Supporting Information for

Diffusion-Viscosity Decoupling in Solute Rotation and Solvent Relaxation of Coumarin153 in Ionic Liquids Containing Fluoroalkylphosphate (FAP) Anion: A thermophysical and photophysical study

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TABLE S1: Experimental dynamic viscosity (η) and density for [MOEMPL][FAP] and [MOEMMO] [FAP] as a function of temperature

	η/cP		ρ/gm cm^{-3}	
Temp.(K)	[MOEMPL][FAP]	[MOEMMO][FAP]	[MOEMPL][FAP]	[MOEMMO][FAP]
293	128	1004	1.634230	1.680979
298	98	657	1.628792	1.675603
303	75	438	1.623288	1.670098
308	57	301	1.617759	1.664575
313	46	214	1.612191	1.659044
318	37	154	1.606593	1.653693
323	30	114	1.600976	1.648369

Experimental errors are ±5%

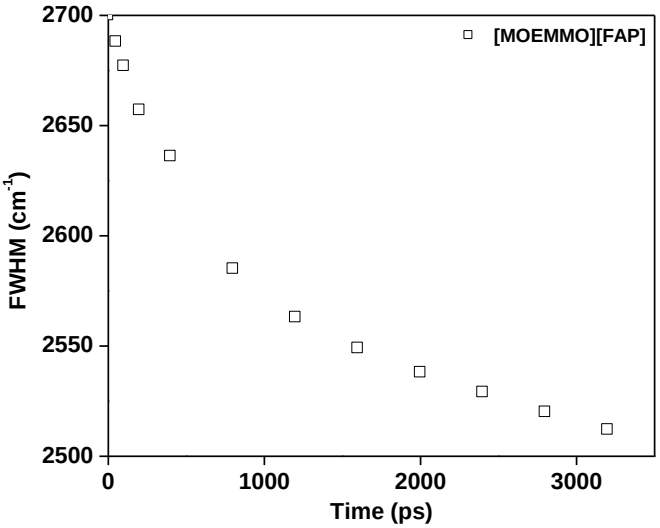

Figure S1: Plot of full width half maxima (FWHM), obtained from several time resolved emission spectra of C153 in [MOEMMO][FAP] at 293K at $\lambda_{exc.}$=405 nm.

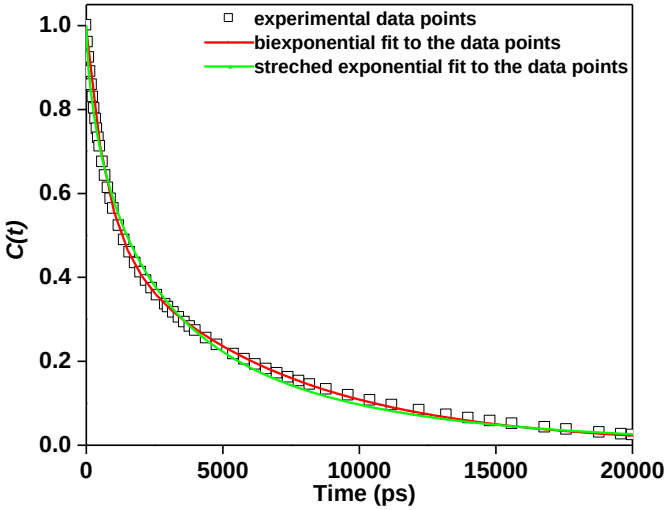

Figure S2. Biexponential and stretched exponential fits to spectral correlation function, *C (t)* versus time plot of C153 in [MOEMMO][FAP] at 293 K at λ_{ex}= 405 nm. Symbols are denoting the data points and solid lines represent the corresponding fit to the data points.