

# ' Control and Amplification of Chirality in Dynamic Molecular Systems'

**Ben L. Feringa**

Stratingh Institute for Chemistry, University of Groningen, Nijenborgh 4, 9747 AG Groningen, The Netherlands

b.l.feringa@rug.nl

Chirality plays a key role in numerous areas of chemistry. In this lecture our journey through chiral space will feature several of our discoveries where the control of chirality was a key challenge. Chirality at different length scales is a key control element from assembly to function. The exploration of chiral space is illustrated with recent developments ranging from adaptive asymmetric catalysis to chiral supramolecular systems, responsive materials and nanostructured systems. The latest findings on molecular rotary motors and molecular machines will also be discussed as well as amplification of chirality from nano- to macro-scales .