Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information

Effect of water and methanol on the dissolution and gelatinization of corn starch in [MMIM][(MeO)HPO_2]

Jianan Shen, Leli Wang, Yongjun Men, Ying Wu, Qiaohong Peng, Xiaoling Wang, Rui Yang, Khalid Mahmood and Zhengping Liu*

BNU Lab of Environmentally Friendly and Functional Polymer Materials,

Beijing Key Laboratory of Energy Conversion and Storage Materials,

College of Chemistry, Beijing Normal University, Beijing 100875, PR China

Tel.:+86 10 58806896; fax:+86 10 58802075.E-mail address: lzp@bnu.edu.cn.

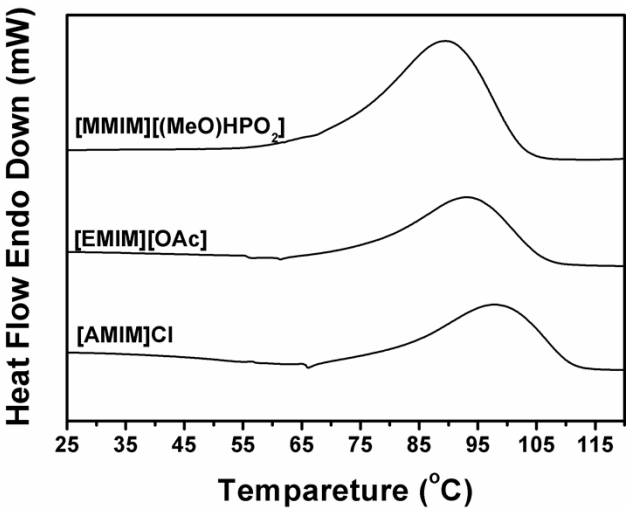

Figure S1. DSC curves of corn starch in different ionic liquids. Aluminum crucibles are heated from 25 °C to 120 °C at scanning rate of 5 °C/min.

Table S1. DSC data of 10 wt% corn starch in different ionic liquids.[a]

Ionic liquids	T_o (°C)	T_p (°C)	T_e (°C)	ΔH (J g^{-1})
[MMIM][(MeO)HPO_2]	70	90	103	14.02
[EMIM][OAc]	75	93	107	12.00
[AMIM]Cl	78	98	111	9.01

[a] T_o: onset temperature; T_p: peak temperature; T_e: endset temperature; ΔH: transition enthalpy.

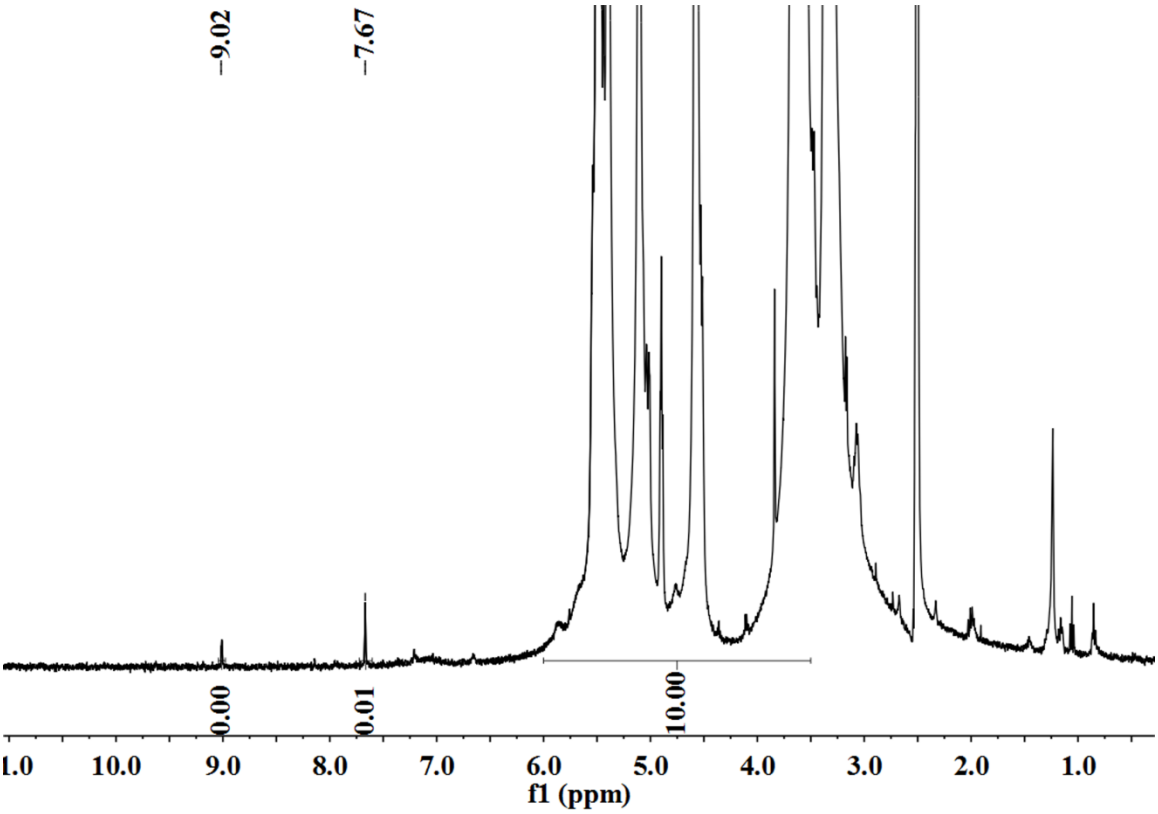

Figure S2. ^{1}H NMR spectrum of regenerated starch after dissolved in [MMIM][(MeO)HPO_2] at 80 ^{o}C for 50 min.