

HOUJOU LAB.

Crystal Engineering

Department of Materials and Environmental Science



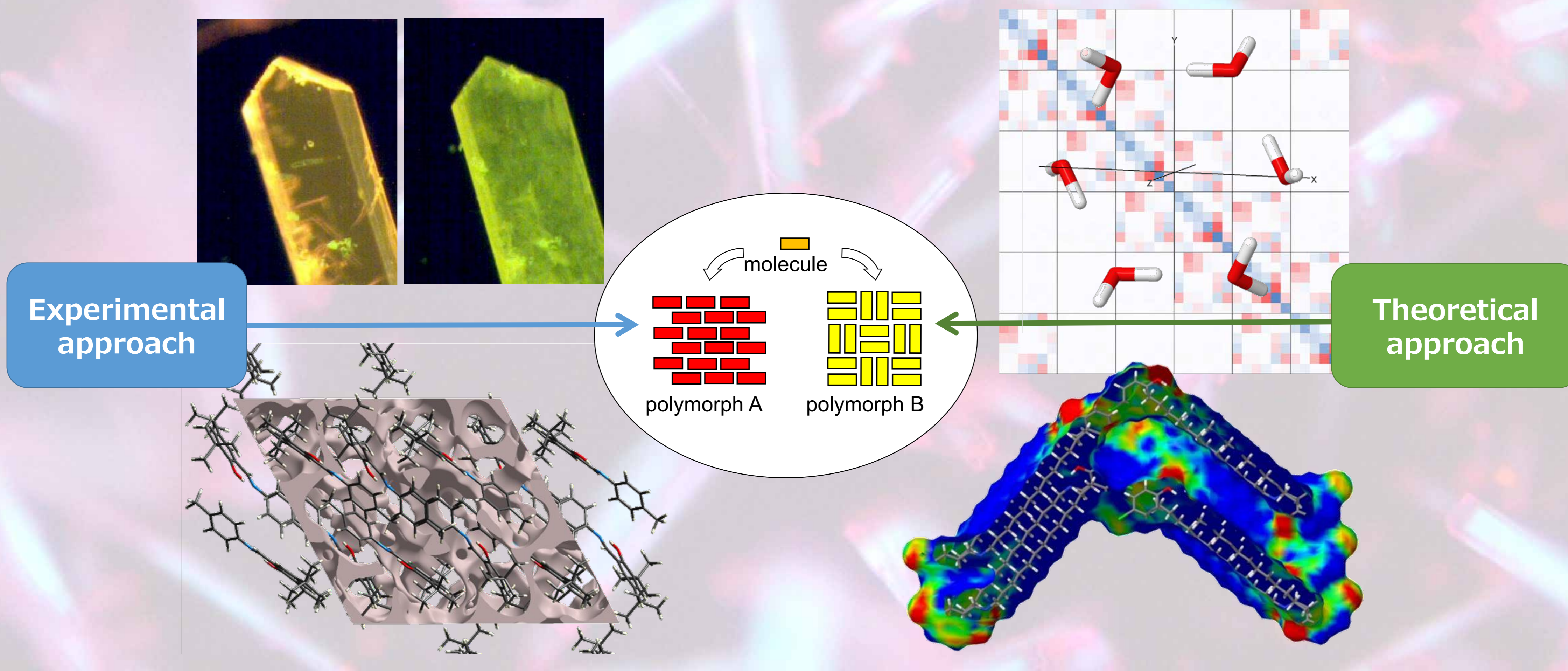
Molecular Integrated System Engineering

Department of Chemistry and Biotechnology, Graduate School of Engineering

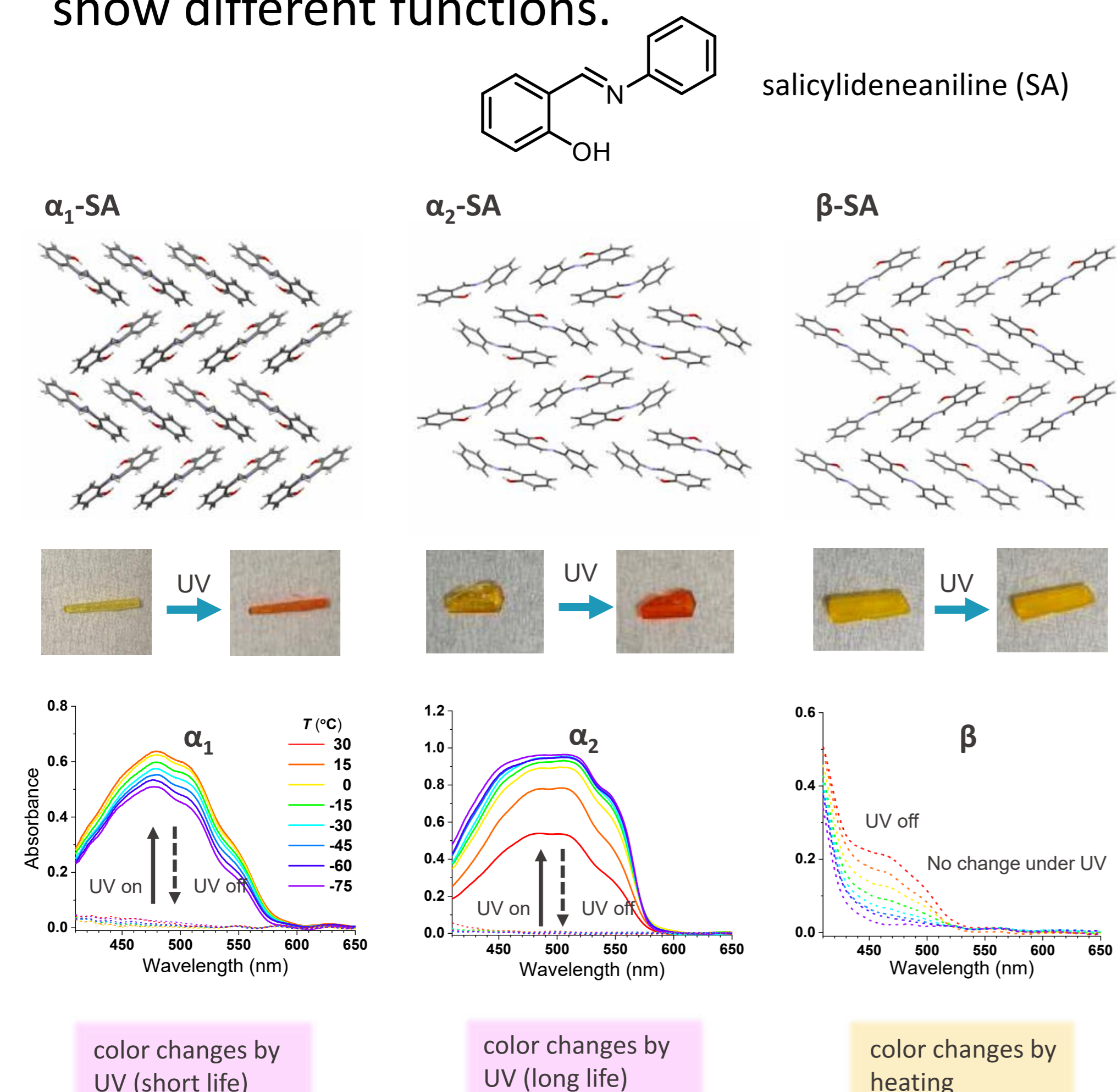
http://www.iis.u-tokyo.ac.jp/~houjou/hjlab_wiki/

Functions of Molecular Arrangement

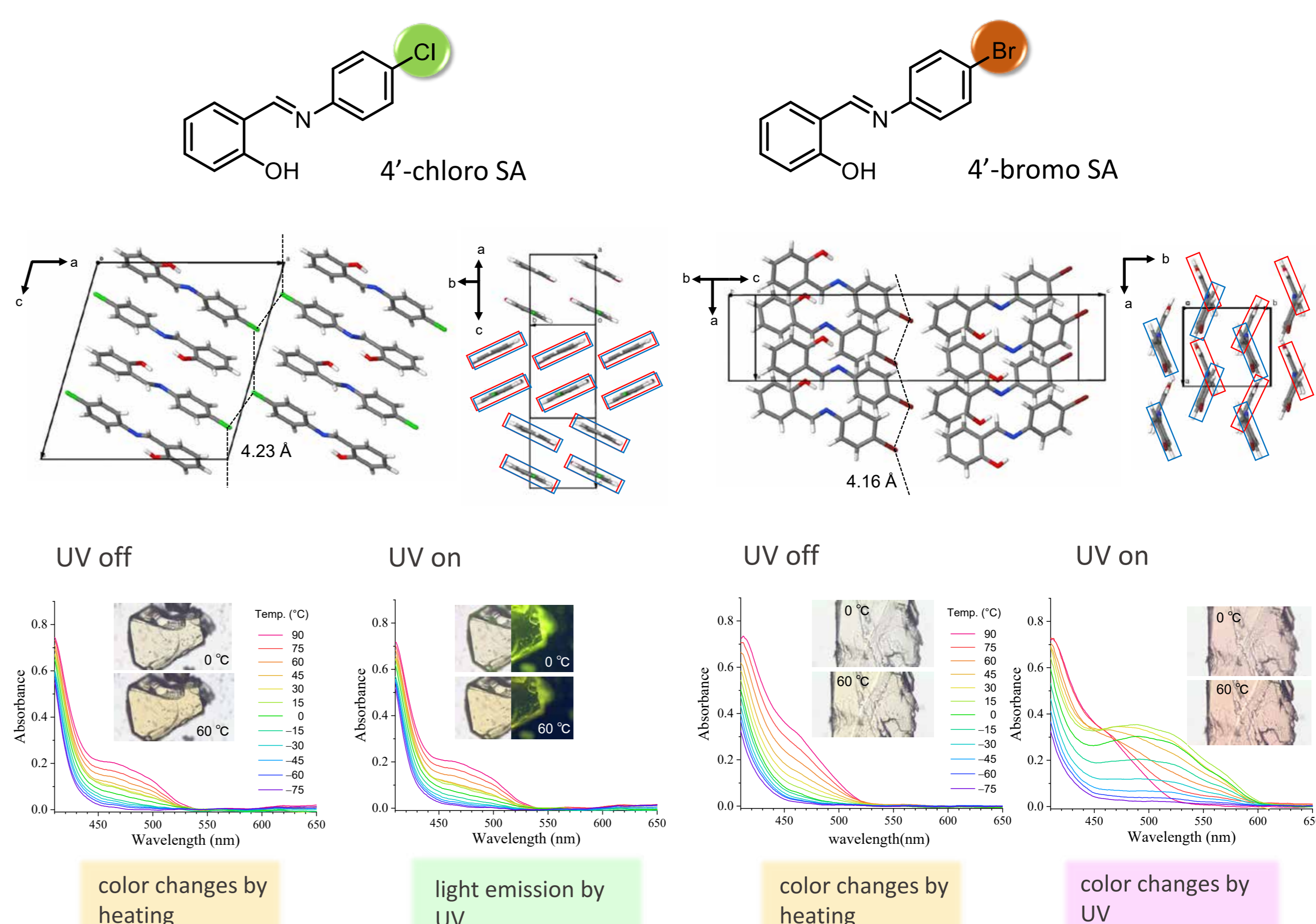
Polymorphism, a phenomenon that a single molecule crystallizes differently, has an impact on the materials' function, hence it is associated with pharmaceuticals, food science, dyes and pigments, and organic electronics. We are working on crystal engineering problems through experimental and theoretical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



The same molecules in different arrangements show different functions.

Koibuchi, et al., *J. Phys. Chem. A* (2022)

A subtle modification of molecular structure results in differences in arrangements and functions.

Houjou, et al., *Chem. Lett.* (2022)