

**A01-4**

# Exploration of condensed conjugation systems by substituent-free nitrogen-incorporated nanographenes

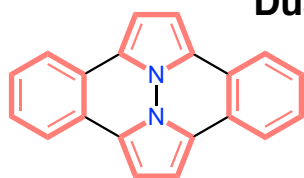
Principal investigator: Takayuki Tanaka (Kyoto Univ)

**Our Mission: Realization of a new electronic conjugation in intermolecular spaces via precise design of molecules with minimum intermolecular distances**

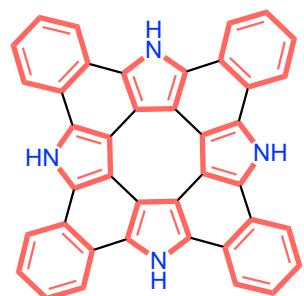
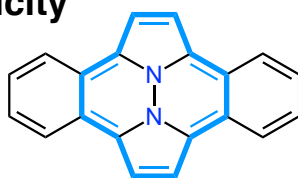
## Aims of A01-4

- Designing novel nanographenes viable to stack in a close proximity
- Revealing intermolecular interactions by modulating the properties

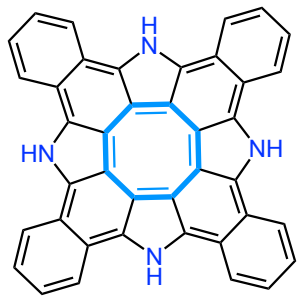
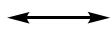
### Dual Aromaticity



local  $6\pi$  aromaticity (dominant) + weak  $12\pi$  antiaromaticity



local  $6\pi$  aromaticity (dominant) + negligible  $8\pi$  antiaromaticity



### Modulation of the intermolecular interaction

