

Fullerene-rich Macromolecules

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Among the various electro- and photoactive chromophores used as building blocks in dendrimer chemistry, C_{60} appears to be quite versatile and growing interest is developing in fullerene-functionalized dendrimers, i.e. *fullerodendrimers*.¹ C_{60} itself is a convenient core for dendrimers since its almost spherical shape leads to globular systems even with low-generation dendrons. Furthermore, the unusual chemical and physical properties of fullerene derivatives make fullerodendrimers attractive candidates for a variety of interesting features in supramolecular chemistry and materials science. Following the preparation and study of dendrimers with a C_{60} core, we have recently succeeded in the preparation of dendrons with peripheral C_{60} subunits or containing a C_{60} sphere at each branching unit.²⁻³ These fullerodendrons are interesting building blocks for the preparation of monodisperse fullerene-rich macromolecules with intriguing properties.⁴ Herein, we will report on our latest advances in this field.

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References

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