

Abstract

Karagianni Styliani

Synthesis of 4-nitrosalicylanilide derivatives with potential antibacterial activity

Diploma thesis

Charles University in Prague, Faculty of Pharmacy in Hradec Kralove

Pharmacy

Background: The point of this diploma work was the synthesis of 4-nitrosalicylanilide derivatives, as a possible antibacterial agents against *Mycobacterium tuberculosis*.

Methods: All reactions were monitored, and the purity of products was verified by TLC in which the plates were coated with silica gel 60 F₂₅₄. They were also visualized using UV irradiation, while the column chromatography, was performed using silica gel 60.

The melting points of products were determined on a Melting Point apparatus and Büchi are uncorrected, IR spectra were recorded using ATR technique and the NMR spectra were measured in DMSO-*d*₆ or CDCl₃.

Results: The reactions between the starting compounds were successfully proceeded under the microwave reactor and the presence of chlorobenzene, trimethylamine and phosphorus trichloride.

Conclusion: Unfortunately some of the final products of these experiments were probably triethylamine salts of salicylanilides that was determined on NMR spectra.