Professor Robert H. GRUBBS

Olefin Metathesis Catalysts for the Synthesis of Large and Small Molecules

Division of Chemistry and Chemical Engineering, California Institute of Technology, 1200 East California Boulevard, 164-30, Pasadena, CA 91125, USA Email: rhg@caltech.edu

Ruthenium based olefin metathesis catalysts have provided new routes to olefins that in a variety of structures. Their functional group tolerance and ease of use allow their application in the synthesis of multifunctional bioactive molecules. The same systems are also useful for the synthesis of an array of new materials from multifunctional polymers to supramolecular systems. Underlying these developments has been the development of active catalysts with controlled selectivity.