

Zeolites and fine Chemistry : biomass application

The objective of this project is the use of different zeolites (HBEA, HZSM5, HMor) as catalyst to transform different molecules such as glycerol. Glycerol is a by-product of the synthesis of biodiesel. It is a cheap raw compound which can use to prepare some organic molecules which find many applications in chemistry. The project will be focused on the oxidation of glycerol by heterogeneous catalysis in gas phase. The zeolite can be modified with metal such as Fe, Ti to improve the catalytic properties and to control the acido-basic balance. During this work, the candidate must be prepare or modify the zeolite and to do the catalytic test.

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