Synthesis of Novel Chiral Substituted Bis(ethylenedithio)tetrathiafulvalene (BEDT-TTF) Derivatives

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The synthesis of chiral BEDT-TTF organosulfur donors has received much interest over recent years following observations by Rikken *et al*. of magnetochiral anisotropy in carbon nanotubes,[1] while the introduction of hydrogen bonding groups has the potential for linking to other molecular systems and also promoting ordering of the radical cation salts. We were interested in the synthesis of functionalised chiral BEDT-TTF donors with an aim to provide systems for use in investigations of the effects of chirality and for possible use in multi-functional materials. The synthesis of several novel chiral donors, such as in Figure 1, for introducing chirality and functionalities capable of hydrogen bonding, will be discussed.

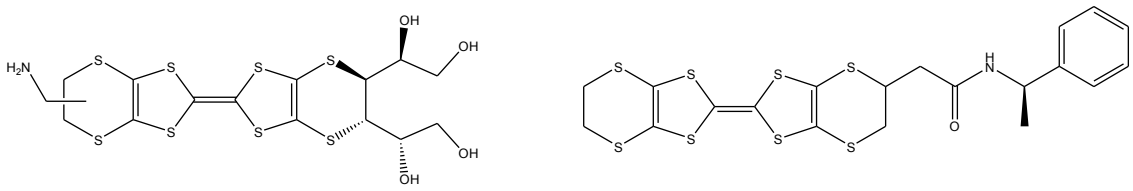

Figure 1

[1]V.Kristic, S. Roth, M. Burghard, K. Kern and G.L.J.A. Rikken, *J. Chem. Phys*. 117 (2002) 11315; V. Kristic and G.L.J.A. Rikken, *Chem. Phys. Lett.* 364 (2002) 51.