

Prof. Bernard L. Feringa

Nobel Lecture

September 29th 2017, 3:00 p.m.
Lubar Hall, Room N140
University of Wisconsin-Milwaukee



The Art of Building Small, From Molecular Switches to Motors

Prof. Feringa is the Jacobus van 't Hoff Distinguished Professor of Molecular Sciences, Stratingh Inst. for Chemistry, Univ. Groningen, NL. Prof. Feringa was awarded the 2016 Nobel Prize in Chemistry.

Beyond the fascinating designs of nature, the creative power of synthetic chemistry provides unlimited opportunities to realize our own molecular world ranging from life sustaining drugs to smart materials that are the pillar of modern society. In their art of building small, chemists have shown amazing successes during the centuries. In the recent decades some have taken on the fundamental challenge to understand the principles of dynamic molecular systems to gain control of molecular motion at the nanoscale.

The 21st century is expected to develop nanomachines and nanorobots powered by molecular motors. One example is the nanocar, which we developed. In my presentation, I will describe our journey in the world of molecular switches and motors, the process of discovery and my personal experiences through my scientific career. In particular I will address how fundamental questions and molecular beauty have guided me on this journey.

