

Study on Hydrodechlorination of STC to TCS Catalyzed by ordered mesoporous carbon

곽도환, 양오봉^{1,*}, M. Shaheer Akhtar¹

전북대학교; ¹전북대학교 화학공학부

(obyang@jbnu.ac.kr*)

Renewable energy, low carbon and green growth are recent concerned worldwide to the prevent the sudden climate changes. A called solar cell technology which convert direct sunlight energy into electricity is popularly used as a renewable energy source. Recent European Economic Crisis and entrance of China in the photovoltaic market are drastically reducing the prices of Polysilicon (SoG-Si) upto 20\$ or less. In this regard, most of Silicon solar cells companies and researchers are directed their reseaches for the reduction of Polysilicon production cost. Recently, the polysilicon from trichlorosilane (TCS) has been studied and reduced the production costs. In this experiment, the Pretreatment as stream ordered mesoporous carbon(MEC) catalyst of pretreatment as stream at 300°C showed the higher conversion rate of 10.8% than ordered mesoporous carbon of pretreatment as Oxygen at 300°C (5.7%), and ordered mesoporous carbon(3.28%)