

**Jaroslav Kukla**

**Otázky bezpečnosti moderních jaderných reaktorů**

**Bakalářská práce**

**Abstract:**

This study is concerned with safety factors of nuclear reactors. It summarizes history of nuclear reactors development and analyses causes of some serious accidents, which occurred in the past. It describes physical characteristics of radioactive radiation and mentions a basic survey of quantities and units. Then it describes the influence of radioactive emission on man and other living organisms. It also defines some reactor components and focuses on general security principles, which are further developed. It shortly explains the methods of evaluation of safety factors of nuclear reactors and a role of nuclear supervision. It puts nuclear reactors into several generations and every type of reactor is described as for technical and safety aspects, respectively. It refers to contemporary trends in development of nuclear reactors and in development of their safety.