

Phthalocyanine-fullerene Based Photoactive Ensembles

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Phthalocyanines (**Pc**) and related analogues¹ have drawn considerable attention as new molecular materials that give rise to improved electronic and optical properties. Owing to the unique redox- and photochemical features of **Pcs**, the design of linked **Pc-C₆₀** systems appears particularly promising.

Recently we have reported on the electrochemical and photophysical properties of several **Pc-C₆₀** systems.² To the best of our knowledge, photoinduced energy / electron transfer events had never been studied in linked **Pc-C₆₀** dyads.

In this communication we present our recent advances on the synthesis and properties of covalently and non-covalently linked phthalocyanine-C₆₀ ensembles and related systems.

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2. a) A. Sastre, A. Gouloumis, P. Vazquez, T. Torres, V. Doan, B.J. Schwartz, F. Wudl, L. Echegoyen, J. Rivera, *Org. Lett.*, **1**, 1807 (1999). b) A. Gouloumis, S. Liu, A. Sastre, P. Vazquez, L. Echegoyen, T. Torres, *Chem. Eur. J.*, **6**, 3600 (2000). c) D. González-Rodríguez, T. Torres, D. M. Guldi, J. Rivera and L. Echegoyen, *Org. Letters*, **4**, 335 (2002). d) D. M. Guldi, J. Ramey, M.V. Martínez-Díaz, A. de la Escosura, T. Torres, M. Prato, *Chem. Commun.*, in press. e) D. M. Guldi, A. Gouloumis, P. Vázquez, T. Torres, *Chem. Commun.*, 2056 (2002).

