

# Empirical Polarity Parameters for Hexaalkylguanidinium-based Room-temperature Ionic Liquids

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The polarity of a series of 36 hexaalkylguanidinium-based room-temperature ionic liquids (RTILs), featuring different unbranched alkyl substituents in the cation and eight different anions, has been determined by means of Reichardt's solvatochromic betaine dye;  $E_T(30)$  and the corresponding normalized  $E_T^N$  values are presented. The positively solvatochromic probe 5-dimethylamino-5'-nitro-2,2'-bithiophene was used to characterize unspecific solvent/solute interactions (effects of dipolarity/polarizability) of ten hexaalkylguanidinium and, for comparison, two 1-alkyl-3-methylimidazolium ionic liquids.

*Key words:* Ionic Liquids, Polarity, Hexaalkylguanidinium Salts, Reichardt's Dye,  
5-Dimethylamino-5'-nitro-2,2'-bithiophene