Supporting information

Spectroscopic data of compounds **1a-f**

Benzyl bromide (1a)

Yield: 81%. Colorless oil. b.p. 79-82 ^{o}C/15 mmHg (Lit. 83.5–84 ^{o}C/13 mmHg).[1] ^{1}H NMR ($CDCl_3$): δ 4.45 (2H, s, PhCH_2Br), 7.35-7.48 (5H, m, CH). ^{13}C NMR ($CDCl_3$): δ 33.7 (PhCH$_2$Br), 128.4 (CH-4), 128.8 (CH-3,5), 129.1 (CH-2,6), 137.8 (C-1). IR (Nujol): 2954 (vs), 2924 (vs), 2854 (vs), 1462 (s), 1377 (s) cm^{-1}.

***o*-bis(Bromomethyl)benzene (1b)**

Yield: 75%. White solid. m.p.: 98.4-99.8 °C (Lit. 98-99 ^{o}C).[2] ^{1}H NMR ($CDCl_3$): δ 4.68 (4H, s, PhCH_2Br), 7.26-7.39 (4H, m, CH). ^{13}C NMR ($CDCl_3$): δ 30.1 (PhCH$_2$Br), 129.6 (CH-4,5), 131.2 (CH-3.6), 136.7 (C-1,2). IR (KBr): 1437 (w), 1419 (w), 1227 (s), 1198 (s), 848 (w), 750 (w) cm^{-1}.

***m*-bis(Bromomethyl)benzene (1c)**

Yield: 58%. White solid. m.p.: 77.7-79.4 °C (Lit. 75-76 ^{o}C).[3] ^{1}H NMR ($CDCl_3$): δ 4.48 (4H, s, PhCH_2Br), 7.33 (3H, m, PhCH), 7.43 (1H, m, PhCH). ^{13}C NMR ($CDCl_3$): δ 33.0 (PhCH$_2$Br), 129.1 (CH-4,6), 129.3 (CH-5), 129.6 (CH-2), 138.4 (C-1,3). IR (KBr): 1486 (w), 1436 (vs), 1210 (vs), 1163 (s), 898 (w), 798 (s) cm^{-1}.

***p*-bis(Bromomethyl)benzene (1d)**

Yield: 15%. White solid. m.p.: 143.6-145.8 °C (Lit. 142-144 ^{o}C).[2] ^{1}H NMR ($CDCl_3$): δ 4.48 (4H, s, PhCH_2Br), 7.37 (4H, s, CH). ^{13}C NMR ($CDCl_3$): δ 33.0 (PhCH$_2$Br), 129.6 (CH-2,3,5,6), 138.1 (C-1,4). IR (KBr): 2346 (s), 1456 (w), 1433 (w), 1221 (s), 1211 (s), 1187 (s), 766 (s), 738 (s) cm^{-1}.

1,3,5-tris(Bromomethyl)benzene (1e)

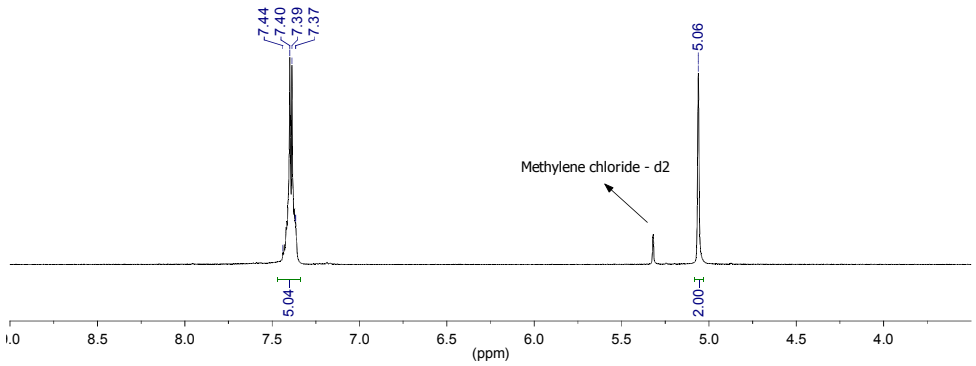
Yield: 42%. White solid. m.p.: 104.9-107.5 °C (Lit. 101-105).[4] ^{1}H NMR ($CDCl_3$): δ 4.45 (6H, s, PhCH_2Br), 7.26-7.36 (3H, s, CH). ^{13}C NMR ($CDCl_3$): δ 32.4 (PhCH$_2$Br), 139.2 (CH-2, 4, 6), 129.8 (C-1,3,5). IR (KBr): 1256 (vs), 1152 (s), 1026 (s), 973 (s), 727 (s) cm^{-1}.

1-Bromo-2,4,6-tris(bromomethyl)benzene (1f)

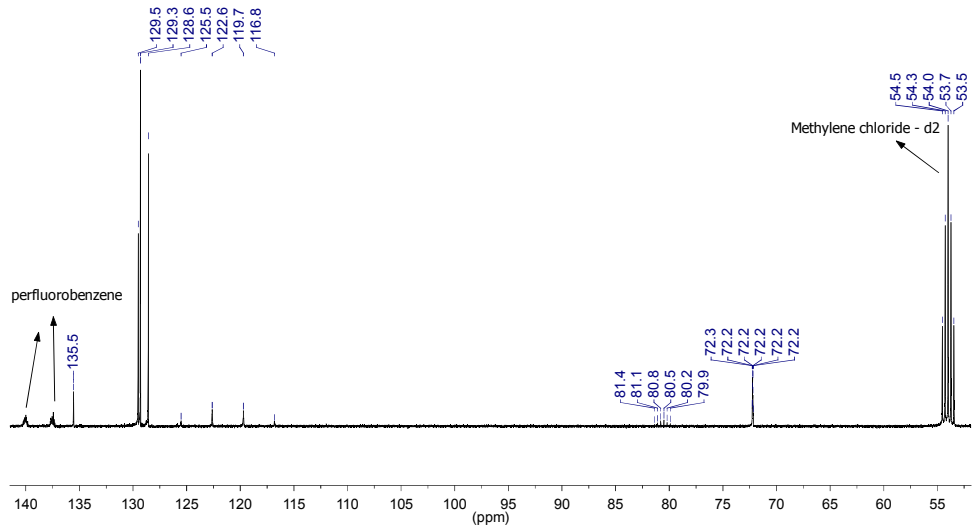
Yield: 38%. White solid. m.p.: 100.1-103.3 °C (Lit. 98-100).[5] ^{1}H NMR ($CDCl_3$): δ 4.41 (2H, s, Ph-4-CH_2Br), 4.61 (4H, s, Ph-2,6-CH_2Br), 7.44 (2H, s, CH). ^{13}C NMR ($CDCl_3$): δ 31.3 (Ph-2,6-CH_2Br), 33.4 (Ph-4-CH_2Br), 126.5 (C-1), 131.8 (CH-3,5), 138.0 (C-2,6), 139.0 (C-4). IR (KBr): 3441 (vs), 1212 (s), 703 (s) cm^{-1}.

NMR spectra of compounds **2a-g**

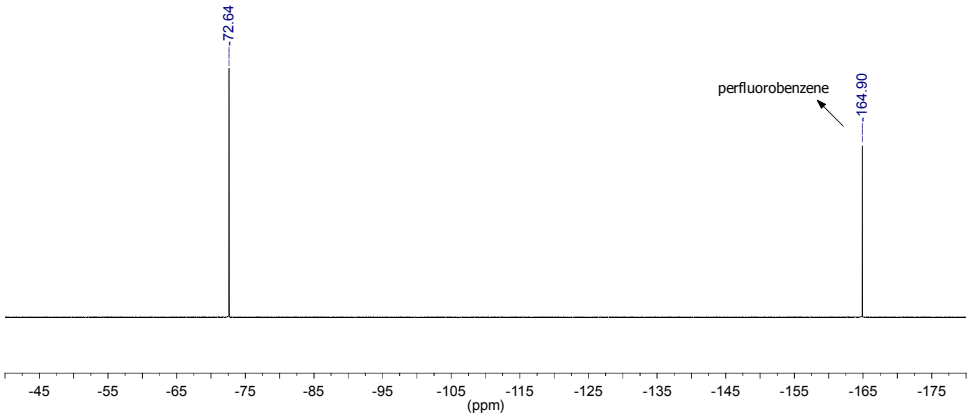
Perfluoro-*tert*-butoxymethylbenzene (2a)



^{1}H NMR spectrum of **2a**

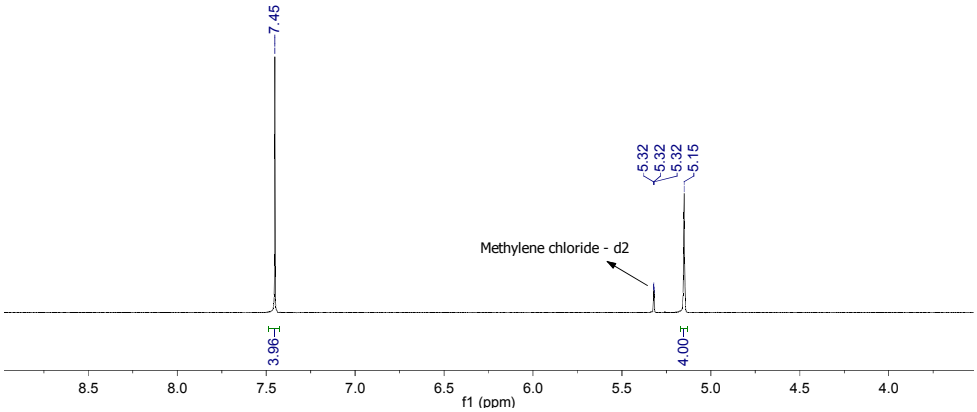


^{13}C NMR spectrum of **2a**

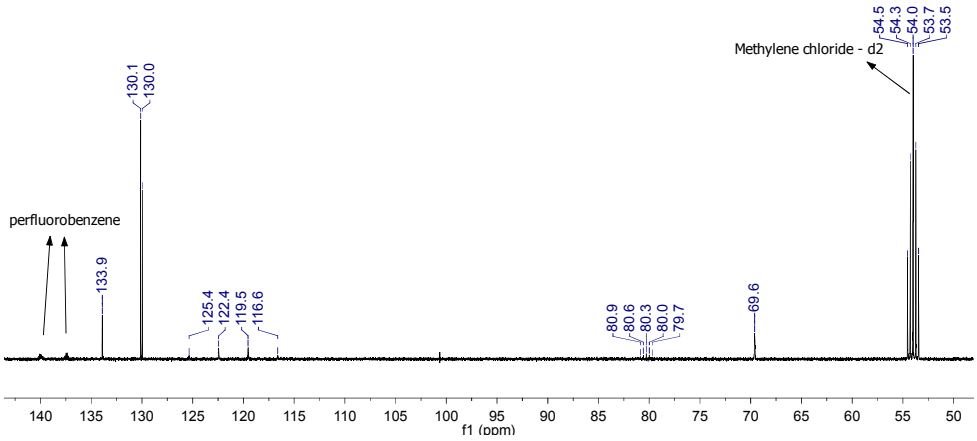


^{19}F NMR spectrum of **2a**

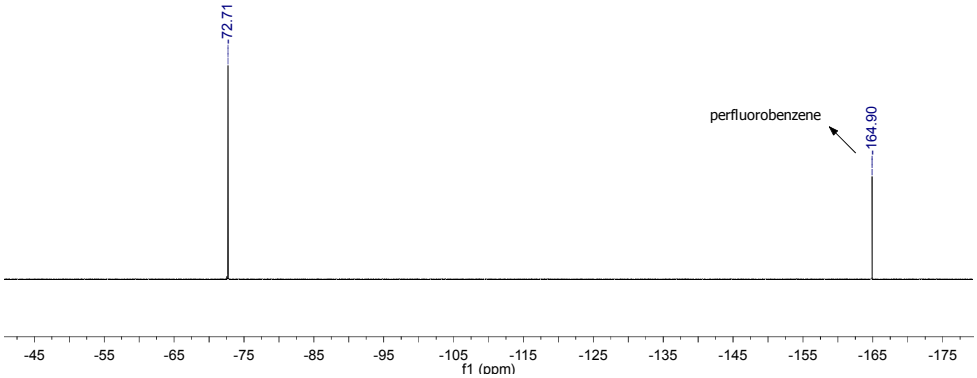
o-bis(Perfluoro-*tert*-butoxymethyl)benzene (2b)



^{1}H NMR spectrum of **2b**

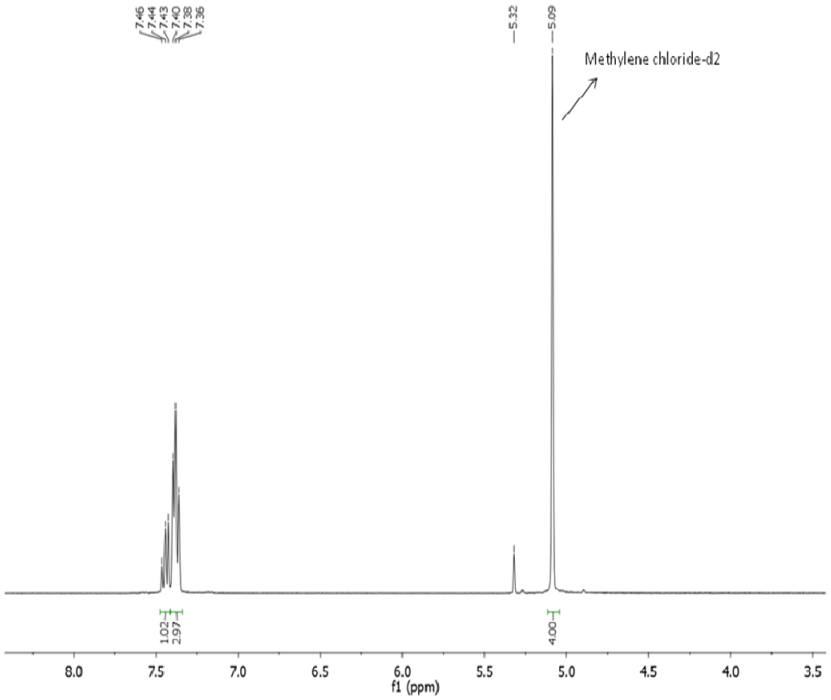


^{13}C NMR spectrum of **2b**

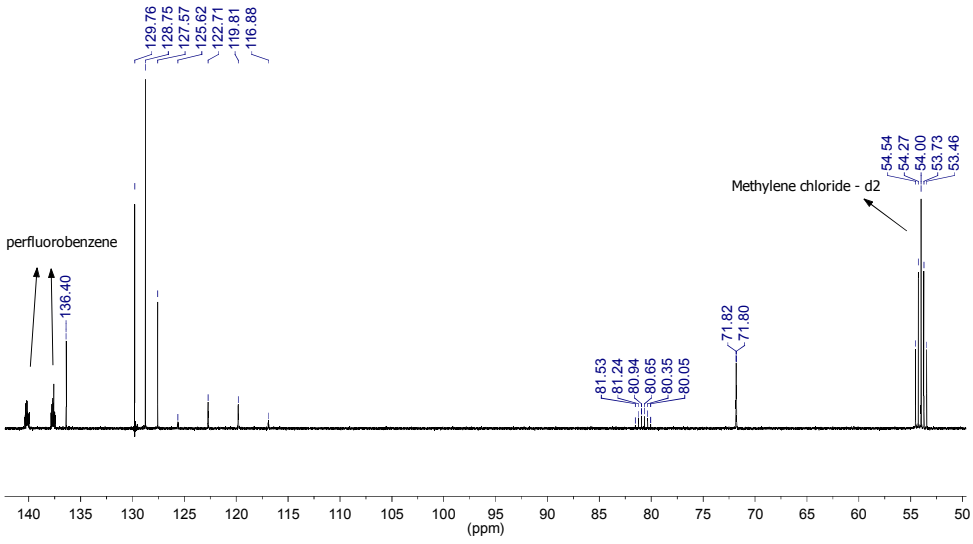


^{19}F NMR spectrum of **2b**

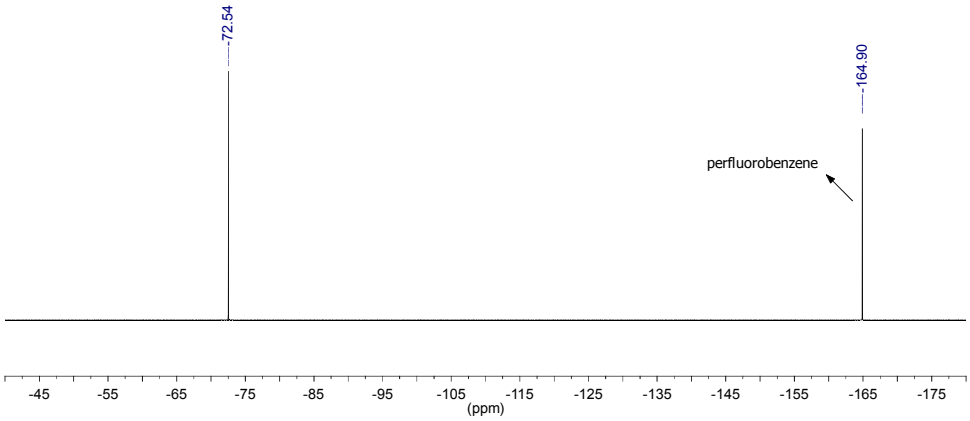
m-bis(perfluoro-*tert*-butoxylmethyl)benzene (2c)



^{1}H NMR spectrum of **2c**

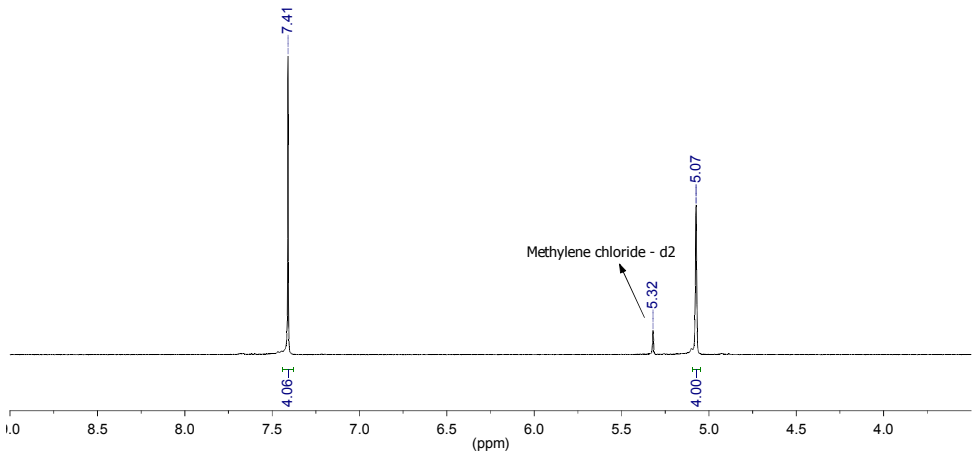


^{13}C NMR spectrum of **2c**

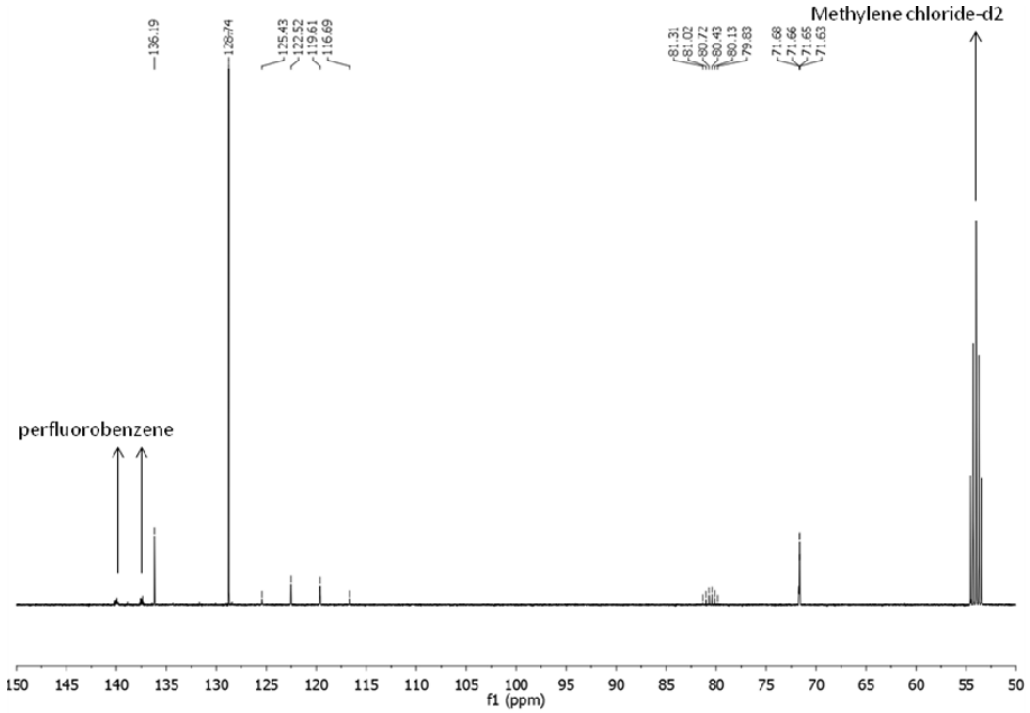


^{19}F NMR spectrum of **2c**

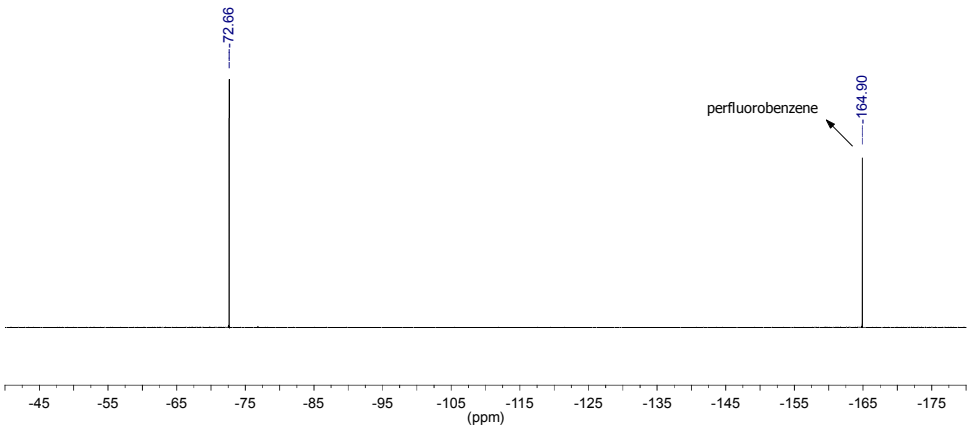
p-bis(Perfluoro-*tert*-butoxylmethyl)benzene (2d)



^{1}H NMR spectrum of **2d**

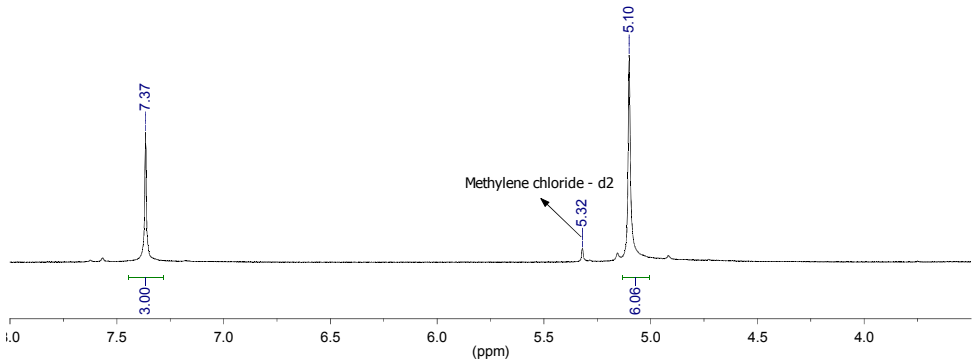


^{13}C NMR spectrum of **2d**

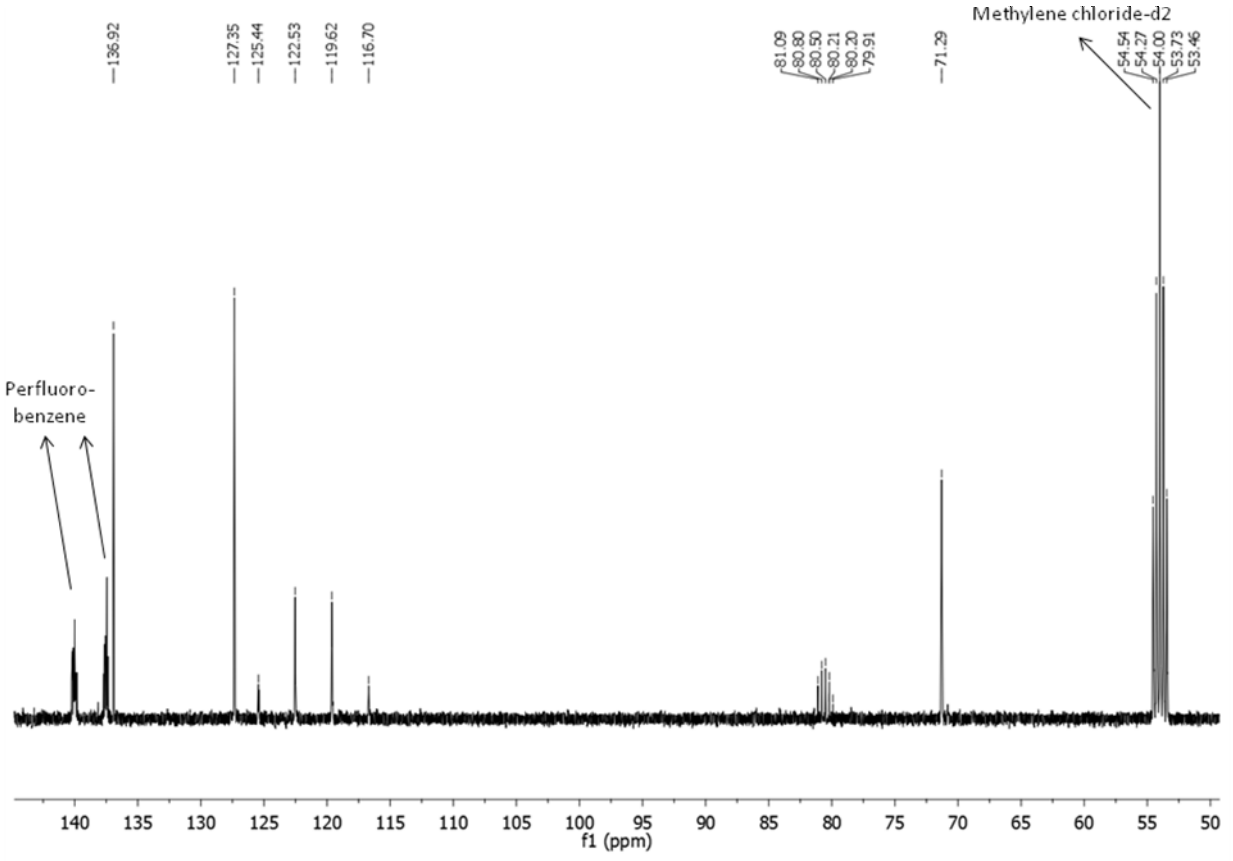


^{19}F NMR spectrum of **2d**

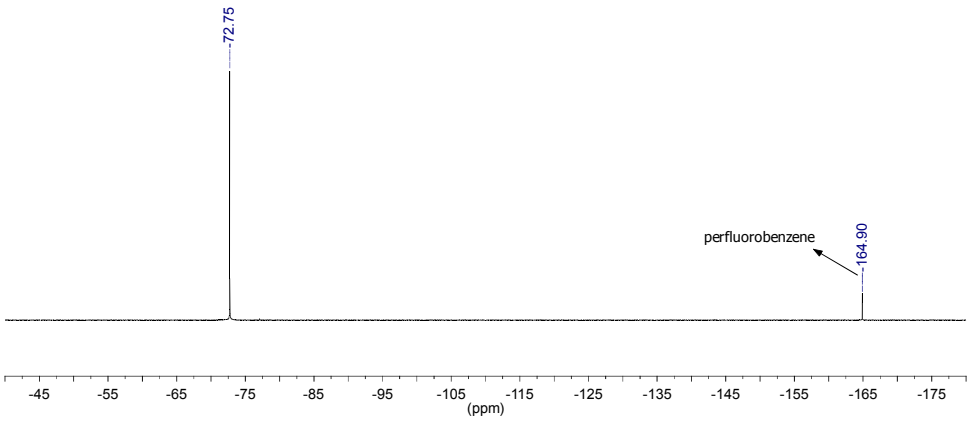
1,3,5-tris(Perfluoro-*tert*-butoxylmethyl)benzene (2e)



^{1}H NMR spectrum of **2e**

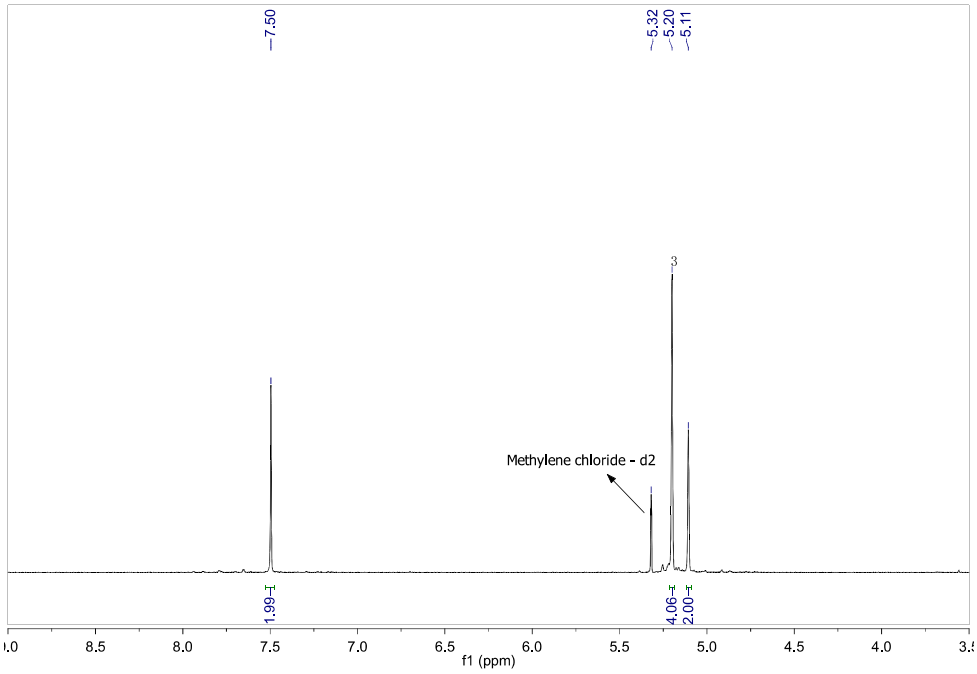


^{13}C NMR spectrum of **2e**

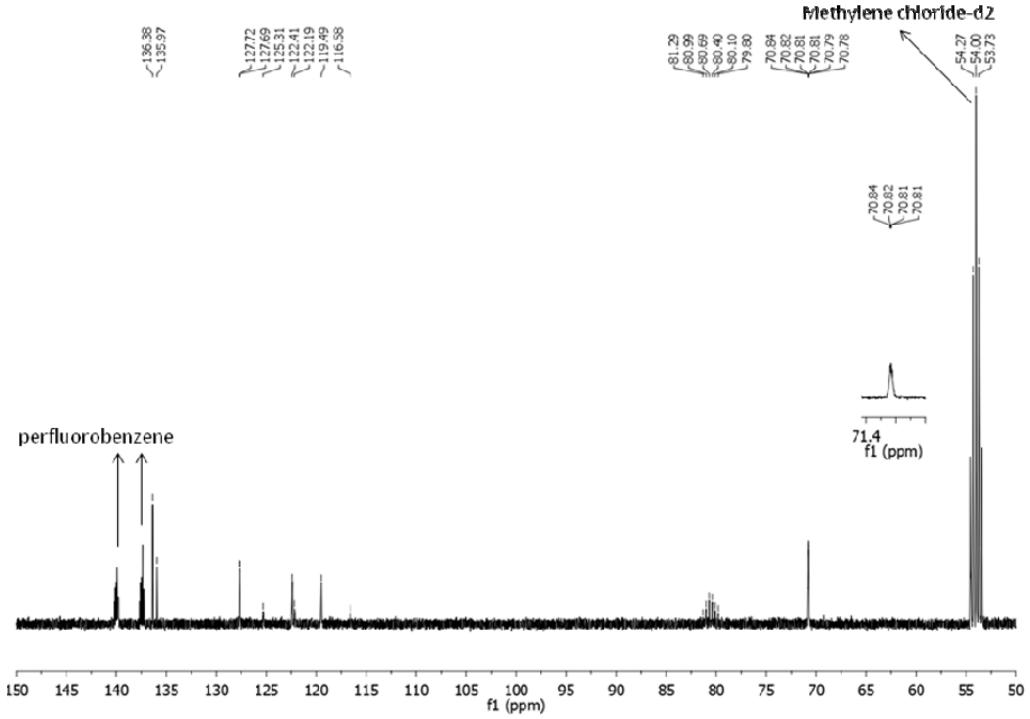


^{19}F NMR spectrum of **2e**

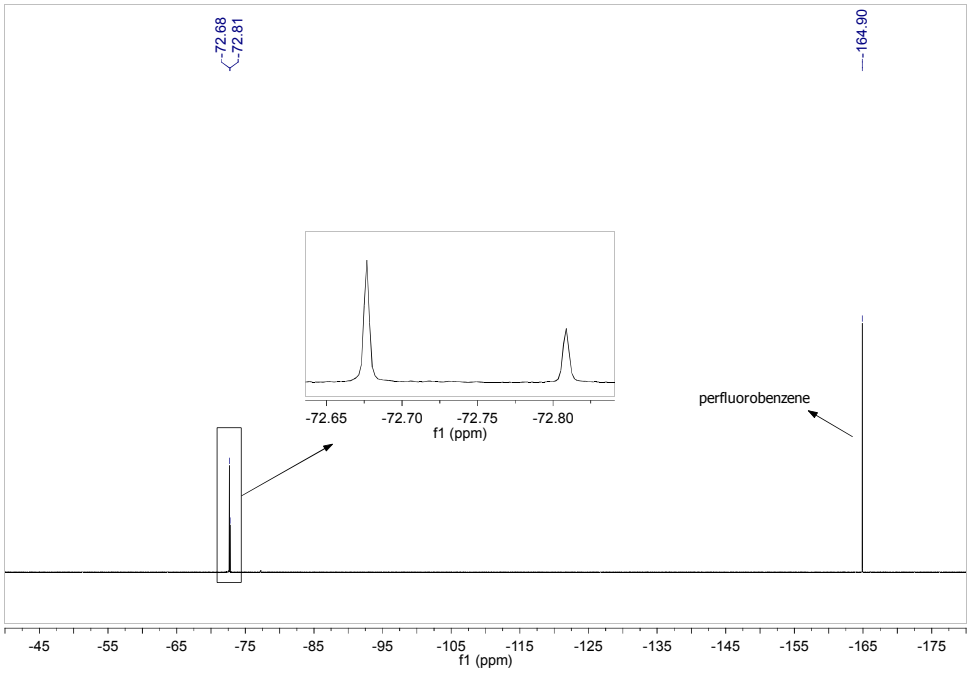
1-Bromo-2,4,6-tris(perfluoro-*tert*-butoxylmethyl)benzene (2f)



^{1}H NMR spectrum of **2f**

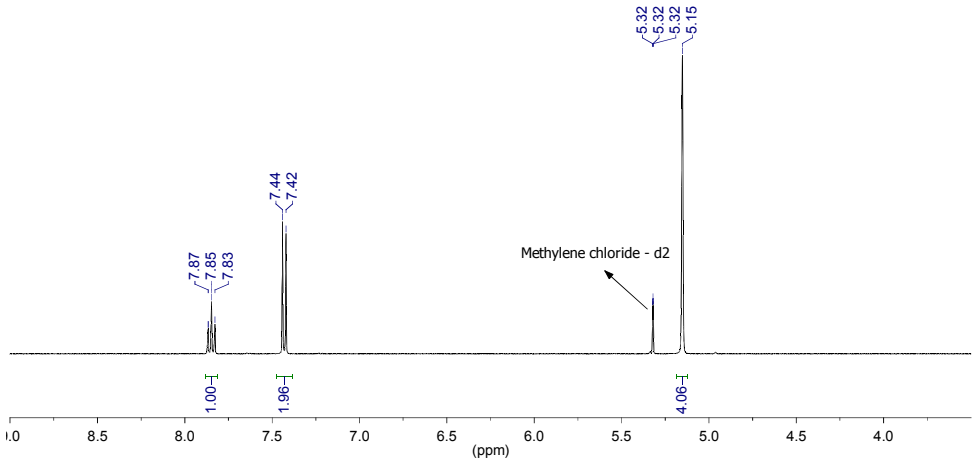


^{13}C NMR spectrum of **2f**

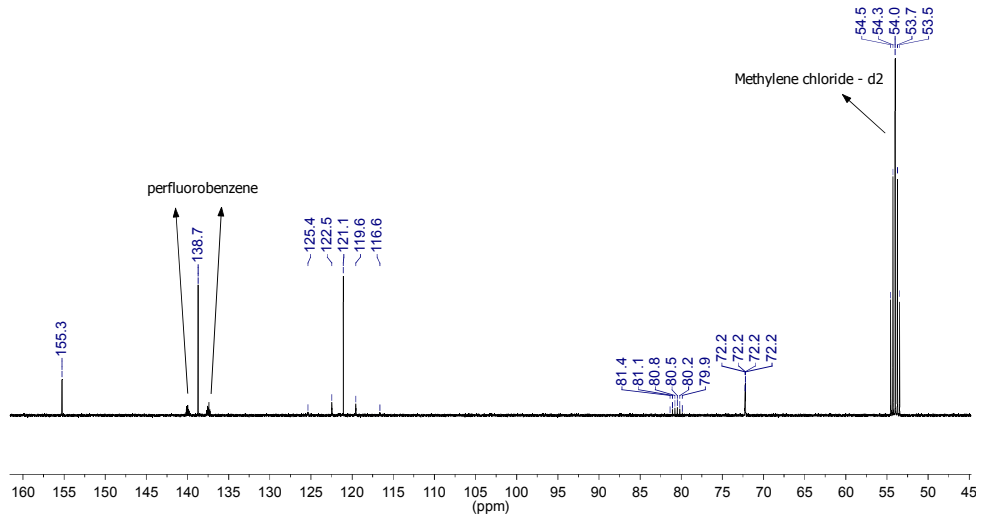


^{19}F NMR spectrum of **2f**

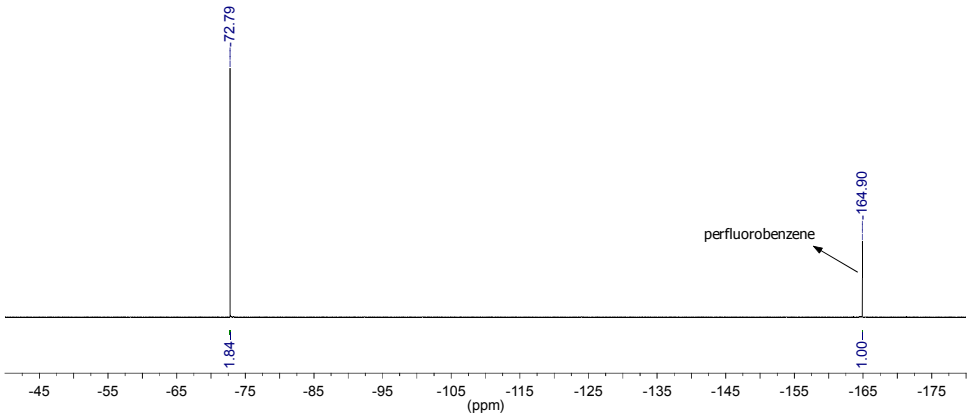
2,6-bis(Perfluoro-*tert*-butoxylmethyl)pyridine (2g)



^{1}H NMR spectrum of **2g**



^{13}C NMR spectrum of **2g**



^{19}F NMR spectrum of **2g**

[1] T. Yokoyama, G. R. Wiley, S. I. Miller, *J. Org. Chem.* 1969, **34**, 1859.

[2] W. Wenner, *J. Org. Chem.* 1952, **17**, 523.

[3] R. E. Benson, R. V. Lindsay Jnr., B. C. Anderson, *J. Org. Chem.* 1959, **81**, 4253.

[4] Y. Yamagiwa, Y. Koreishi, S. Kiyozumi, M. Kobayashi, T. Kamikawa, *Bull. Chem. Soc. Jpn.* 1996, **69**, 3317.

[5] D. M. Tal, S. J. D. Karlish, *Tetrahedron*. 1995, **51**, 3823.