

The 126th MANA Special Seminar



Polymeric Ladderphanes

Chair: Dr. Masayuki Takeuchi (Macromolecules Group Leader)

Professor Tien-Yau Luh

(Department of Chemistry, National Taiwan University, Taiwan)

A polymeric ladderphane is defined as multiple layers of cyclophanes where the tethers are part of the polymeric backbones. By ring opening metathesis polymerization of bisnorbornene derivatives, double stranded polymeric ladderphanes are conveniently obtained. A range of different linkers (ferrocenes, oligoaryls, porphyrins, crown ethers as well as chiral linkers) are used for the preparation of these polymeric ladderphanes. Triple stranded ladderphanes are also accessed by a similar strategy. Replication of a single stranded polymer will be discussed. The photophysical and magnetic properties, electrochemical behavior, self assembly and microscopic images as well as chemical modifications of both comb-like single stranded polynorbornenes and ladderphanes will be presented.

Venue: Seminar Room #431, MANA Bldg.

Date: Feb 4th Thursday Time: 14:45-15:45

Contact: International Center for Materials Nanoarchitectonics (MANA), Nakata (ex. 8806)

