

# ACADEMY PUBLIC LECTURE

jointly organized by the Indian Academy of Sciences & the Indian Institute of Science



## THE ART OF BUILDING SMALL

Beyond the current frontiers of chemical sciences, there is vast uncharted territory to control dynamic function based on molecular and supramolecular approaches. 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. In the art of building small, we explore the fascinating field of molecular nanoscience. Among the major challenges ahead in the design of complex artificial molecular systems is the control over dynamic functions and responsive far-from-equilibrium behaviour. A major goal is to gain control over translational and rotary motion. The focus is on my journey in the world of molecular switches and motors creating opportunities for smart drugs, adaptive catalysts or responsive materials.



12 March 2019



4:00 pm



J N Tata  
Auditorium,  
IISc

Prof. Anurag Kumar,  
Director, IISc  
will preside

5 pm – High tea

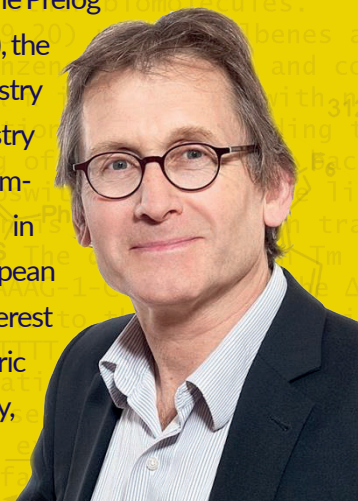
**ALL ARE  
WELCOME**

### BEN L FERINGA

RAMAN CHAIR PROFESSOR, INDIAN ACADEMY OF SCIENCES

*Jacobus van't Hoff Distinguished Professor of Molecular Sciences, Stratingh Institute  
University of Groningen, The Netherlands*

Ben L. Feringa obtained his PhD degree at the University of Groningen in the Netherlands under the guidance of Professor Hans Wynberg. After working as a research scientist at Shell in the Netherlands and the UK, he was appointed lecturer and in 1988 full professor at the University of Groningen and named the Jacobus H. van't Hoff Distinguished Professor of Molecular Sciences in 2004. In 2008 he was appointed Academy Professor and he was knighted by Her Majesty the Queen of the Netherlands. Feringa's research has been recognized with numerous awards including the Körber European Science Award (2003), the Prelog gold medal (2005), the Norrish Award of the ACS (2007), the Chirality medal (2009), the RSC Organic Stereochemistry Award (2011), the Humboldt award (2012), the Chemistry for the Future Solvay Prize (2015), the August-Wilhelm-von-Hoffman Medal (2016), The 2016 Nobel prize in Chemistry, the Tetrahedron Prize (2017) and the European Chemistry Gold Medal (2018). His research interest includes stereochemistry, organic synthesis, asymmetric catalysis, molecular switches and motors, self-assembly, molecular nanosystems and photopharmacology.



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