

Organic Chemistry

Hirschmann Lecture Series

Professor Helmut Schwarz

Institut für Chemie, Technische Universität Berlin
President, Alexander von Humboldt Foundation

Thursday, April 16, 2009, 11:00 a.m.
Room 1315 Chemistry



Keto-Enol Tautomerism: A 125 Year-old Story Revisited

Problems which will be addressed in a combined experimental/ computational approach, with a focus on the chemistry and physics of *isolated* molecules, are among others:

- Stability of neutral *versus* cation-radical keto-enol pairs
- Reaction pathways of strictly intramolecular hydrogen migrations
- Non-ergodic behaviour of intermediates
- 'Titration' of an isomerisation barrier
- Role of *individual* solvent molecules acting as proton-shuttle catalysts
- What are the *minimal* requirements for the action of carbonic anhydrase?