

CHARLES UNIVERSITY IN PRAGUE
FACULTY OF PHARMACY IN HRADEC KRALOVE
Department of Inorganic and Organic Chemistry

Pharmacy

Review of diploma thesis

Student: **Firdaus Shaban Swedi**

Mentor of the thesis: PharmDr. Karel Palát, CSc.

Year of the defence:

Reviewer of the thesis: doc. PharmDr. Miloš Macháček,
CSc.

2015

Title of diploma thesis:

“Synthesis of substituted arylguanidines as potential drugs XI

Formal comments: number of pages: 51, number of graphs: -, number of figures: -,

number of tables: -, number of references: 18

Type of work: Experimental

a) Aim of the thesis is: Fulfilled

b) Language and graphic level: Excellent

c) Processing of theory: Very good

d) Methods description: Excellent

e) Results description: Excellent

f) Discussion and conclusions: Very good

Reviewer comments: The thesis includes introduction, theoretical part (focused on guanidine derivatives with antifungal activity reported in the last years), and aim of the project (general reaction scheme for synthesis is presented here). The syntheses are described in experimental part and briefly discussed in discussion. Conclusion and references close the thesis. The goal of this project was to synthesize two N-[4-(alkylsulfanyl)-3-(trifluoromethyl)phenyl]-guanidines and their N',N'-dimethyl derivatives as antifungal agents. The prepared compounds were characterized by their melting points (wherever possible) and IR spectra. The structures of final compounds have been corroborated by ¹H NMR and ¹³C NMR data. The spectra are appended at the end of respective paragraph, but without specific captions. Neglecting that the numerical locants are no longer recommended even for general nomenclature of guanidine and its derivatives, the compounds are named correctly, except for intermediate 'ammonium' salts. Parentheses should be used around compound prefixes (these are missing in some cases) and square brackets should enclose substituent prefixes in which parentheses have already been used (instead parentheses are repeatedly used). Format of references is not uniform throughout the reference list. Journal titles are not given for ref. 6 and 7 (also pagination is missing in ref. 7) and ref. 9 and 12 were published in 2013 (not 2014). The reference to Chinese patent (ref 13) is incorrect.

Questions: ---

Evaluation of diploma thesis: Excellent, to defense: Recommended

In Hradec Kralove 27. 5. 2015

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