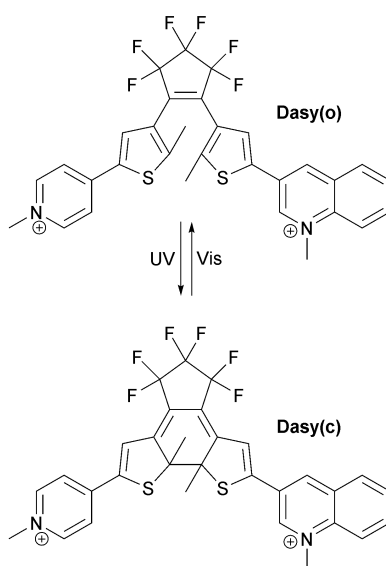


Master thesis project:

Spectroscopic studies of a diarylethene photoswitch using 1- and 2-photon techniques.

Photochromic molecules, also referred to as molecular photoswitches, exist in two different isomeric forms that can be interconverted by exposure to light at different wavelengths. A very popular “family” of photoswitches is the Diarylethenes. A representative example is Dasy, a newly synthesized derivative, shown in the figure below.



The project implies a comprehensive spectroscopic/photophysical characterization of Dasy in a series of different solvents using absorption and fluorescence spectroscopy. We have recently shown that Dasy is a promising candidate for microscopy applications, and this project will also include the study of Dasy using 2-photon microscopy.

We are looking for a highly motivated student with interest in physical chemistry, spectroscopy, and microscopy. You should have a bachelor's degree in chemical engineering, biological engineering, chemical engineering with physics or equivalent and be fluent in English. The project is most suitable for a 30 hp thesis.

Contact: Joakim Andréasson (a-son@chalmers.se)