STUDY OF SOLVENT EFFECT ON DISPERSION OF LT/Al2O3 CATALYST FOR FACILE SYNTHESIS OF CYCLIC CARBONATE FROM RENEWABLE SUGAR

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ABSTRACT

The previous approached to transform sugar into sugar carbonate was based on phosgene technique and pyridine as a base solvent which is seriously hazardous also overexposures will associate to illnesses. In short, the use of D-mannose and urea as feedstock are an advantage for waste into wealth besides being an environmentally friendly process to nature. Apart from that, the role of Aluminium oxide (Al2O3) supported Lanthanum triflate La(Otf)3 also were studied to enhance the catalytic process of 2,3-O-Carbonyl-α-Dmannopyranose synthesis.

KEYWORDS

Sugar; Cylic carbonate; Impregnation solvent; Lanthanum triflate; Al2O3.

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