

The 220th MANA Special Seminar

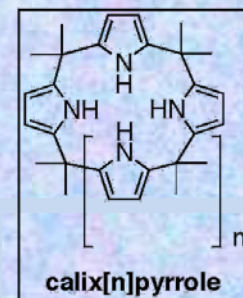


Pyrrolic Receptors: From Sensors and Recognition to Self-Assembly

Chair: Dr. Katsuhiko Ariga (MANA PI)

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Pyrroles are found in several natural anion binding motifs. This inspired the development in our laboratory of calix[n]pyrroles as artificial, pyrrole-based anion binding agents. These synthetic compounds contain four or more pyrrole or pyrrole-like heterocyclic subunits within their non-conjugated frameworks. In this lecture calix[n]pyrroles will be discussed in the context of recent efforts to develop “tunable” systems that are 1) capable of binding and transporting selected substrates, including ion pairs, 2) acting as “molecular switches” and “logic gates” for electron transfer, as well as 3) serving as precursors for environmentally responsive, self-assembled materials. Other systems, including those that act as electron deficient analogues of higher order calixpyrroles, will be presented as time permits.

Venue: 4F, Seminar room #431, MANA Bldg., Namiki Site

Date: September 12th (Mon) **Time:** 15:30-16:15