



Professor Ben Feringa U. of Groningen, The Netherlands

Program

Inaugural Lecture: Monday 24 September (4 - 5 P.M., Solvay Room)

The Joy of Discovery

Exploring across the current frontiers of chemical sciences there is vast uncharted territory to experience the joy of discovery. Far beyond Nature's design, the creative power of synthetic chemistry provides unlimited opportunities to realize our own molecular world as we experience every day with products ranging from drugs to displays that sustain modern society. In their practice of the art of building small, chemists have shown amazing success in the past decades. Moving from molecules to dynamic molecular systems the fundamental challenge is how to control and exploit motion at the nanoscale. In this presentation the focus is on my journey in the world of molecular switches and motors, the process of discovery and my personal experiences through my scientific career. I will also share with you memorable moments after 'The Magic Call from Stockholm'. Based on recent development in nanotechnology perspectives for the future will be presented. In particular I will address how fundamental questions and molecular beauty have guided me on this journey.

**FOR THE INAUGURAL LECTURE, COFFEE AND TEA WILL BE SERVED AT 3.45 P.M.
AND DRINKS AT 5.00 P.M. IN FRONT OF THE SOLVAY ROOM**

Lecture 1: Tuesday 25 September (4 - 5 P.M., Solvay Room)

Exploring Catalytic Space

Chemical catalysis is at the heart of chemical processes and key to deliver the products for our society ranging from drugs to materials. Major challenges are associated with the design of sustainable catalysts and chemical transformations. Organometallic reagents and transition metal catalysts are continuously at the frontier in the search for novel reactivity and synthetic methodology. Controlling chemo- and stereo-selectivity and low E-factor methods offer major challenges while novel approaches toward dynamic functions controlled by catalysis and transformations in aqueous media emerge. In this lecture various approaches to address these challenges will be discussed. Specific topics will be catalytic enantioselective allylation, Murahashi-Feringa cross coupling with organolithium reagents, sustainable low-E-factor transformations and adaptive catalysts.

The rest of Prof. Feringa's lectures will be given in April 2019.

**SOLVAY ROOM - BUILDING N.O. 5TH FLOOR
UNIVERSITÉ LIBRE DE BRUXELLES
CAMPUS PLAINE - BOULEVARD DU TRIOMPHE
ACCESS 2- 1050 BRUSSELS**

