

Supporting Information

Chemical Communication b912839e

Cage connectivities of C₈₈ (33) and C₉₂ (82) fullerenes captured as trifluoromethyl derivatives, C₈₈(CF₃)₁₈ and C₉₂(CF₃)₁₆

S. I. Troyanov and N. B. Tamm

The sublimed C_m(CF₃)_n mixture was dissolved in hexane and subjected to HPLC separation with the use of a WATERS 1500 chromatographic system, a Cosmosil Buckyprep column (10×250 mm, Nacalai Tesque Corp.) and hexane as the eluent, monitored at 290 nm. A chromatogram of the mixture is presented in Figure S1. The positions of fractions 15 and 34 eluted at 6.83 and 37.2 min, respectively, are shown. Fraction 15 contained three main components, C₈₂(CF₃)₁₄, C₈₆(CF₃)₁₆, and C₉₂(CF₃)₁₆, whereas fraction 34 contained C₈₈(CF₃)₁₈ as the main component according to MALDI MS analyses.

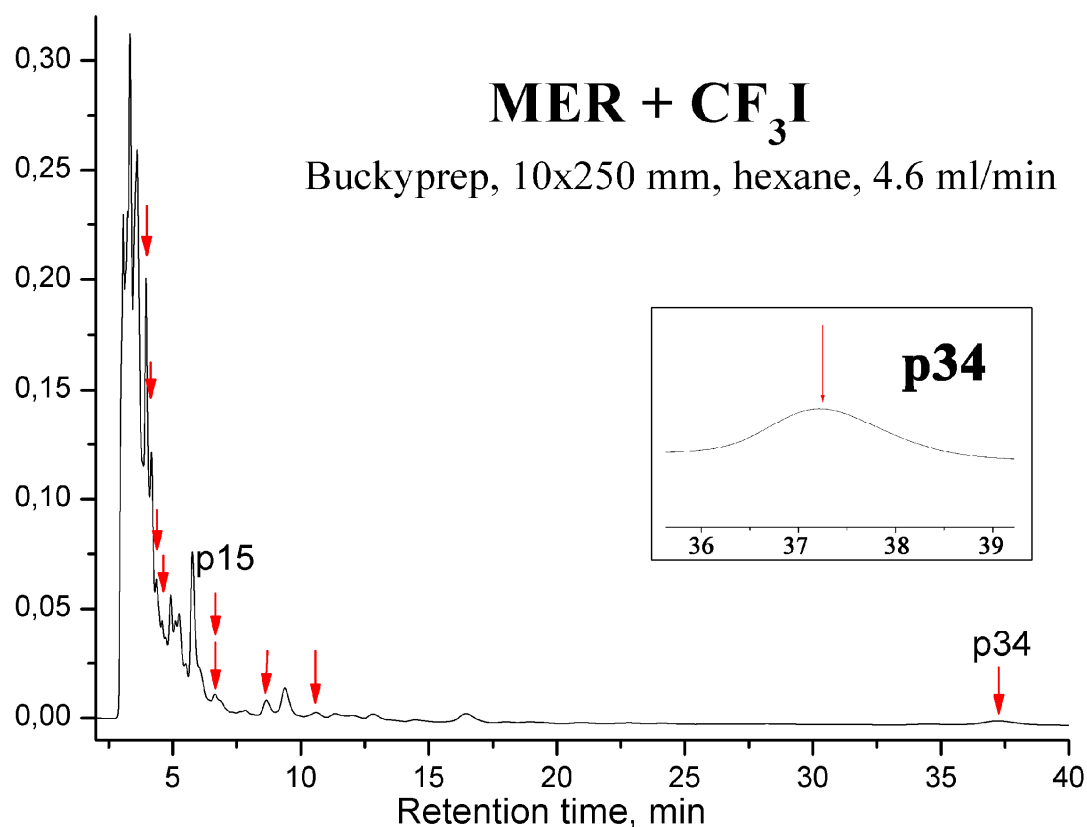


Fig. S1. HPLC trace of the mixture of trifluoromethylated higher fullerenes recorded in hexane. Red arrows denote the fractions which afforded crystalline materials. Crystals of C₈₆(CF₃)₁₆ [S1] and C₉₂(CF₃)₁₆ were obtained from fraction p15, whereas fraction p34 gave crystals of C₈₈(CF₃)₁₈.

[S1] S. I. Troyanov and N. B. Tamm, *Crystallogr. Rep.* 2009, **54**, 598.