ICReDD International Seminar Series

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Structural Dynamics in Chemical Synthesis

Place: Seminar Room 2, Frontier Research in Applied Sciences Building, Hokkaido University

Time: Wednesday, 12 June 2024
16:30-18:00

Abstract: In this lecture, I will describe my lab's long-standing objective to control conformations of macrocycles. To do this, we have initiated the field of structural dynamics in synthesis. This idea describes formation of transient rings in cyclic peptides. The corresponding motifs are nucleated in the vicinity of existing functional groups and play critical roles in the behavior of complex molecules. Using this idea, we are developing a strategy for chemical synthesis of macrocycles based on enthalpy/entropy compensation. Case studies discussed in this lecture will include both control over macrocycle conformations and synthesis.

A seminar organized by the
Ito Group (WPI-ICReDD, Hokkaido University)