## **Abstract**

**Charles University in Prague** 

Faculty of Pharmacy in Hradec Králové

**Department of Organic and Bioorganic Chemistry** 

Candidate: Marie Štemberová

Supervisor: prof. RNDr. Milan Pour, Ph.D.

Supervisor - specialist: PharmDr. Zbyněk Brůža, Ph.D.

Title of Diploma Thesis: Synthesis and reactivity of chosen derivates of [3]dendralenes

This diploma thesis is focused on the preparation of derivates of [3]dendralenes containing electron-withdrawing ester groups. The synthesis is based on a palladium-catalyzed Migita-Stille coupling between stannylated esters and iodinated acrylate which are prepared from methyl-propiolates.

Subsequently these dendralenes undergo Dien-transmissive Diels-Alder reaction with electron-deficient dienophile *N*-phenylmaleimide, resulting in formation of polycyclic structures.