



## Toetab TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" (FMTDK)

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## XPS CHARACTERIZATION OF INDIUM AND COPPER COVERED Mo SURFACE AFTER SELENISATION

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In this study we investigated the effect of In and Cu coverage on Mo to the composition of Mo surface layers formed in selenisation process. Mo/In and Mo/Cu layers were deposited by sputtering. Selenisation was performed by two different experimental set-ups: 1) selenisation in an isothermal sealed quartz ampoules at 500°C, in which the Se pressure was controlled by the amount of elemental Se in the ampoule and by the temperature of the process, and 2) selenisation in two-zone quartz reaction tubes, where the selenium vapour pressure was determined by the temperature of the inexhaustible Se source. Mo-substrates were selenised at 530°C. Temperature of selenium zone was fixed at 500 °C.

X-ray photoelectron spectroscopy (XPS) was used to characterize the surface chemical composition and the bulk of formed surface layers. The experimental results are discussed.