

A01-6

Exploration of condensed conjugation systems by accumulated hydrocarbons having unstable electronic states based on extreme charge-/spin-polarization

Principal investigator: Akihito Konishi (Osaka Univ)

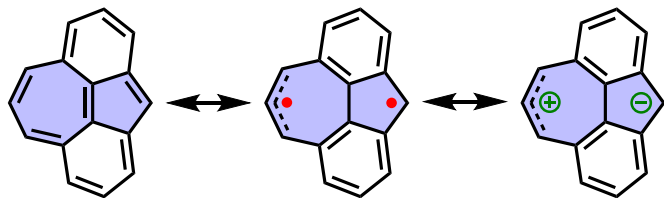
Our Mission: Realization of a new electronic conjugation in intermolecular spaces via precise design of molecules with minimum intermolecular distances

Our aim in A01-6

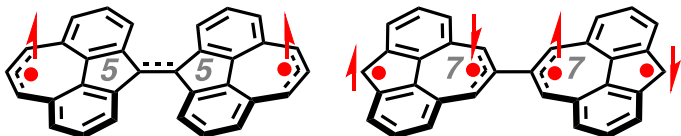
- Accumulation of hydrocarbon skeletons with electronic instability
- Construction of stacked structures through the polarized spins/charges derived from spontaneous structural deformations

Characteristics of non-alternant hydrocarbons and cumulenes

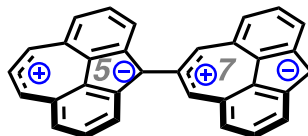
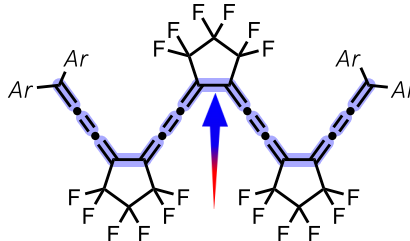
Non-alternant hydrocarbons with multiple electronic states



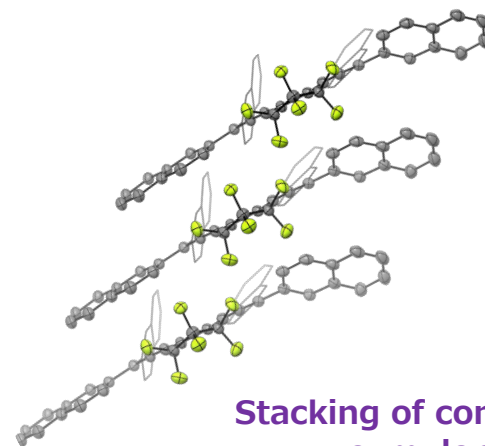
Control of charge-/spin-polarization



Polarized accumulated-conjugated cumulenes



Functionalization of stacked hydrocarbon skeletons



Stacking of conjugated cumulene