

# CONCENTRATED ASSEMBLIES OF MAGNETIC NANOPARTICLES IN IONIC LIQUIDS

MARIANNA MAMUSA, JULIETTE SIRIEIX-PLÉNET, RÉGINE PERZYNSKI , FABRICE COUSIN,  
EMMANUELLE DUBOIS, VÉRONIQUE PEYRE

## SUPPLEMENTARY INFORMATION

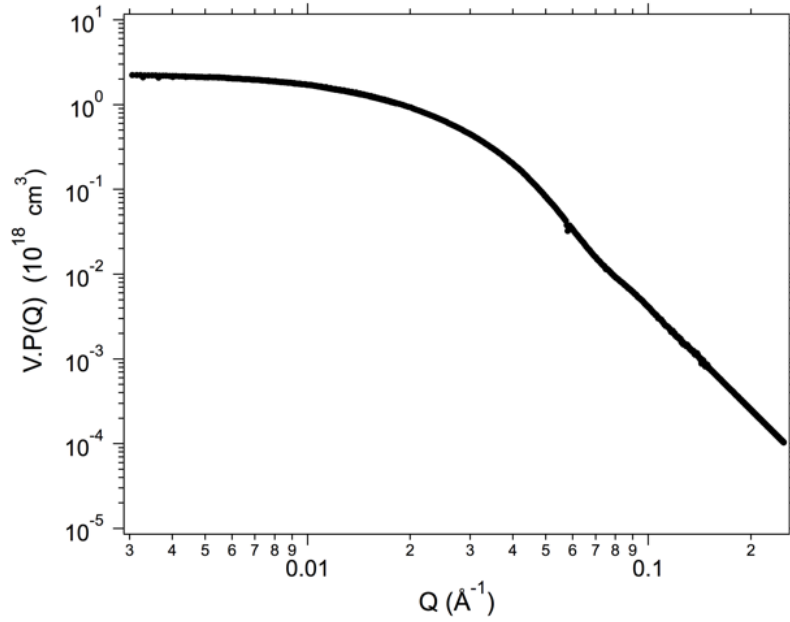


FIGURE 1. Experimental form factor  $P(Q)$  for the maghemite particles used in the present work, normalized to the maghemite/EAN contrast  $\Delta\rho^2$  and to a volume fraction of particles  $\Phi=0.01$

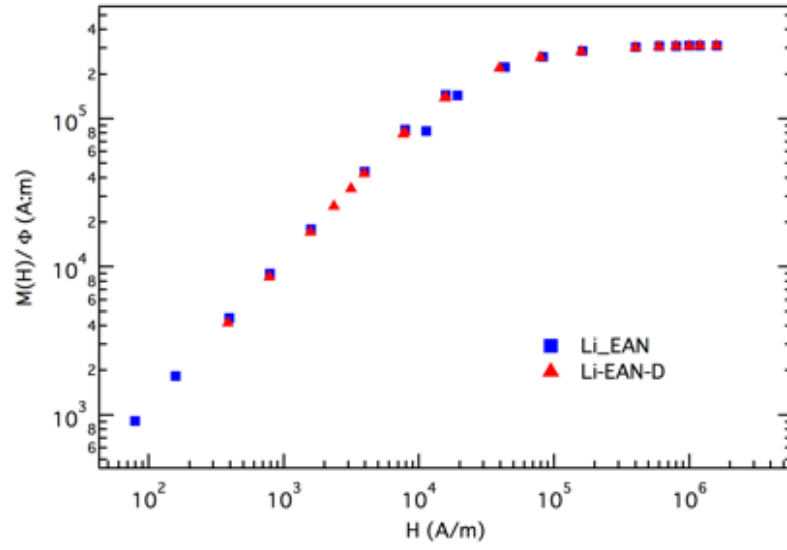


FIGURE 2. Magnetization  $M$  normalized by the volume fraction  $\Phi$  for the two dilute samples with lithium counterions, Li-EAN and Li-EAN-D.

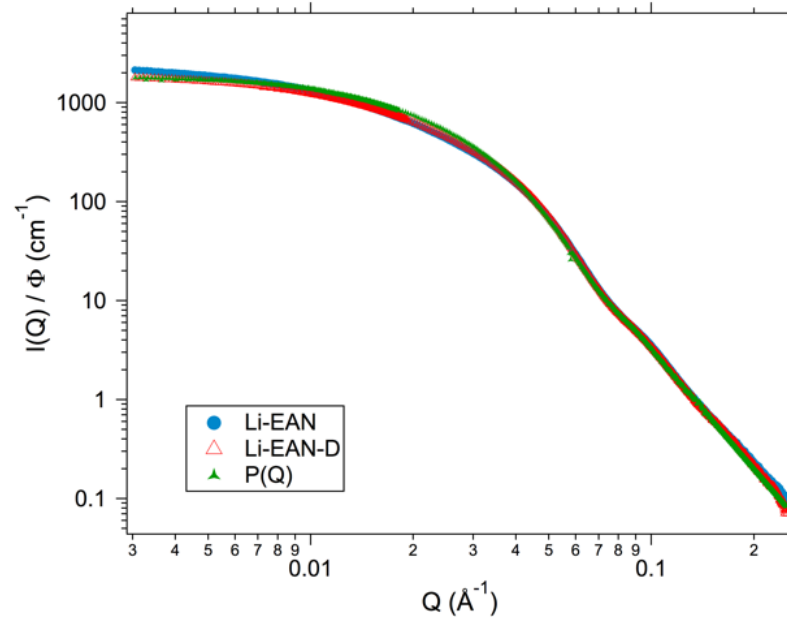


FIGURE 3. Normalized SAXS intensity for dilute Li samples in EAN. Comparison with the normalized form factor  $P(Q)$ .

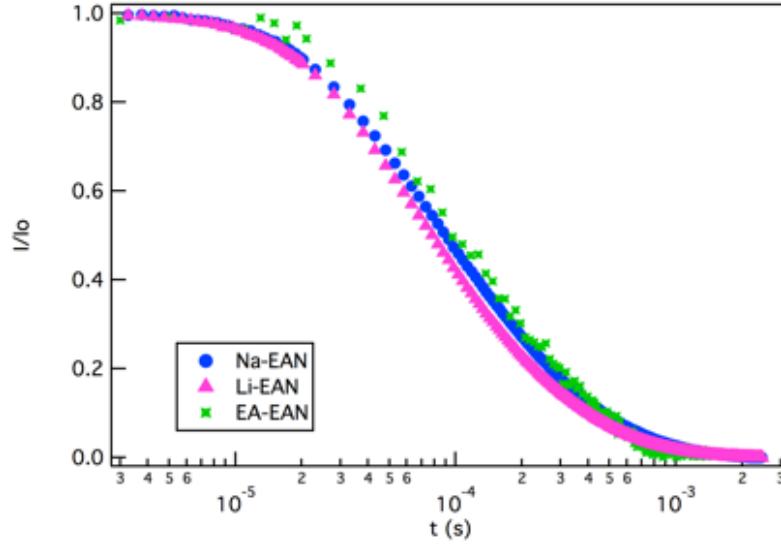


FIGURE 4. Normalized intensity versus time extracted from magneto-optic birefringence experiments on the dilute samples in EAN with the three different initial counterions in water (samples of Table 2 in the article).

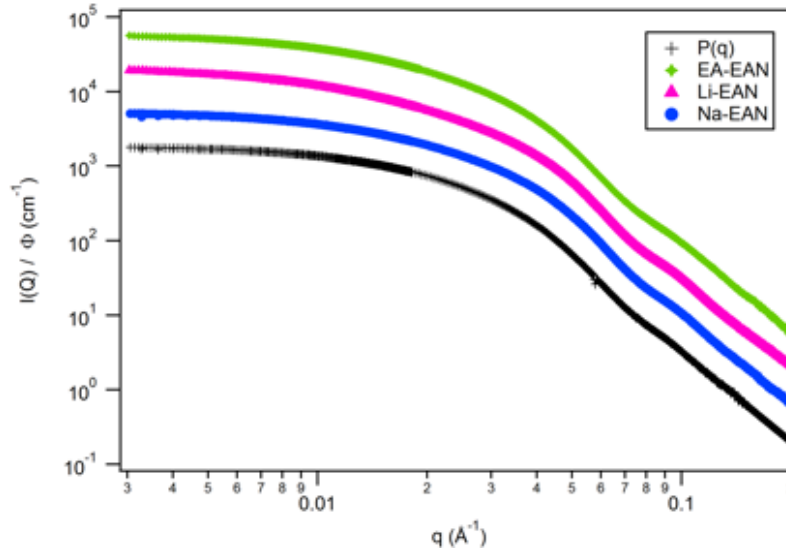


FIGURE 5. SAXS intensity for the dilute phases of the three two-phases samples with the three initial counterions (samples of Table 2 in the article), and experimental form factor. The curves are shifted for clarity by a factor of 3.