

Téma diplomové práce	Synthesis of 4-nitrosalicylanilide derivatives with potential antibacterial activity
Jméno studenta, studentky	Karagianni Styliani
Jméno oponenta	RNDr. Patrik Čonka, PhD. (reviewer)

II. Posudek oponenta

Reviewer's report on the diploma thesis presented by Karagianni Styliani:

"Synthesis of 4-nitrosalicylanilide derivatives with potential antibacterial activity"

The aim of this work was to synthesize eight rather similar title compounds. The final compounds prepared were: 2-hydroxy-4-nitro-*N*-(4-nitrophenyl)benzamide, 2-hydroxy-4-nitro-*N*-(3-nitrophenyl)benzamide, 2-hydroxy-4-nitro-*N*-[4-nitro-3-(trifluoromethyl)phenyl]benzamide, 2-hydroxy-4-nitro-*N*-[4-(trifluoromethyl)phenyl]benzamide, 2-hydroxy-4-nitro-*N*-[3-(trifluoromethyl)phenyl]benzamide, *N*-(3,4-dichlorophenyl)-2-hydroxy-4-nitrobenzamide. Some of them are known in literature. The thesis includes introduction (focused on tuberculosis and its treatment, pathophysiology and appropriate drugs regiment). Project goal is very broad, without further commentary. The syntheses performed are described in experimental part void of discussion. The some compounds prepared were characterized by their melting points, IR and NMR spectra. The spectra are appended at the end of respective paragraph, unfortunately, without specific captions. Brief conclusion and bibliography-references close the thesis. Abstract in Czech and English is given at the beginning of the thesis. The thesis includes 43 pages.

I recommend the thesis to defense.

My questions:

- 1) Melting points of some compounds are given in your paper e. g. (p. 26) indicated not satisfactory purity. Do you know other possibilities of purification?
- 2) There are very low yields in some cases (p. 28 and p. 36), could you explain this fact?
What was the rest?

Navrhovaná klasifikace **Good**
V Hradci Králové dne 31. 5. 2013

Podpis oponenta diplomové práce