

HOUJOU LAB.

[Crystal Engineering]

Department of Materials and Environmental Science

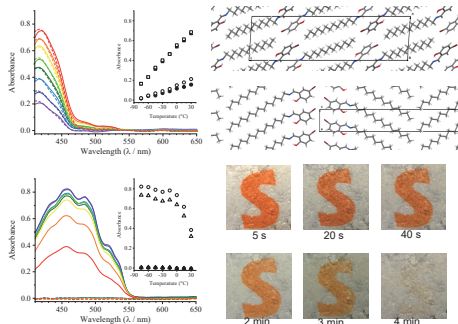
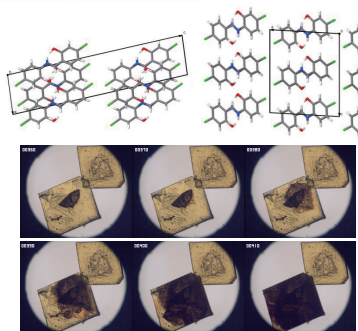
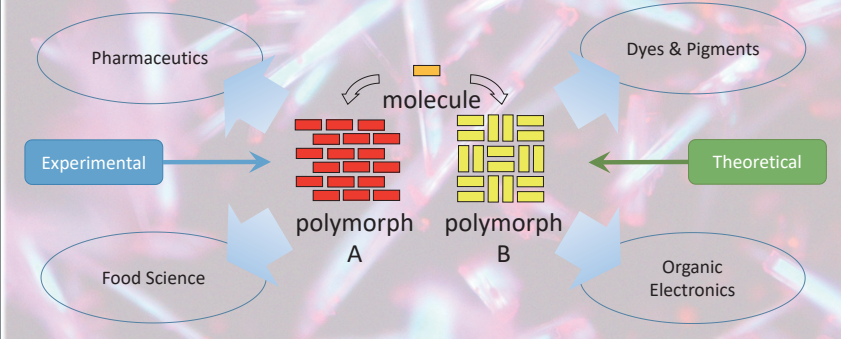
Molecular Integrated System Engineering

Department of Chemistry and Biotechnology

http://www.iis.u-tokyo.ac.jp/~houjou/hjlab_wiki/

Functions of Molecular Arrangement

Polymorphism, a phenomenon that a single molecule crystallizes differently, has an impact on the materials' function, hence it is associated with pharmaceuticals, food science, dyes and pigments, and organic electronics. We are working on crystal engineering problems through experimental and theoretical approaches.



Crystal structure analyses and microscopic thermal behavior observations lead us to a mechanism for solid-solid phase transition. (CrystEngComm. 2019)

A slight modification of molecular structure (i.e. homolog approach) had an impact on crystal packing, which realized hi-spec photochromic materials.