

## **Abstract**

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Title of diploma thesis: Synthesis of alkylaminoderivates of phthalocyanines

The aim of my diploma thesis was the synthesis and the characterization of phthalocyanine alkylaminoderivates and the comparison of their photophysical and photochemical properties with similarly substituted azaphthalocyanines.

I start with the synthesis of dialkylaminodichlorophthalonitrile by the substitution of tetrachlorophthalonitrile. Then I use these derivates of tetrachlorophthalonitrile for cyclotetramerization reaction.

As a result of my work, I received only diethylaminosubstituted phthalocyanines with undesirable butoxy-substituents. I was not successful in the preparation of phthalocyanines substituted with cyclic amines by the used methods.

The prepared compounds were characterized by using the standard spectral methods (UV-VIS, IR,  $^1\text{H}$  NMR,  $^{13}\text{C}$  NMR, mass spectra).