



The shape of molecules to come – Sculpting molecular fragments and directing their assembly into superstructures

Master-thesis (Masterarbeit) or Internships (Praktikum)

Are you a problem-solver, an imaginative and creative thinker, with an idea for everything? Do you want to hone your skills creating new molecules from sketch to material, and haven't lost your passion for learning? Then we've got a job for you!

We are a fresh research team at the University of Zurich (www.rickhauslab.com). Our vision is to do innovative chemistry, combining the versatility of organic synthesis with the power of self-assembly. We strive to enable our students to deliver cutting-edge science while nurturing personality and team-play. Our team is international, made up of highly diverse backgrounds, experiences and personalities. What we don't know yet, we learn. What we can't learn, we create.

Ready to put on the white coat? We are looking for talented candidates, who share our passion for great science and a delightful sense of humor.

Your project

In this project, we develop curved π -surfaces that precisely stack to give unprecedented types of molecular wires. The properties of the wire depend on the nature of your building blocks, which we engineer by synthesis. The supramolecular, non-covalent nature of the wire allows the structure to self-heal when cut, to auto-correct errors and to respond to external stimuli like light, heat or pH.

This project involves both the synthesis of the building blocks and the study of their assembly in solution and in the solid-state.

What we expect from you

We look for highly motivated BSc and MSc students with a strong flair for organic chemistry and noncovalent interactions. You convince with your hands-on attitude, agility, ambition and creativity. You have a humble personality and engage work and people with enthusiasm and generosity. You show strong team orientation and problem-solving skills.

If YES, that's your thing then let us know! Also, feel free to reach out if you have questions.

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For us, only competencies count. Send us your application regardless of origin, age, gender, sexual orientation, religion, ideology or disability.