

SUPPORTING INFORMATION

# Development of sustainable thermosets from cardanol-based epoxy prepolymer and ionic liquids

*Thi Khanh Ly Nguyen<sup>1</sup>, Sébastien Livi<sup>1\*</sup>, Bluma. G. Soares<sup>2</sup>, Guilherme M.O. Barra<sup>3</sup>,*

*Jean-François Gérard<sup>1</sup>, Jannick Duchet-Rumeau<sup>1</sup>*

<sup>1</sup>Université de Lyon, F-69003, Lyon, France; INSA Lyon, F-69621, Villeurbanne, France CNRS,  
UMR 5223, Ingénierie des Matériaux Polymères.

<sup>2</sup>Universidade Federal do Rio de Janeiro, PEMM-COPPE, Centro de Tecnologia, 21941-972 Rio  
de Janeiro, Brazil

<sup>3</sup>Universidade Federal de Santa Catarina, Departamento de Engenharia Mecânica, Florianópolis,  
SC, Brazil

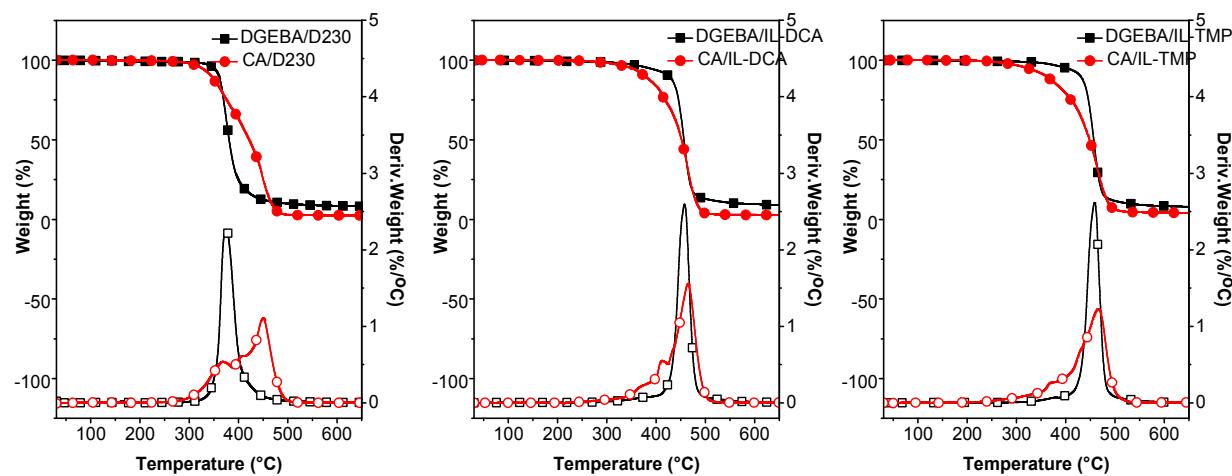
Number of pages: 3

Number of Figures: 3

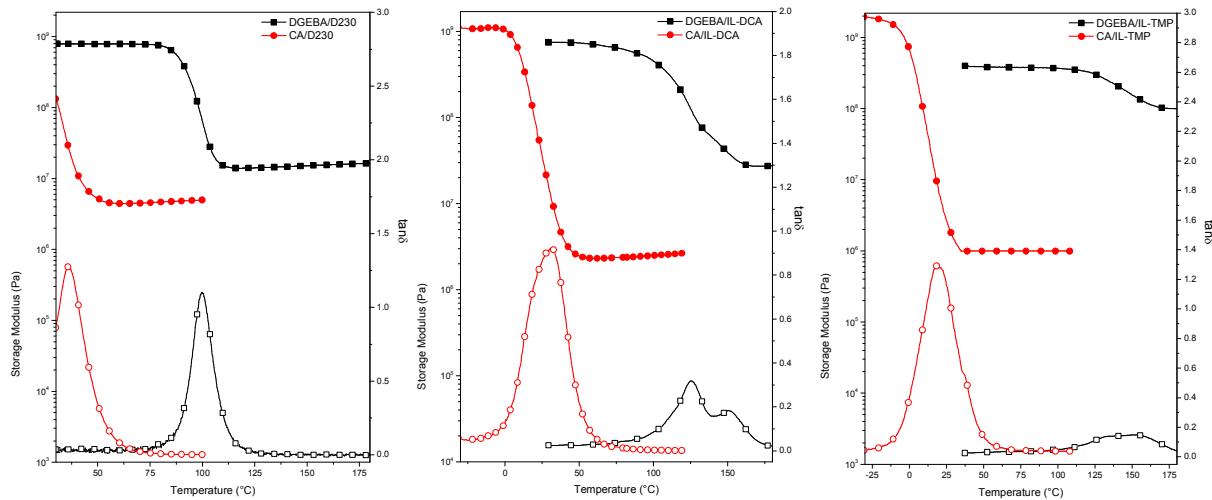
Number of Tables: 1

**Table S1 Concentration of reactive additives (ILs or amine)**

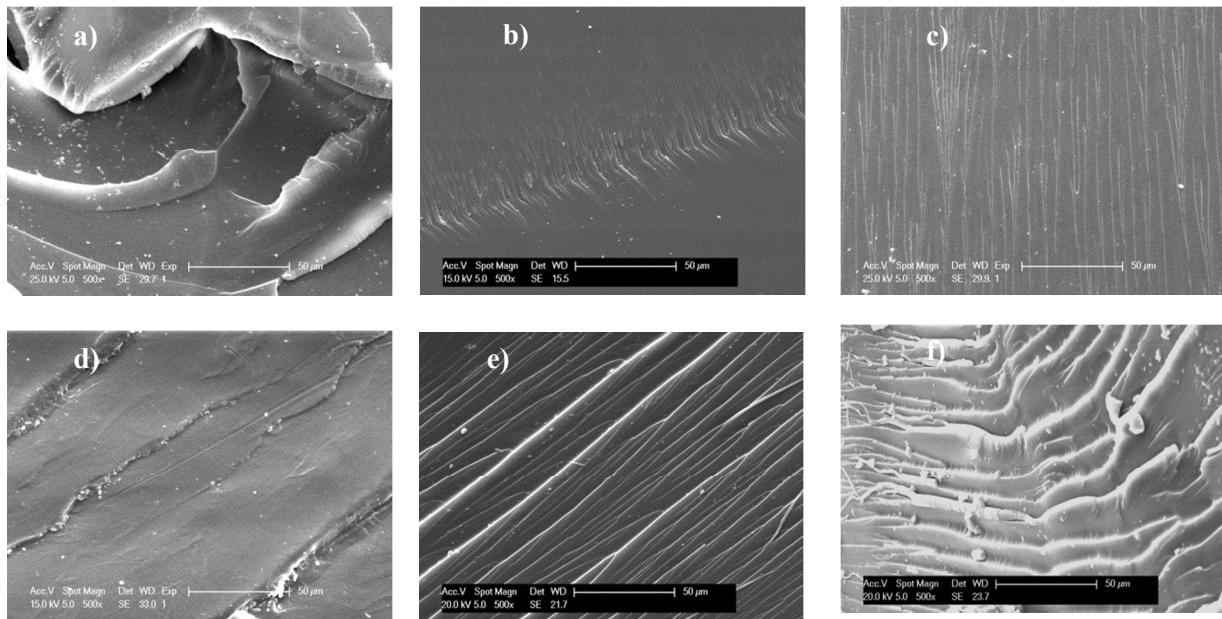
Systems	Concentration of ILs or D230	
	phr	Mol per epoxide equivalent
DGEBA/D230	34	1
CA/D230	12	1
DGEBA/IL-DCA	10	0.03
CA/IL-DCA	10	0.09
DGEBA/IL-TMP	10	0.02
CA/IL-TMP	10	0.07
CA-modified DGEBA/D230	36	1
CA-modified DGEBA/IL-DCA	10	0.02
CA-modified DGEBA/IL-TMP	10	0.03



**Figure S1** TGA and DTG curves of epoxy networks based on DGEBA ((■,□)) or CA (●,○) cured with D230 (right), IL-DCA (middle) and IL-TMP (left)



**Figure S2** DMA analysis ( $E'$ ,  $\tan\delta$ ) of epoxy networks based on DGEBA (■, □) or CA (●, ○) cured with D230 (right), IL-DCA (middle) and IL-TMP (left).



**Figure S3** Fracture surface of unmodified (a,b,c) and CA-modified epoxy networks containing 10 phr of CA (d,e,f) cured with D230 (a,d), IL-DCA (b,e) and IL-TMP (c,f).