

The Art of Building Small
Molecular Machines

Ben L. Feringa

Stratingh Institute for Chemistry, University of Groningen

Nijenborgh 4, 9747 AG Groningen, The Netherlands

b.l.feringa@rug.nl

Beyond the current frontiers of chemical sciences there is vast uncharted territory to control dynamic function based on molecular and supramolecular approaches. Taking inspiration from 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 machines. Among the major challenges ahead in the design of complex artificial molecular systems is the control over dynamic functions and responsive 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.

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