Stellingen
Behorende bij het proefschrift

Synthesis and characterization of squaramide-based supramolecular polymers

Francesca Lauria, Leiden, 2022

1. The aromatic character of squaramide is enhanced in a synergistic manner with the formation of strong and directional hydrogen bonds. This remarkable property renders the squaramide an attractive and minimalistic module for the design of supramolecular materials. **Chapter 1**, this thesis.

2. Supramolecular copolymerization is a powerful approach to modulate the properties of supramolecular materials. **Chapter 2**, this thesis.

3. Multicomponent reactions are a potent synthetic strategy to obtain molecules with high structural diversity and function in a single step with high yield. **Chapter 3**, this thesis.

4. The combination of trisquaric acid with other Ugi components can be exploited to prepare tripodal scaffolds for supramolecular assembly. **Chapter 3**, this thesis.

5. The influence of the monomer structure on the final supramolecular self-assembly still remains challenging and difficult to predict. **Chapter 4**, this thesis.

6. The balance of the hydrophobic and hydrophilic domains in the supramolecular monomer dictates their self-assembly in water. **Chapter 4**, this thesis.

7. The use of light activatable chemistries in supramolecular biomaterials is highly attractive as it provides opportunities for spatiotemporal control of mechanics and bioactivity. **Chapter 5**, this thesis.

8. PhD life is full of challenges, but it is…… never boring!

9. What motivates a scientist to never give up? Curiosity!