

## ABSTRACT

### MODIFICATION MESOPOROUS SILICA BY ANILINE AS Ni(II) CATALYST SUPPORT; SYNTHESIS AND THE CHARACTERIZATION ITS

By:

**Dina Putri Salim (BP : 1210413031)**

**Adviced by Dr. Syukri and Dr. Yetria Rilda**

Mesoporous silica has been synthesized and modified with aniline as a support for catalyst Ni (II). The XRD Characterization showed that the semi-crystalline mesoporous silica structure did not change after the modified. Based on FTIR analysis results, it can be concluded that the grafting process of metal ion Ni (II) has been successfully performed. The measurement results with AAS showed that the modified mesoporous silica with aniline has Ni-loading ability that relatively lower compared to mesoporous silica and amorphous silica which equal to 62%. While Ni-leaching support developed in this research has the best value of metal leaching than both of its competitors in the amount of 0.0082%.

**Keywords :** Nickel (II), grafting, support, mesoporous silica, metal leaching.

