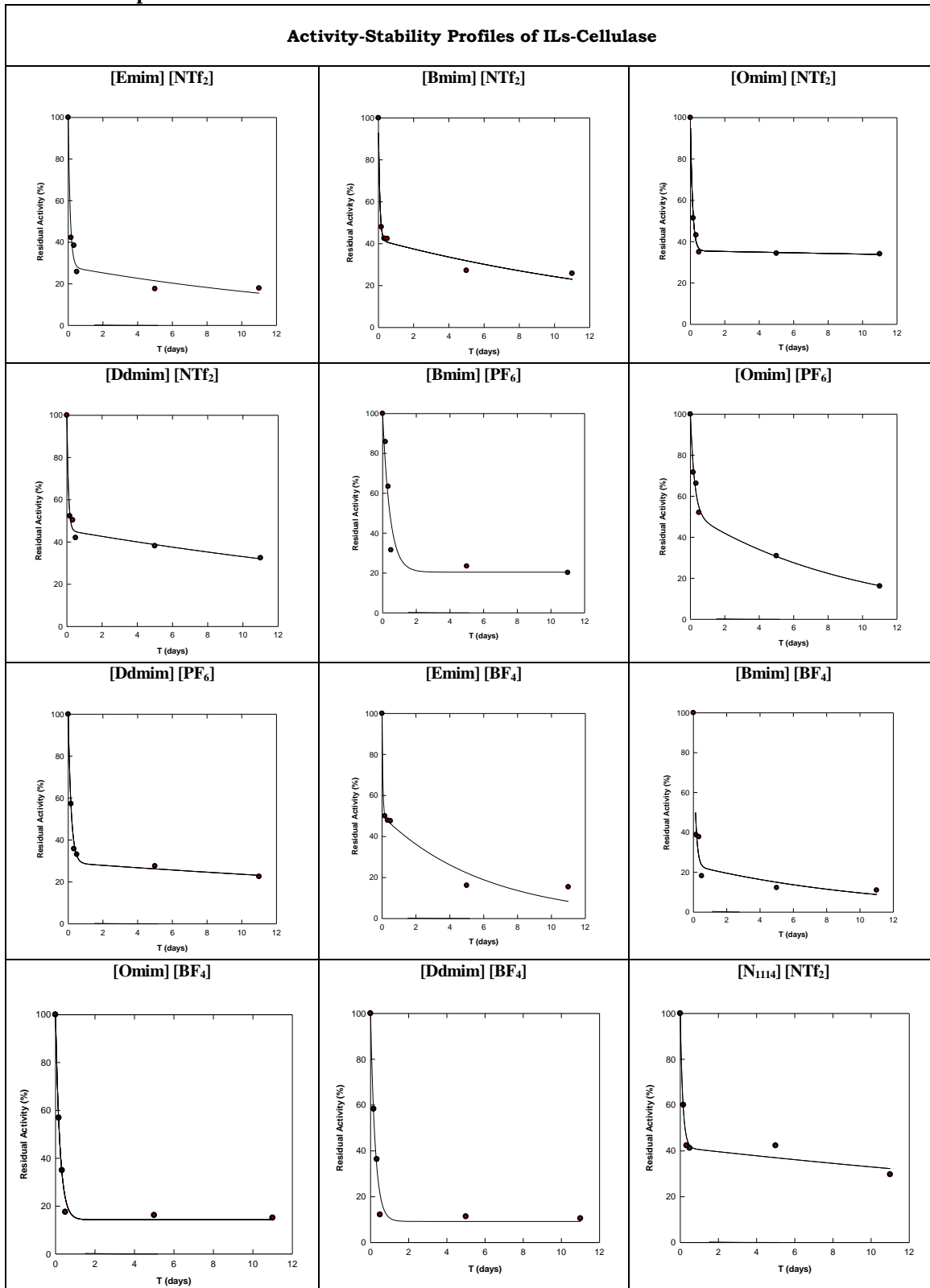


ELECTRONIC SUPPORTING INFORMATION

Stabilizing immobilized cellulase by ionic liquids for saccharification of cellulose solutions in 1-butyl-3-methylimidazolium chloride.

Pedro Lozano, Berenice Bernal, Juana M. Bernal, Mathieu Pucheault and Michel Vaultier*

Deactivation profiles of immobilize cellulase onto Ambelite XAD4 in different ILs at 80 °C



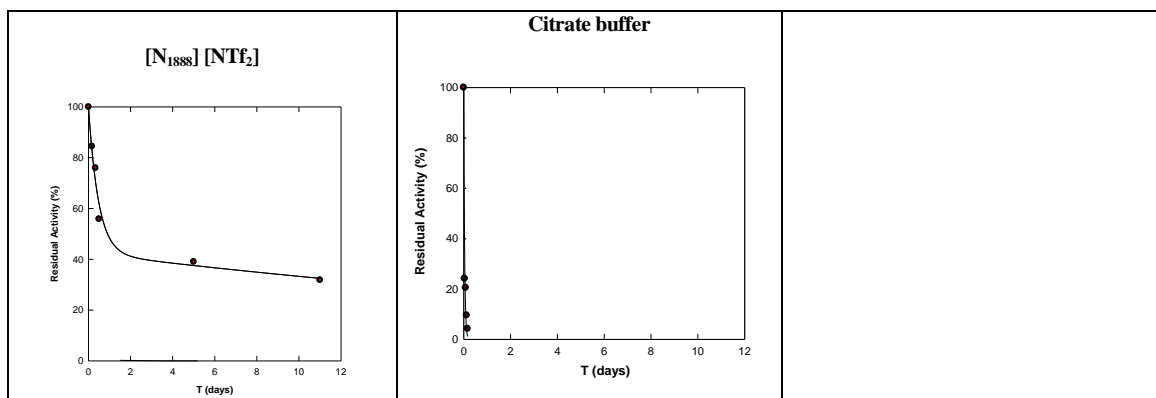


Table 1. Kinetic Parameters of immobilized cellulase deactivation in different IL media at 80 °C. (See Ref. 12a for kinetic equations)

Ionic liquid	$t_{1/2}$ (h)	α_1	α_2	$K_1(\text{days}^{-1})$	$K_2(\text{days}^{-1})$	Residual Activity at 5 d (%)
[Emim] [NTf ₂]	3.24	0.2801	0	8.6271	0.0543	17.6
[Bmim] [NTf ₂]	3.48	0.4159	0	12.8568	0.0542	27.2
[Omim] [NTf ₂]	4.44	0.3555	0	7.9469	0.0046	34.3
[Ddmim] [NTf ₂]	5.16	0.4535	0	11.4512	0.0318	38.2
[Bmim] [PF ₆]	10.32	0.2043	0	2.3053	$1.99 \cdot 10^{-10}$	23.4
[Omim] [PF ₆]	17.53	0.5043	0	4.2915	0.1046	30.9
[Ddmim] [PF ₆]	4.64	0.2899	0	5.9394	0.0207	27.6
[Emim] [BF ₄]	3.61	0.4979	0	22.4047	0.1625	16.1
[Bmim] [BF ₄]	3.09	0.2306	0	8.1244	0.0882	17.1
[Omim] [BF ₄]	4.64	0.1432	0	4.5197	$3.868 \cdot 10^{-10}$	19.8
[Ddmim] [BF ₄]	4.64	0.0921	0	4.0743	$9.44 \cdot 10^{-10}$	11.6
[N1114] [NTf ₂]	6.19	0.4138	0	7.6121	0.0229	42.3
[N1888] [NTf ₂]	21.66	0.4187	0	2.1004	0.0241	39.1
Citrate buffer	0.37	$1.2340 \cdot 10^{-7}$	0	26.5665	250777084	0