

# Theme: Construction of Topological Reaction Fields by Supramolecular and Chemical Engineering Approach

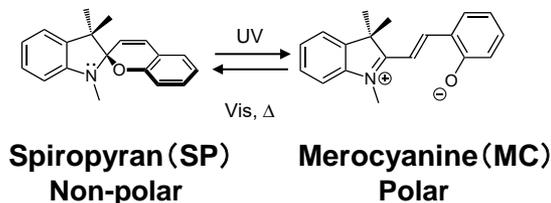
## Purpose:

- (1) Inducing novel functions by controlling interaction between materials and external environment.
- (2) Adjustment of strength the interaction by controlling topology of reaction field.

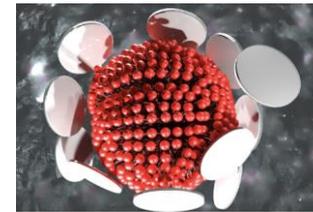
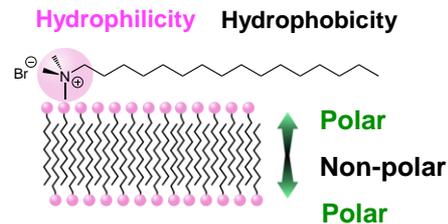
## Achievement:

- (1) Development of photo-induced CO<sub>2</sub> capture system using spiropyran by constructing continuous polar gradient reaction field.
- (2) Enhancement of CO<sub>2</sub> capacity by adjustment of topology of reaction field.

### Photochromic Molecule



### Surfactant



Fabrication of topological self-assemblies of nano-sized clay minerals transcribed by topology of surfactant micelles using surface-activating ability of nano-sized clay minerals

