Electronic Supplementary Information (ESI)

Title: Block Modification of Rod-Shaped π Conjugated Carbon Framework with Donor and Acceptor Groups Toward Highly Fluorescent Molecules: Synthesis and Emission Characteristics

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Synthetic routes of donor units (1 – 5 and 13)
Synthetic routes of acceptor units (7 - 9)

1) KBr, NaBO₃·4H₂O, (NH₄)₆Mo₇O₂₄·4H₂O, AcOH
2) I₂, t-BuONO, CH₃CN

1) Pd(PPh₃)₂Cl₂, CuI, Et₃N
2) 1 M aq. KOH, MeOH, CHCl₃

7) 62%

1) Pd(PPh₃)₂Cl₂, CuI, Et₃N, THF

9) 70%

57%
Absorption (A) and Fluorescence (B) Spectra of block modification system (BL-1 – BL-9) in CHCl$_3$
Typical Z-scan trace (■) and theoretically fitted curve (line) of 7 mM of BL-6 and BL-8 in pyridine.