

## Abstract

Title of rigorous thesis: Pyrazine derivatives as potential antituberculous drugs

Author: Mgr. Michal Kašírek

In this rigorous thesis the research was realized which was focused on recent incidence of tuberculosis in the world, the possibility of present therapy and the new trends in therapy as well. This thesis dealt with synthesis of undocumented compounds in literature. The starting compound was 5-chloro-6-methylpyrazine-2,3-dicarbonitrile. The compounds were developed by aminodehalogenation reaction, linked to alkyl descriptor across *amino* group, whereas side chains were analogously extended. It can be said that the product was developed by reaction of 5-chloro-6-methylpyrazine-2,3-dicarbonitrile with corresponding primary aliphatic amine. Final compounds were characterized by melting point, TLC, elementary analysis,  $^1\text{H}$  and  $^{13}\text{C}$  NMR and IR. All compounds were liable *in vitro* testing on their biological activity – antimycobacterial, antifungal and antibacterial. In the group of antituberculosis testing the activity grew up from the least to the most lipophilic compound.