

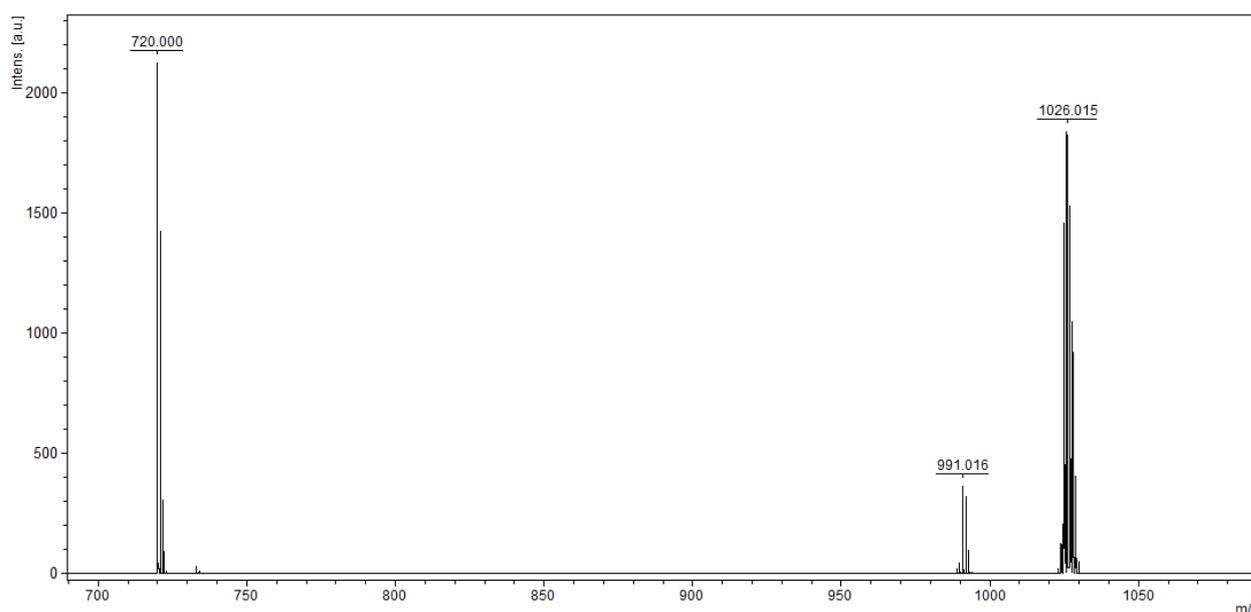
Covalent binding of fullerene C₆₀ to dithienylethene as a promising approach to the preparation of new photochromic compounds

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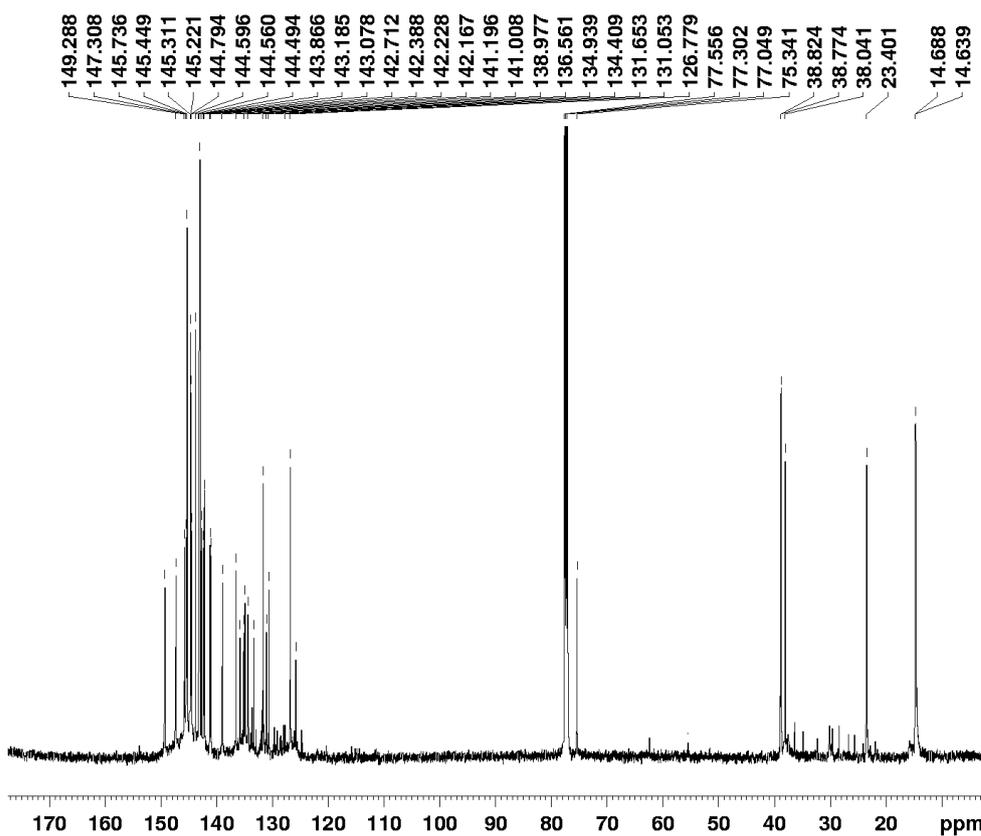
The spectrophotometric measurements were performed on a CARY 50bio spectrophotometer (Varian) in 2- and 10-mm thick quartz cells. For photochemical measurements, the solutions were irradiated by an L8253 xenon lamp included in an LC-4 radiation unit (Hamamatsu) at a medium radiation power through colour glass filters, UFS-1 (~51.2 W/m² in the 235-400 nm range and 2.7 W/m² in the visible range) and ZhS-16 (~0.1 W/m² in the 235-400 nm range and 20.76 W/m² in the visible range), and with unfiltered light (~72.6 W/m² in the 235-400 nm range and 56.0 W/m² in the visible range).

Methanofullerene 2: brown powder. ¹H NMR (500 MHz, CDCl₃): δ = 1.97 (s, 3H), 2.11-2.15 (m, 2H), 2.17 (s, 3H), 2.81 (t, *J* = 5 Hz, 2H), 2.92 (t, *J* = 5 Hz, 2H), 5.30 (s, 1H), 6.63 (s, 1H), 7.20 (s, 1H) ppm. ¹³C NMR (125 MHz, CDCl₃): δ = 14.64, 14.68, 23.40, 38.04, 38.77, 38.82, 75.34, 125.80, 126.78, 131.05, 131.65, 133.37, 134.41, 134.87, 134.94, 135.15, 136.56, 138.98, 141.01, 141.20, 142.17, 142.23, 142.39, 142.71, 143.08, 143.19, 143.87, 144.50, 144.56, 144.60, 144.79, 145.22, 145.28, 145.31, 145.45, 145.74, 147.31, 149.29 ppm. MS (MALDI TOF/TOF): calcd. for C₇₆H₁₅ClS₂ [M]⁺ 1026.030; found 1026.015.

MS MALDI TOF/TOF



¹³C



Current Data Parameters
NAME KAA-1136
EXPNO 13
PROCNO 1

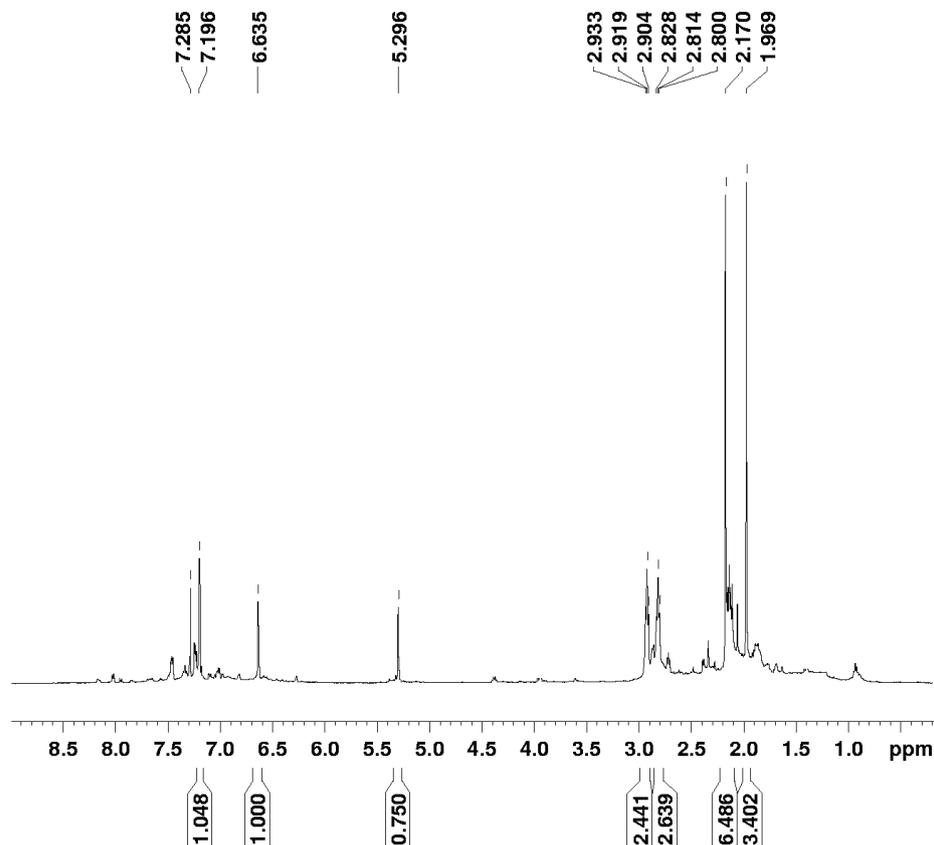
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FIDRES 0.693581 Hz
AQ 0.7208960 sec
RG 184.73
DW 22.000 usec
DE 6.50 usec
TE 298.0 K
D1 1.00000000 sec
D11 0.03000000 sec
TD0 56

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P1 10.00 usec
PLW1 80.00000000 W

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CPDPRG2 waltz16
PCPD2 80.00 usec
PLW2 14.00000000 W
PLW12 0.31500000 W
PLW13 0.20160000 W

F2 - Processing parameters
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GB 0
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¹H



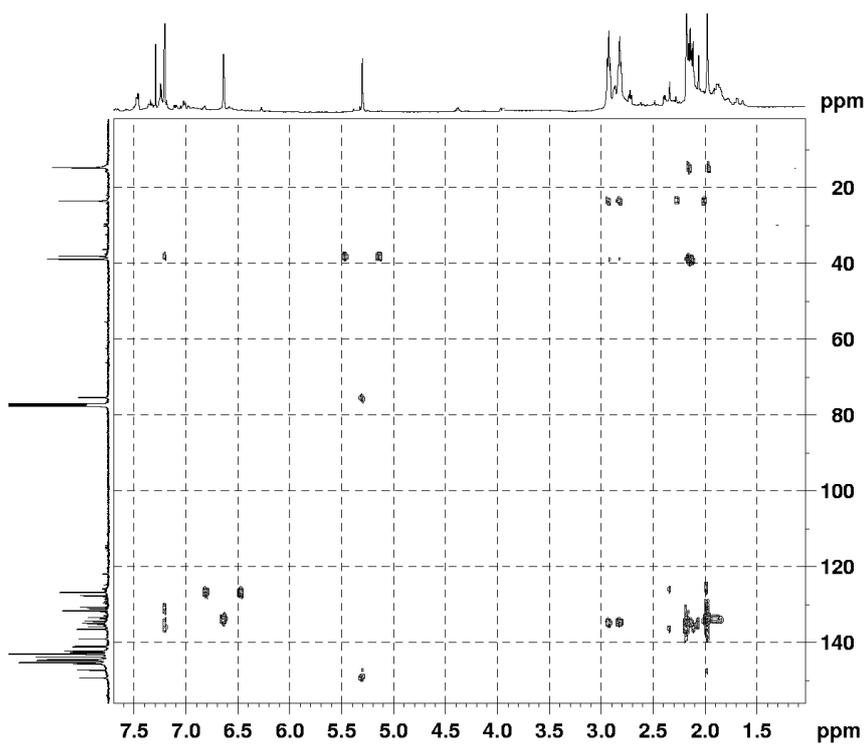
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PULPROG zg30
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FIDRES 0.610352 Hz
AQ 0.8192000 sec
RG 135.29
DW 50.000 usec
DE 6.50 usec
TE 298.0 K
D1 1.00000000 sec
TD0 1

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NUC1 1H
P1 12.00 usec
PLW1 15.00000000 W

F2 - Processing parameters
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SF 500.1700000 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 1.00

HMBC



HSQC

