

ESI

Efficient microwave-assisted production of furfural from C₅ sugars in aqueous media catalysed by Brønsted acidic ionic liquids

Juan C. Serrano-Ruiz^{a*}, Juan M. Campelo^a, Matteo Francavilla^a, Antonio A. Romero^a, Rafael Luque^a, Carmen Menéndez-Vázquez^b, Ana B. García^b, Eduardo J. García-Suárez^{b*}

^a*Departamento de Química Orgánica, Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie, Ctra Nnal IV-A, Km 396, E14014, Córdoba (Spain). Fax: +34 957212066; Tel: +34957211050; q62alsor@uco.es*

^b*Grupo de Materiales de Carbono para Aplicaciones en Catálisis, Energía y Medioambiente, Departamento de Procesos Químicos en Energía y Medio Ambiente, Instituto Nacional del Carbón (CSIC), Francisco Pintado Fe 26, 33011 Oviedo, Spain. Fax: +34 985297662; Tel: +34985119004; eduardo@incar.csic.es*

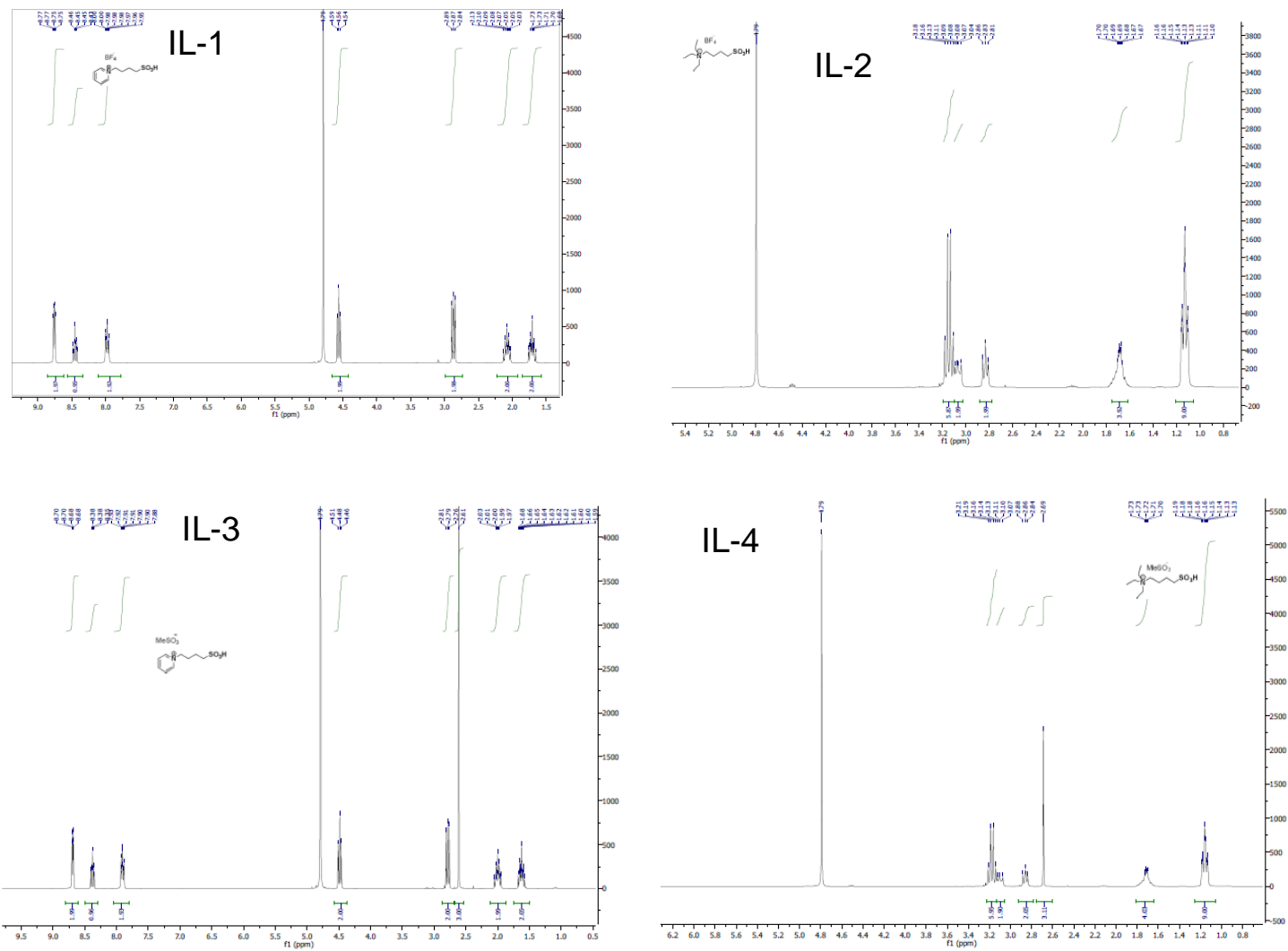


Figure S1. NMR spectra of fresh IL prepared before the reaction

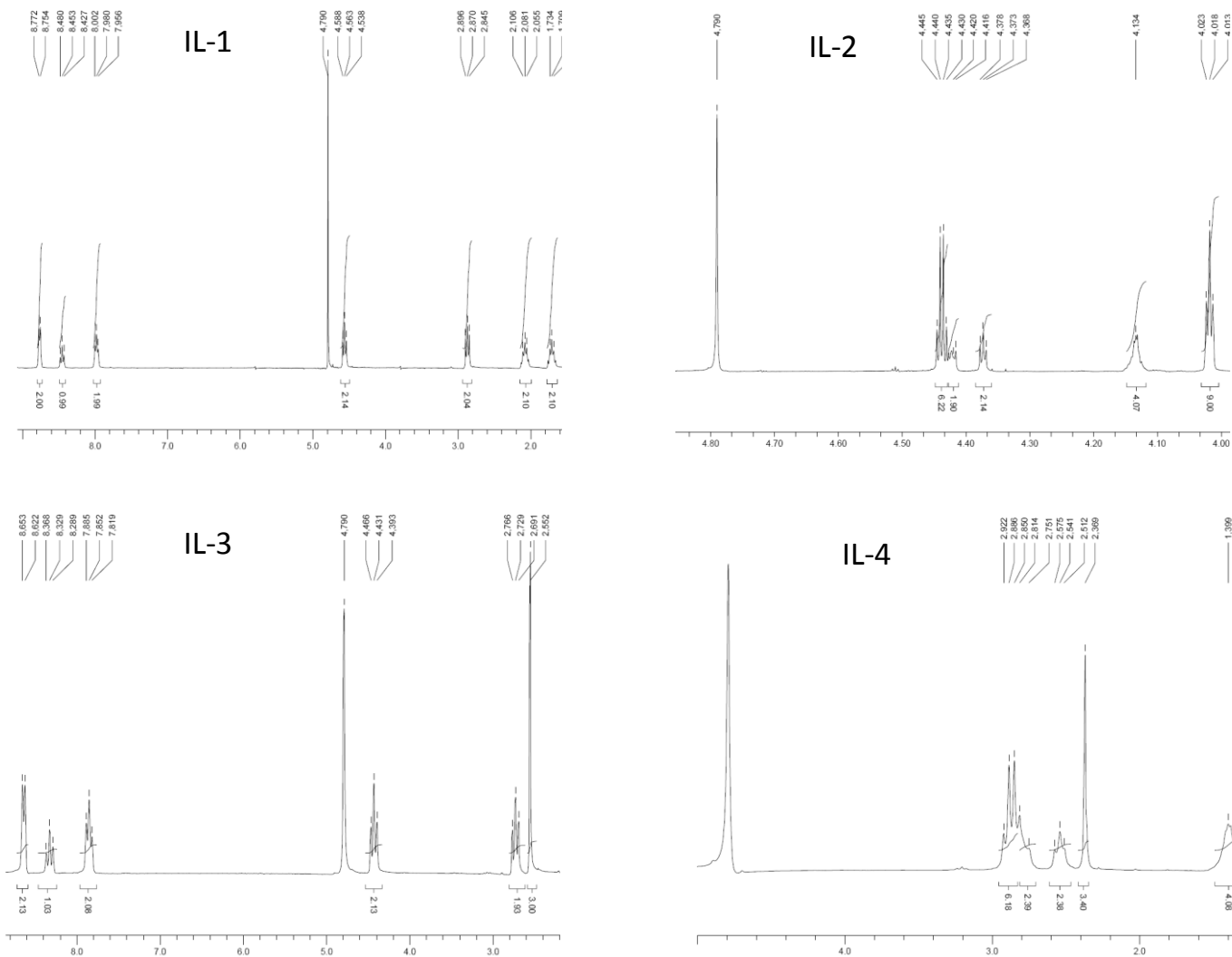


Figure S2. NMR spectra of treated IL under the investigated reaction conditions

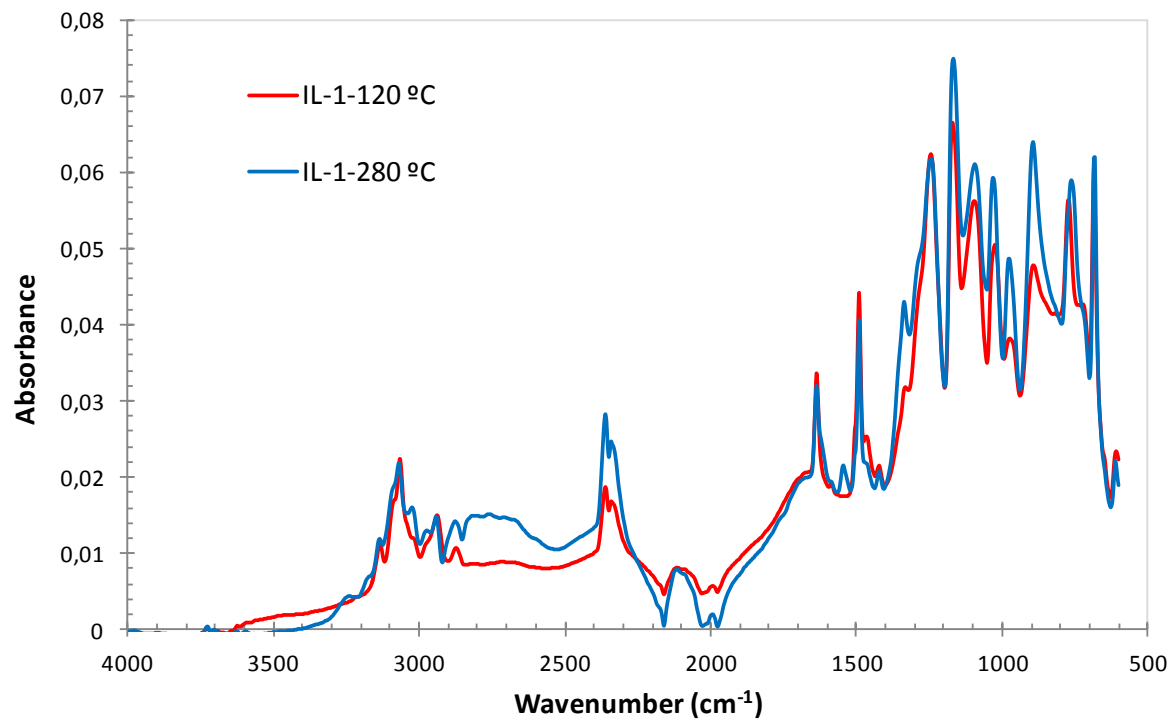


Figure S3. IR spectra of IL-1 treated at 120°C and 280°C, respectively, for 2 h showing there are no differences (except some removed water) between the structure of the IL after heating up.

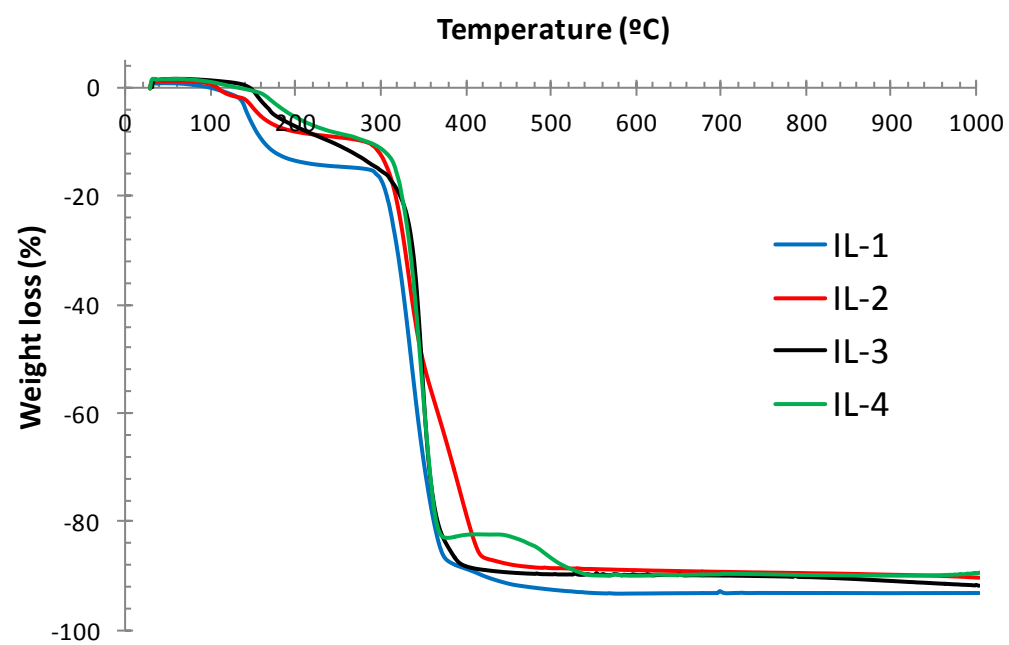


Figure S4. TG experiments (RT-1000°C) of the IL investigated in the work showing an almost negligible mass loss (<10%) in the RT to 200°C range.