award in Fundamental Catalysis from the North American Catalysis Society and the Paul Rylander Award from the Organic Reactions Catalysis Society. In 2013, Professor Blackmond was elected as a member of the US National Academy of Engineering.

Research Interests

Professor Blackmond's research focuses on kinetic and mechanistic studies of catalytic reactions for pharmaceutical applications, including asymmetric catalysis, as well as on fundamental investigations of the origin of biological homochirality. She has pioneered the development of Reaction Progress Kinetic Analysis (RPKA), which makes use of *in-situ* tools to monitor reaction progress and employs novel graphical manipulations for rapid and straightforward analysis of the kinetics of solution-phase reactions. Prof. Blackmond's Arthur C. Cope Scholar Award citation read "for her insightful studies on the mechanism of transformations, particularly asymmetric processes, of importance in organic chemistry."