

ABSTRACT

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Topic: Synthesis of anionic phthalocyanines

This diploma thesis focuses on the synthesis of anionic phthalocyanines with carboxylic groups for potential use in photodynamic therapy (PDT). The study outlines the importance of water solubility in photosensitizer design for effective PDT.

The synthesis process involved various reactions, including esterification, Suzuki-Miyaura cross-coupling, and cyclotetramerization, to create water-soluble compounds.

The experimental section details the steps taken to obtain the final products, highlighting the challenges faced, such as experimental errors and separation difficulties.

The results and discussion section analyzes the outcomes, emphasizing the significance of specific reaction conditions and purification techniques.

Overall, this work contributes to the development of anionic phthalocyanines with improved properties for PDT, aiming to enhance their efficacy.