Influence of Ti incorporation to mesoporous carbon structure for 2,5 DMF production by biomass.

Brenda Ledesma[1], Juliana Maria Juarez[1], Andrea Raquel Beltramone[1]
[1]Universidad TecnolÃ³gica Nacional, Cordoba, Argentina.

Several metal an bimettallics catalysts were prepared in order to evaluate performance to produce 2,5- dimethylfuran (2,5-DMF) trough hydrogenolysis of 5-(hydroxymethyl) furfural (5-HMF). Detailed physico-chemical characterisation was done in order to understand structure-activity correlation. Through a series of experiments and comparison, the synergistic effect among Pt, Ir, and Ti was investigated. The results revealed that the titanium contained in the ordered mesoporous carbon promotes a synergistic effect between Pt-Ir and Ti; that plays an important role in improving selectivity to DMF for PtIr / TiC bimetallic catalysts

Keywords: biomass, hydroximethylfurfural, 2,5-dimethylfuran

Acknowledgment:

NANOTEC, CONICET, Universidad Tecnológica Nacional, Maestro López y Cruz Roja Argentina. We acknowledge the Ã¯Â¬Â• nancial support provided by CONICET Argentina, PIP CONICET 11220120100218CO. 2014-2019

Presenting authors email: ledesmabrenda@gmail.com