

## Electronic structure of interfaces with perovskites and Si in hybrid solar cells

Perovskites and combinations of Si and conjugated polymers emerge as promising new materials for photovoltaic cells, with power conversion efficiencies of already above 10%. To further improve device performance, the electronic structure of these materials and their interfaces must be understood in order to develop optimization strategies. In this project, photoelectron spectroscopy will be employed to study the electronic properties and molecule-based interface engineering will be explored for controlling and increasing charge generation in photovoltaic cells.