

The objective of this thesis was to investigate whether [2 + 2 + 2] cyclotrimerisation of aromatic triynes is a suitable method for preparation of helicenes containing sulfur. The thesis deals with the synthesis of dithia[5]helicene and thia[11]helicene. The aim of the theoretical part is to illustrate methods of synthesis of thiahelicenes that have already been prepared. It also describes the mechanism of the [2 + 2 + 2] cyclotrimerisation. The *Results and discussion* as well as the *Experimental part* focus on the synthesis of dithia[5]helicene and thia[11]helicene from the corresponding triyne and hexayne, respectively, as the key structures. A UV/Vis spectral analysis and cyclic voltammetry of the dithia[5]helicene was also performed.