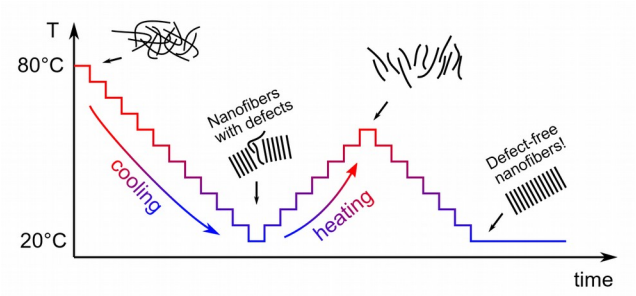
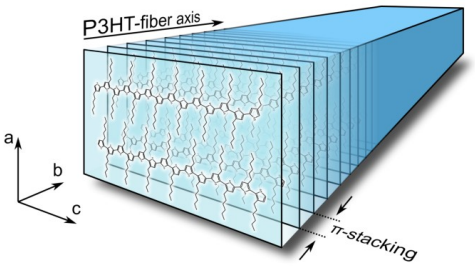
university of groningen / zernike institute for advanced materials / optical spectroscopy of functional nanosystems

Self-Assembly of Organic Nanofibers

Master / Bachelor research project

Our idea:
Organic self-assembled **nanofibers** enable long-range transport of excitation energy, and are building blocks for new nanophotonic devices. Nanofiber growth in solution depends on a variety of parameters, and good control over the growth process is crucial to tune the optical properties. In this project, you will investigate the influence of **heating profiles** and centrifugation on the yield of organic nanofibers. You will also employ a variety of microscopic and spectroscopic techniques.





Your contribution:
- Develop specific heating curves to optimize nanofiber growth in solution
- Employ centrifugation to improve nanofiber yield & quality
- Analyze nanofiber solutions with a variety of spectroscopic techniques
- Operate state-of-the-art equipment for spatially- and time-resolved spectroscopy

Contact us:
Learn more and get to know us:

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