



KoRS-CB-NTU Joint PhD Programme in Chemical Biology Project Summary

The regulation of carbon dioxide assimilation in diatoms

The aim of this project is to unravel the regulation of photosynthetic CO₂ fixation in diatoms, unicellular algae. Although diatoms are major contributors to global primary production, it is still unclear how photosynthesis is regulated other than there are many differences compared to green algae and land plants. In this project we will tackle the molecular details of this process by combining physiological experiments using genetically altered diatoms with functional and structural studies on the biochemical machinery involved.