

Supramolecular Fullerene-containing Photoactive Devices

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In light of their unique electronic properties, fullerene derivatives are suitable building blocks for the preparation of molecular devices displaying photoinduced energy and electron transfer processes.¹ Whereas research focused on the use of C₆₀ as the acceptor in covalently bound donor-acceptor pairs has received considerable attention,¹ only a few related examples of fullerene-containing non-covalent assemblies have been described so far. As part of our research on compounds combining C₆₀ with electron and/or energy donors, we have decided to develop various non-covalent approaches for their preparation.² The assembly of the different molecular components by using supramolecular interactions rather than covalent chemistry appears particularly attractive since the range of systems that can be investigated is not severely limited by the synthetic route. In this paper, we will report on our latest advances in this field.

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References

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