

Cover Picture

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The cover picture shows the single-crystal X-ray structure for $C_{60}F_{18}$, the first fully characterized aromatic fullerene, possessing a flat and fully delocalized hexagonal benzenoid ring embedded at the center of the fluorinated crown. The bond lengths in this hexagon are all of equal length (1.372 Å). The un-addended part of the molecule possesses the normal C_{60} fullerene structure so that the overall appearance is that of a tortoise shell. $C_{60}F_{18}$ is potentially an important building block for donor–acceptor derivatives with photovoltaic/photonic applications, combining enhanced cage electron withdrawal, with a vacant area for location of donors. The unique geometry also makes the molecule a hexasubstituted benzene, which may be able to participate in η^6 coordination to metallic species. Details on this tortoise molecule are described by Slovokhotov, Boltalina, and Taylor et al. on p. 3273 ff.

