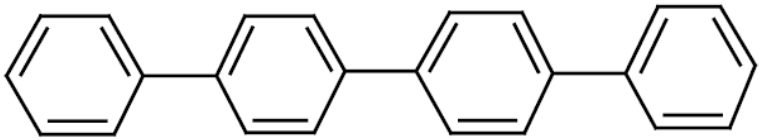
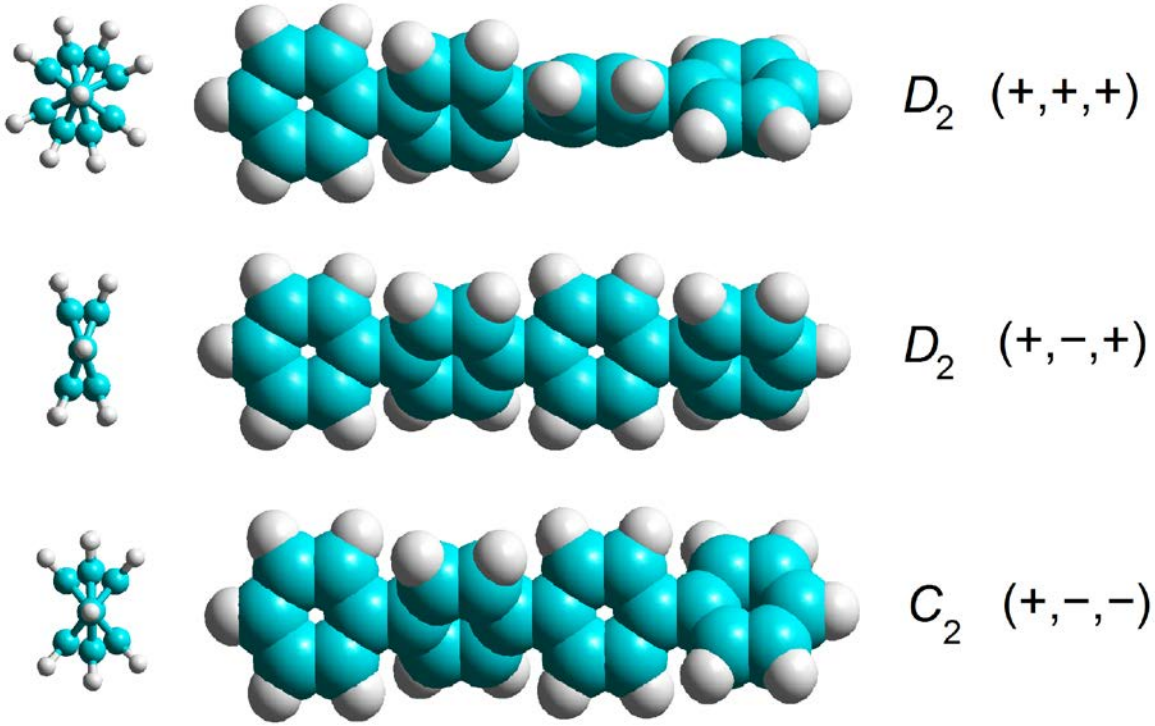
Spectroscopic investigation of *p*-quaterphenyl **(QP)**





QP is of considerable interest as a model compound for “molecular wires” (*i.e.*, poly(*p*-phenylene)) and as a backbone for “molecular switches” and other electronic devices. Its optical properties of are of crucial importance in the application of **QP** in laser dyes, wavelength shifters, and light emitters. – The purpose of the proposed project is to investigate the optical transitions of **QP** in the visible and ultraviolet regions by means of polarization spectroscopy on samples aligned in stretched polyethylene. Three diastereomeric rotamers are predicted for **QP**; how is this situation expected to influence the observed absorption spectrum of the compound?

Jens Spanget-Larsen