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Supplementary Data

All NMR analysis was performed on a 300 MHz Bruker machine using deuterated DMSO as the solvent. Melting points were determined using a Gallenkamp instrument.

Benzimidazole (**3a**): m.p. 171–174 (170);[1] ^{1}H NMR (DMSO-d_6) δ 7.17 – 7.20 (2H, m, Ar H), 7.58 – 7.59 (2H, m, Ar H), 8.21 (1H, s, H-2) ppm;[2] ^{13}C NMR (DMSO-d_6) δ 108.8, 120.7, 122.0, 142.3 ppm.

2-Methylbenzimidazole (**3b**): m.p. 177-178 (176);[1] ^{1}H NMR (DMSO-d_6) δ 2.51 (s, 3H, CH_3), 7.11 – 7.14 (2H, m, Ar H), 7.46 – 7.49 (2H, m, Ar H) ppm;[2] ^{13}C NMR (DMSO-d_6) δ 15.0, 24.6, 114.5, 121.3, 139.4, 151.6 ppm.[3]

2-Isopropylbenzimidazole (**3c**): ^{1}H NMR (DMSO-d_6) δ 1.33 (6H, d, J = 6.9, CH_3), 3.13 (1H, sept., J = 6.8, CH), 7.08 – 7.11 (2H, m, Ar H), 7.42 – 7.49 (2H, m, Ar H) ppm; ^{13}C NMR (DMSO-d_6) δ 21.7, 28.7, 111.1, 118.5, 121.1, 121.7, 128.7, 134.7, 143.4, 160.1 ppm.

2-*t*-Butylbenzimidazole (**3d**): ^{1}H NMR (DMSO-d_6) δ 1.40 (9H, s, CH_3), 7.09 – 7.13 (2H, m, Ar H), 7.39 – 7.55 (2H, m, Ar H) ppm;[4] ^{13}C NMR (DMSO-d_6) δ 29.6, 33.5, 111.1, 118.6, 121.0, 121.7. 128.7, 135.0, 143.1, 162.5 ppm.

2-Benzylbenzimidazole (**3e**): m.p. 189 – 190 (191);[5] ^{1}H NMR (DMSO-d_6) δ 4.18 (2H, s, CH_2), 7.11 – 7.53 (9H, m, Ar H) ppm;[6] ^{13}C NMR (DMSO-d_6) δ 35.3, 111.3, 118.6, 121.3, 121.9, 126.9, 128.8, 129.1, 134.8, 138.0, 143.7, 153.9 ppm.

2-Phenylbenzimidazole (**3f**): m.p. 299 – 300 (295);[7] ^{1}H NMR (DMSO-d_6) δ 7.22 – 7.25 (2H, m, Ar H), 7.48 – 7.60 (5H, m, Ar H), 8.21 – 8.24 (2H, m, Ar H) ppm;[2] ^{13}C NMR (DMSO-d_6) δ 111.7, 119.2, 112.2, 112.7, 126.8, 129.3, 130.2, 130.5, 135.4, 144.1, 151.6 ppm.[2]

2,2'-Bi-1H-benzimidazole (**5g**): Poorly soluble therefore NMR not run. C:H:N Microanalysis for $C_{14}H_{10}N_4.½H_2O$: Calculated C 69.11, H 4.57, N 23.03; Actual C 68.71, H 4.16, N 22.93.[8]

2,2'-(1,2-ethanediyl)bis-1H-benzimidazole (**5h**): Poorly soluble therefore NMR not run. C:H:N Microanalysis for $C_{16}H_{14}N_4$: Calculated C 73.26, H 5.38, N 21.36; Actual C 73.15, H 5.43, N 21.31.[9]

2,2'-(1,4-phenylene)bis-1H-benzimidazole (**5i**): Poorly soluble therefore NMR not run. C:H:N Microanalysis for $C_{20}H_{14}N_4.¼H_2O$: Calculated C 76.29, H 4.64, N 17.79; Actual C 76.78, H 4.55, N 17.84.

2,2'-(1,2-phenylene)bis-1H-benzimidazole (**5j**): Poorly soluble therefore NMR not run. C:H:N Microanalysis for $C_{20}H_{14}N_4.¼H_2O$: Calculated C 76.29, H 4.64, N 17.79; Actual C 76.71, H 4.64, N 17.82.

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