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Supplementary Material

Aromatic Schiff bases multiply substituted with terminal ethynyl groups: potential building blocks for conjugated polymers and oligomers

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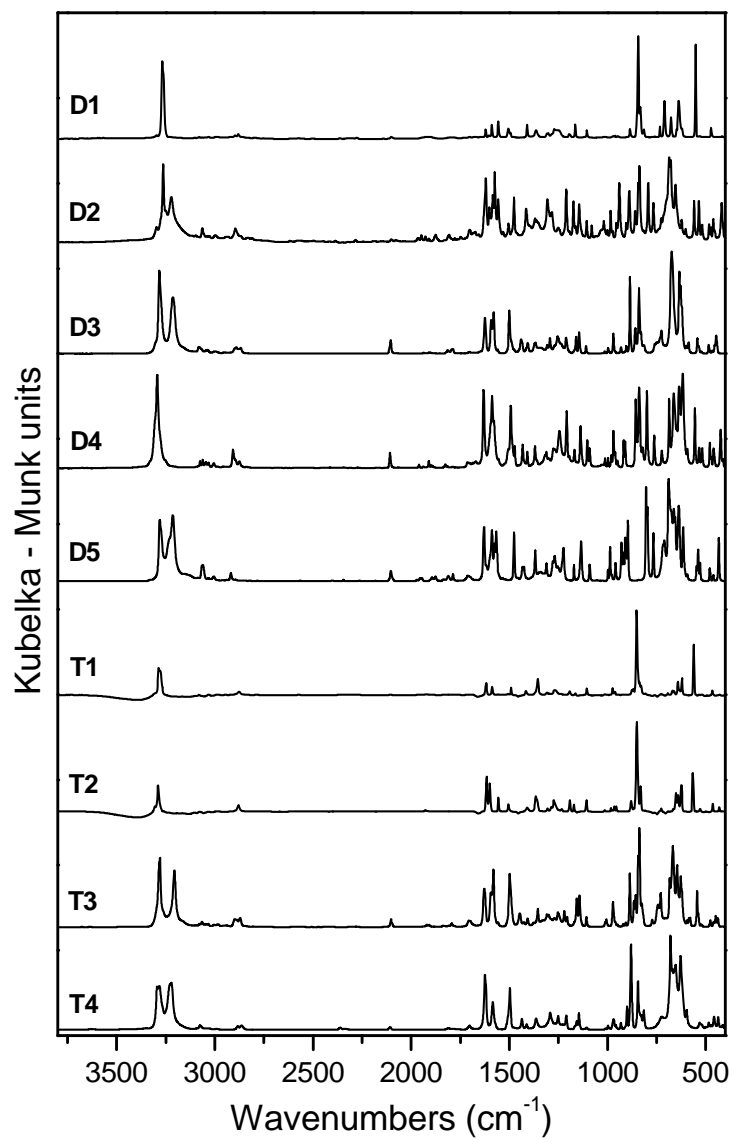


Fig. S1. FTIR spectra of MEAs.

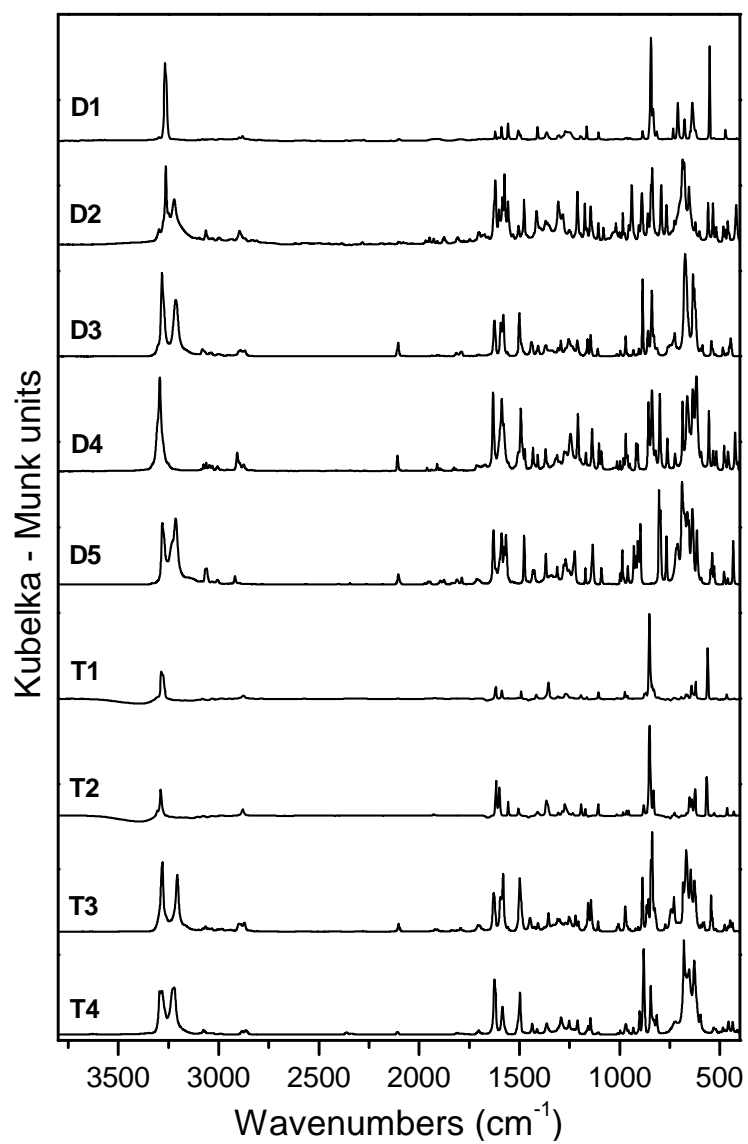


Fig. S2. Raman spectra of MEAs.

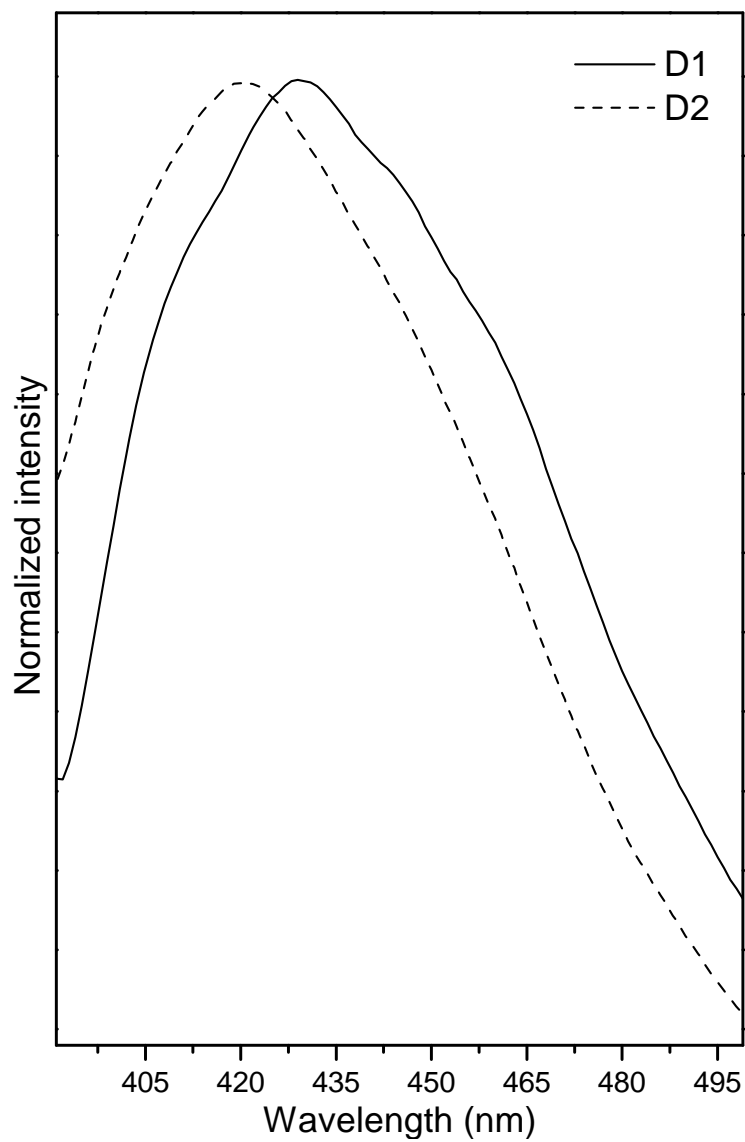


Fig. S3. Normalized photoluminescence emission spectra of D1 and D2. Excitation wavelength = 340 nm.

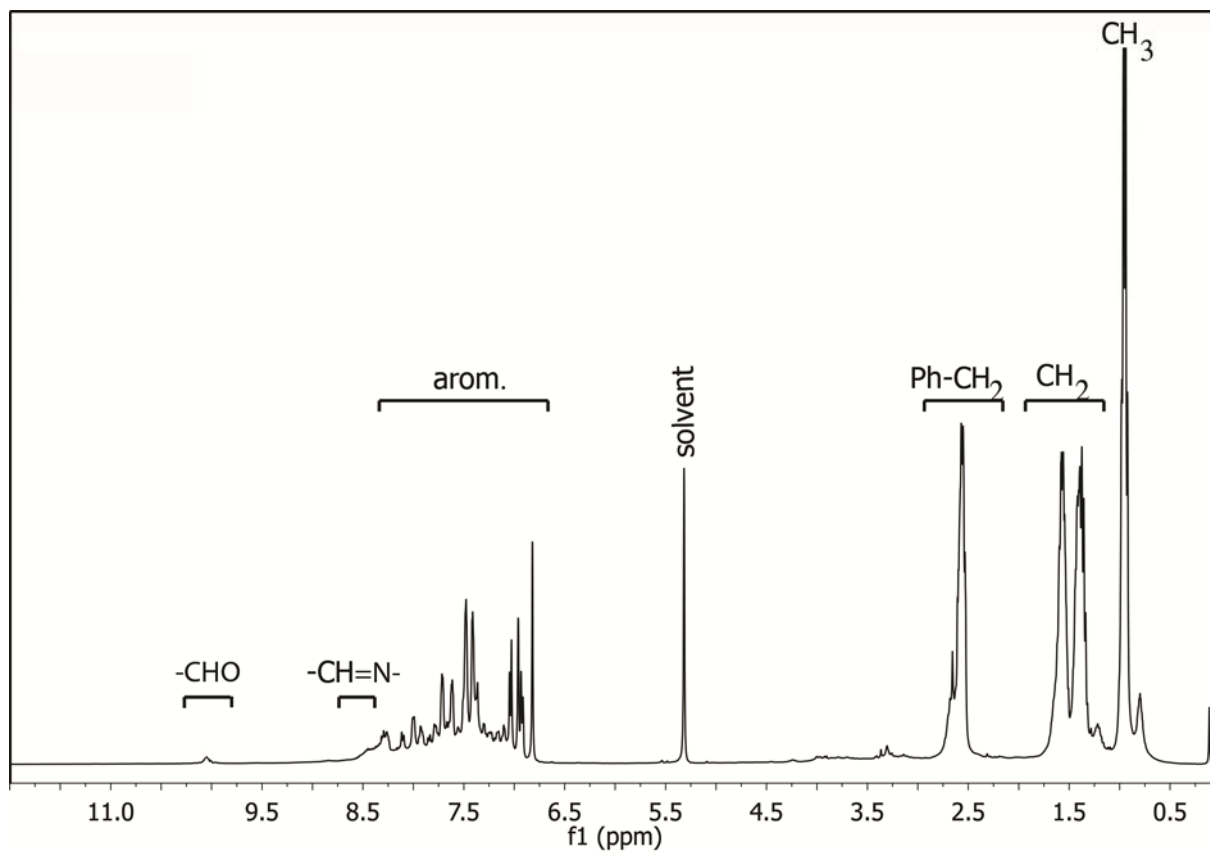


Fig. S4. ^1H NMR (CD_2Cl_2 , 400 MHz) spectrum of Pc(D1/hexyne).

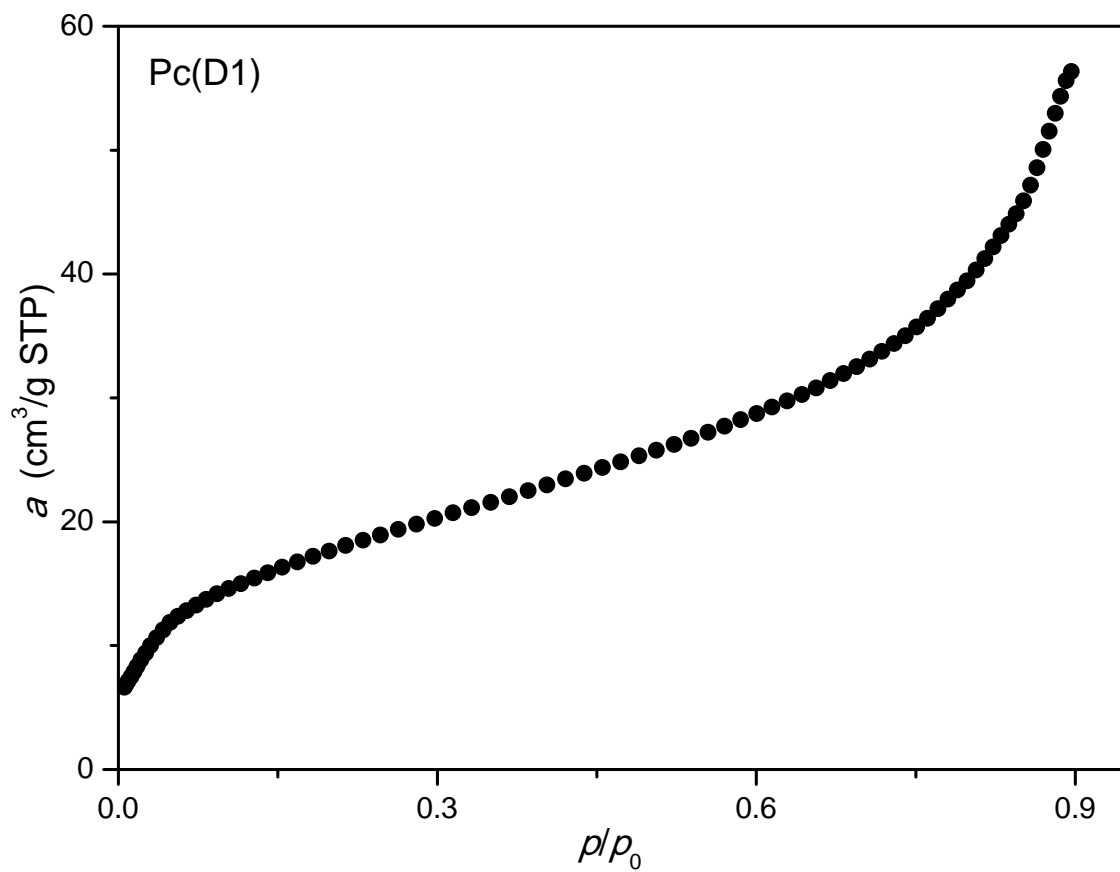


Fig. S5. N₂ adsorption isotherm on Pc(D1) at 77 K.

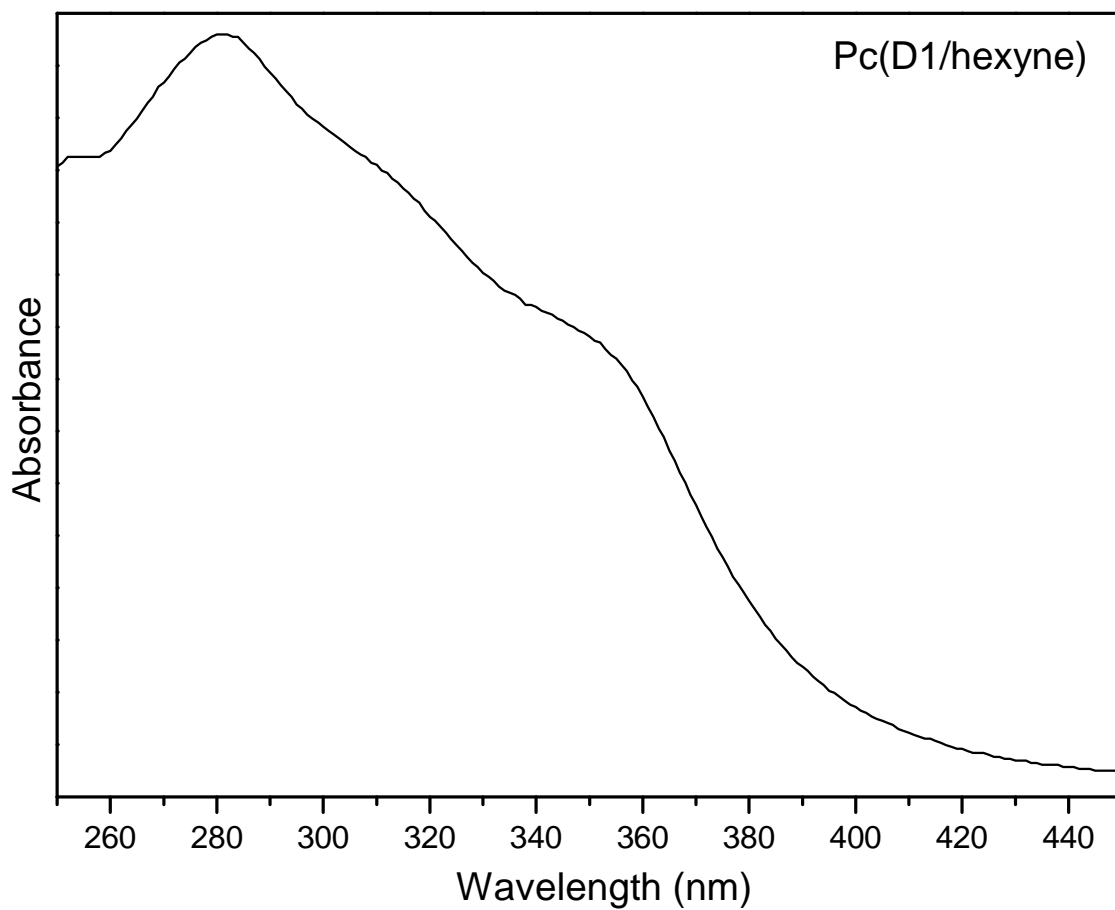


Fig. S6. Uv-vis spectrum of Pc(D1/hexyne).

Table S1

The most important bands of the FTIR and Raman spectra of MEAs.

MEA	$\nu_{\text{N=C}}$ (cm^{-1})		$\nu_{\text{N-C-H}}$ (cm^{-1})	$\nu_{\text{=C-H}}$ (cm^{-1})	$\nu_{\text{C=C}}$ (cm^{-1})	
	FTIR	Raman	FTIR	FTIR	FTIR	Raman
D1	1622	1620	2881	3269	2102	2100
D2	1619	1622	2895	3263; 3221	2096	2103
D3	1624	1625	2888	3282; 3212	2104	2105
D4	1631	1631	2907	3293	2107	2107
D5	1629	1628	2918	3280; 3213	2103	2103
T1	1617	1623	2875	3284	2104	2104
T2	1616	1625	2879	3288	2103	2106
T3	1627	1625	2900	3280; 3205	2101	2098
T4	1624	1629	2885	3280; 3221	2104	2110

Table S2

Photoluminescence emission characteristics of D1 and D2. λ_{PLmax} is wavelength the photoluminescence emission maximum, τ_1 , τ_2 and τ_3 are the lifetimes of the photoluminescence components (their contributions are given in parentheses).

MEA	λ_{PLmax} [nm]	τ_1 [ns] ^{b)}	τ_2 [ns] ^{b)}	τ_3 [ns] ^{b)}
D1	428 ^{a)}	3.2 (10%)	1.1 (52 %)	0.06 (38%)
D2	419 ^{a)}	1.3 (90 %)	0.3 (10 %)	--

^{a)} excitation wavelength = 340 nm

^{b)} excitation wavelength = 378 nm

Table S3

Results of elemental analysis of Pc(D1) and Pc(D1/hexyne).

Sample	Content in wt. %			N/C mole ratio	
	C	H	N	Polymerization feed	Polymer
Pc(D1)	80.04	4.01	5.16	17	18.10
Pc(D1/hexyne)	78.35	5.89	4.10	29	22.29