

## **Abstract**

Title of rigorous thesis:

### **Derivates of 5-methylpyrazine-2-carboxylic acid as potential drugs**

Introduction of rigorous thesis is about tuberculosis, its occurrence in the world, drug resistance, pathogenesis, diagnosis, prevention and treatment, about used and developed drugs. Further, I describe methods of carboxylic acid amides preparation, schemes of reactions and six prepared anilides. These are characterized by melting temperature, elemental analysis, IR,  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectroscopy. Synthesized compounds were tested *in vitro* for antituberculous, antifungal and herbicidal activity. Also values of lipophilicity  $\log P$  and  $\log K$  were gained. Relationship between biological activity, chemical structure and lipophilicity of prepared substances was evaluated.