Optical Switches for Divalent Metal Ions

Objective

We are developing a new class of divalent metal ion chelate that undergoes rapid and reversible optical switching between two states: (A) a high affinity chelating complex (SP) and (B) a low affinity chelator (MC).

We have prepared a series of optical switches incorporating 1, 2 and 4 carboxyl groups; optical switching between the SP and MC states changes the geometry of the carboxyl groups.

Current Library of Divalent Metal Ion Optical Switches