

Supporting Information

for

**Donor-acceptor copolymers with 1,7-regioisomers of
N,N'-dialkylperylene-3,4,9,10-tetracarboxydiimide as materials
for photonics**

Věra Cimrová*, Drahomír Výprachtický, Veronika Pokorná, Petra Babičová

Institute of Macromolecular Chemistry, Czech Academy of Sciences,
Heyrovsky Sq. 2, 16206 Prague 6, Czech Republic

*Corresponding author. E-mail address: cimrova@imc.cas.cz

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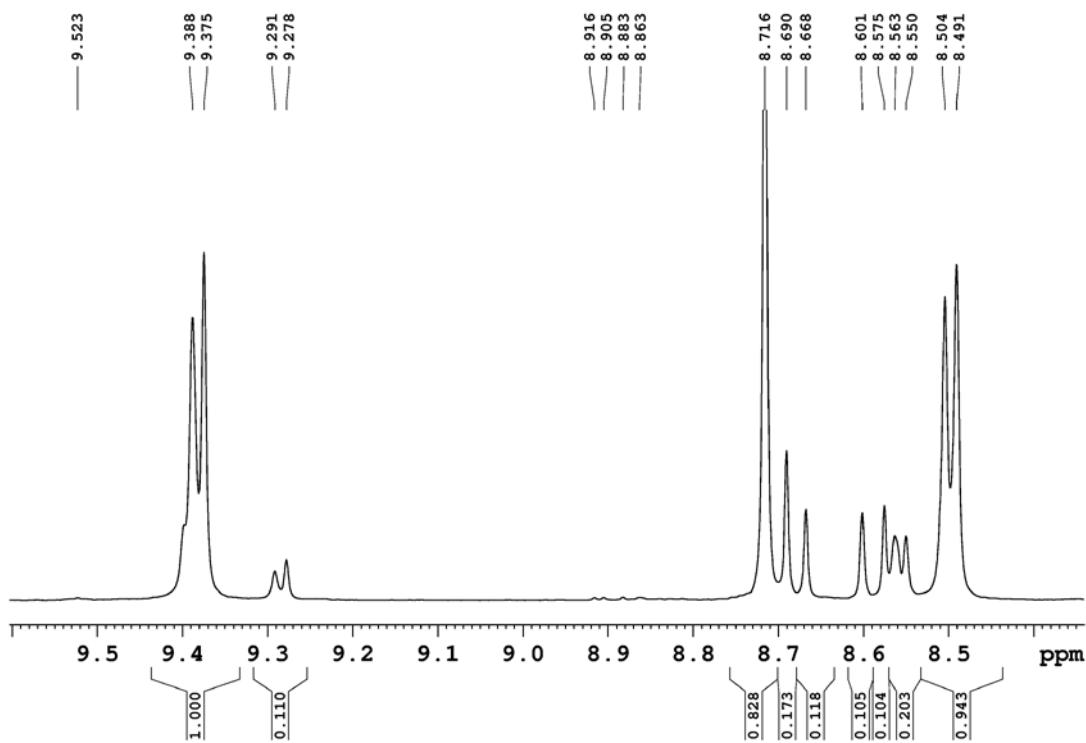


Fig. S1: ^1H NMR (600.27 MHz) spectrum of the mixture 1,7-(**II**) and 1,6-(**III**) dibromo- and 1,6,7-(**IV**) tribromo-derivatives of dianhydride **I** in D_2SO_4 (ca. **II:III:IV** = 77:16:7 (wt.%)).

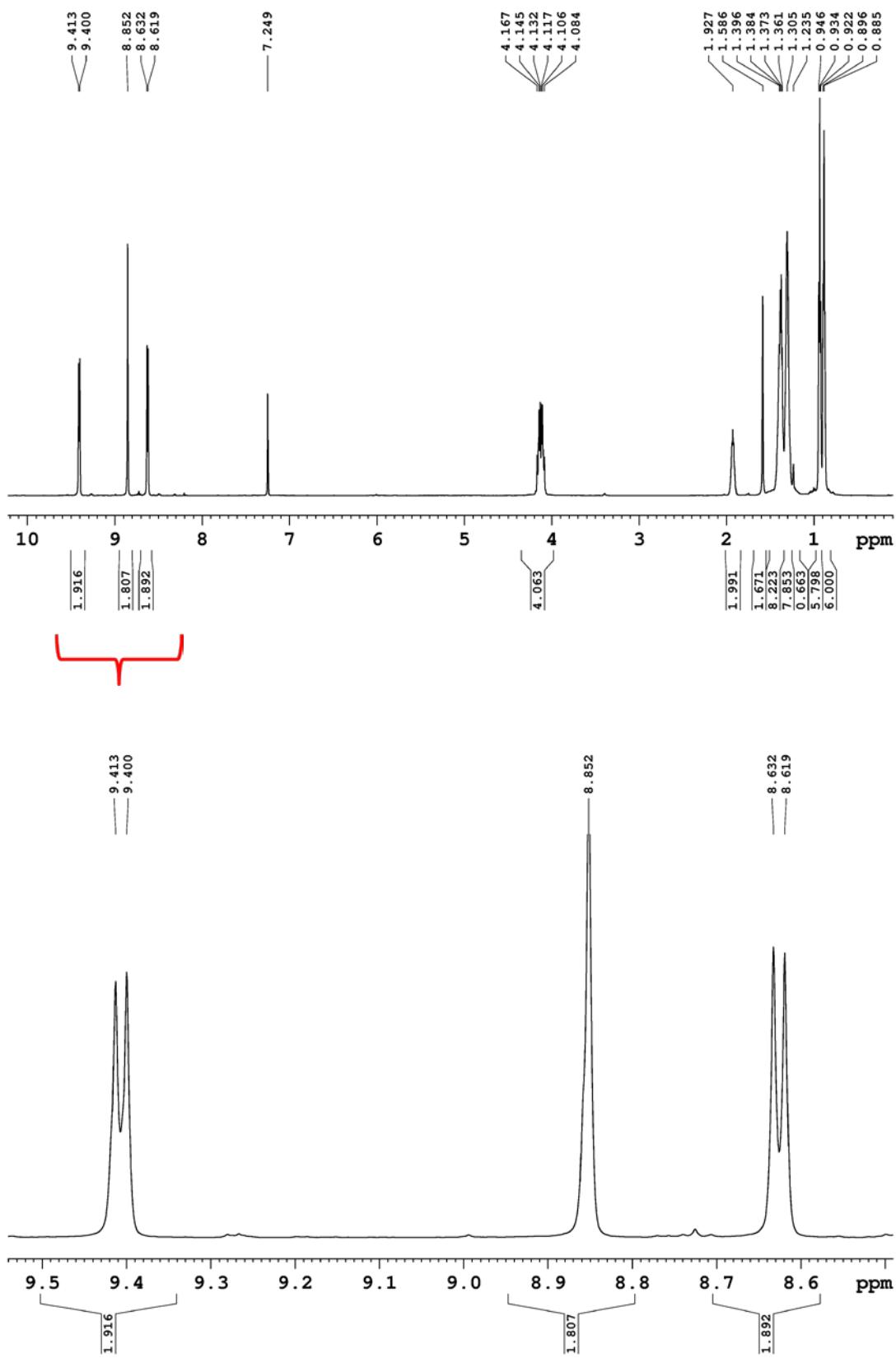


Fig. S2: ^1H NMR (600.27 MHz) spectrum of **EHPDI-Br** in CDCl_3 .

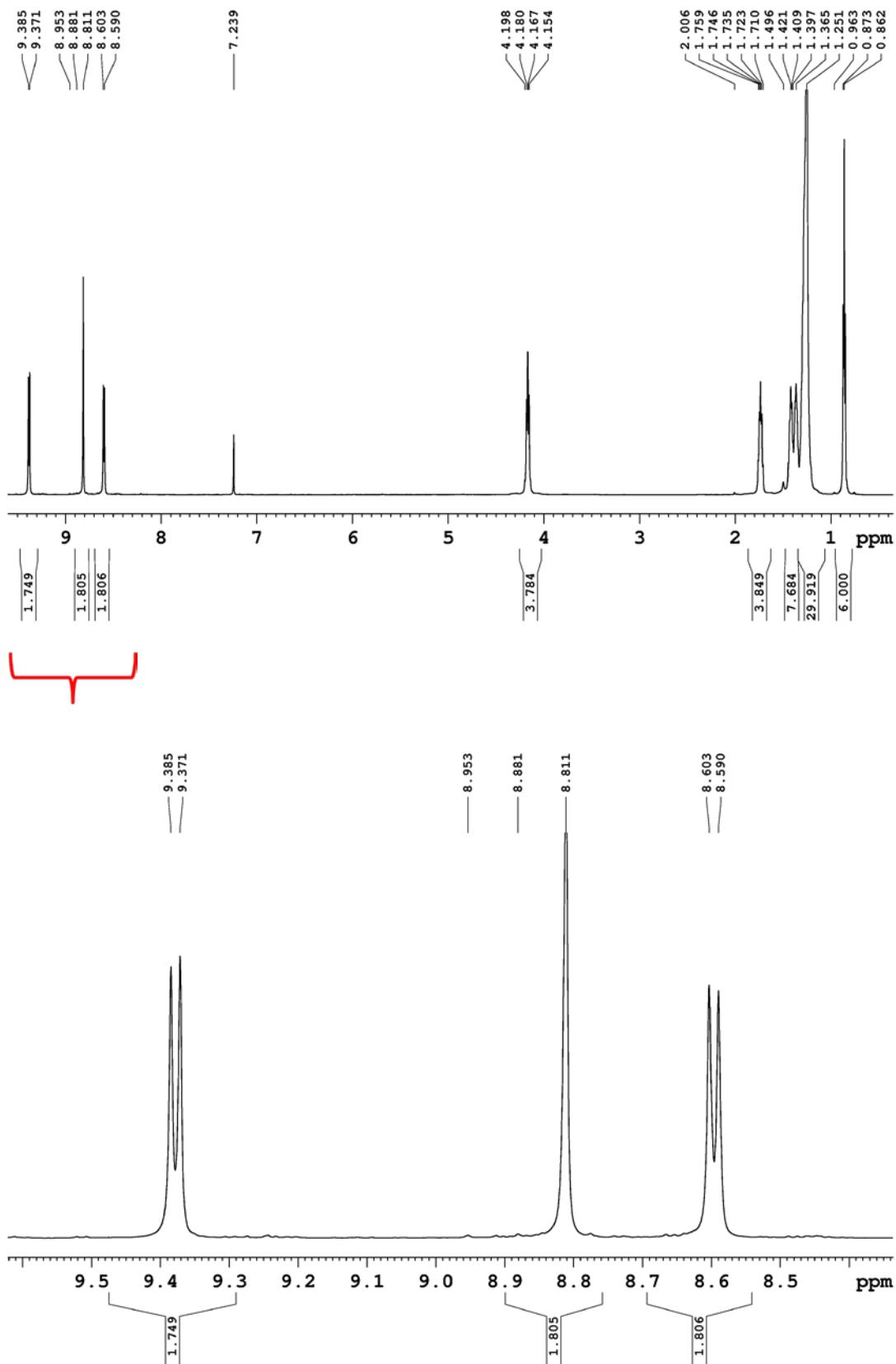


Fig. S3: ¹H NMR (600.27 MHz) spectrum of **DDPDI-Br** in CDCl_3 .

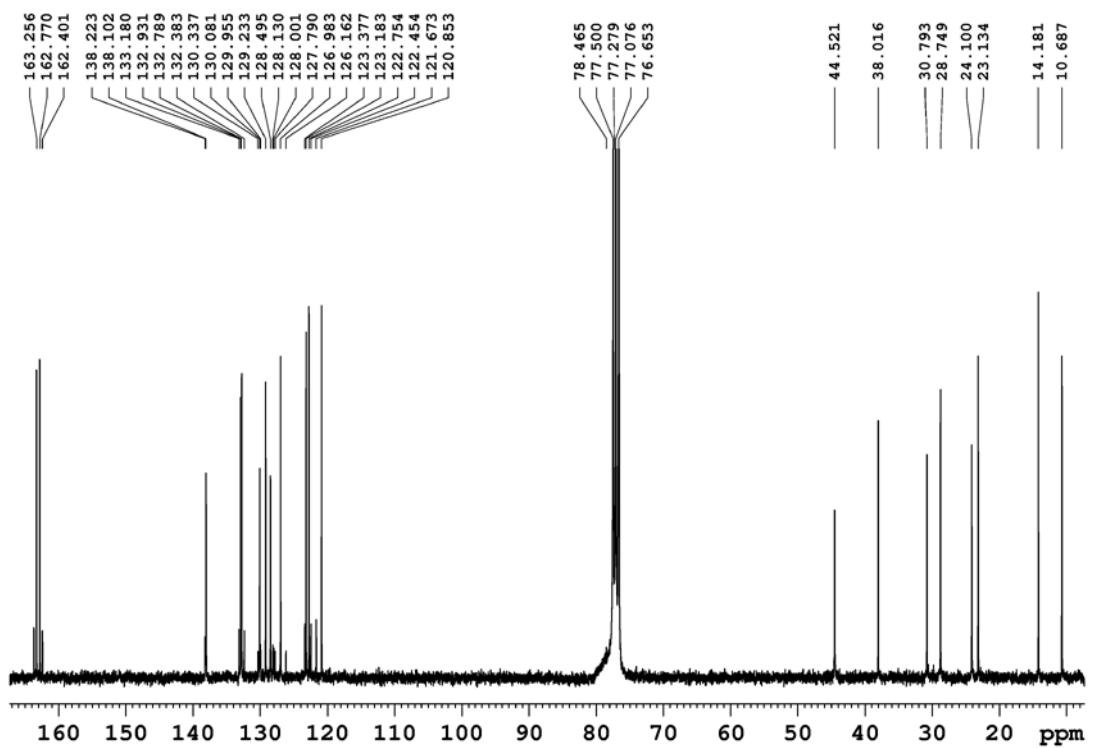


Fig. S4: ^{13}C NMR (150.96 MHz) spectrum of **EHPDI-Br** in CDCl_3 .

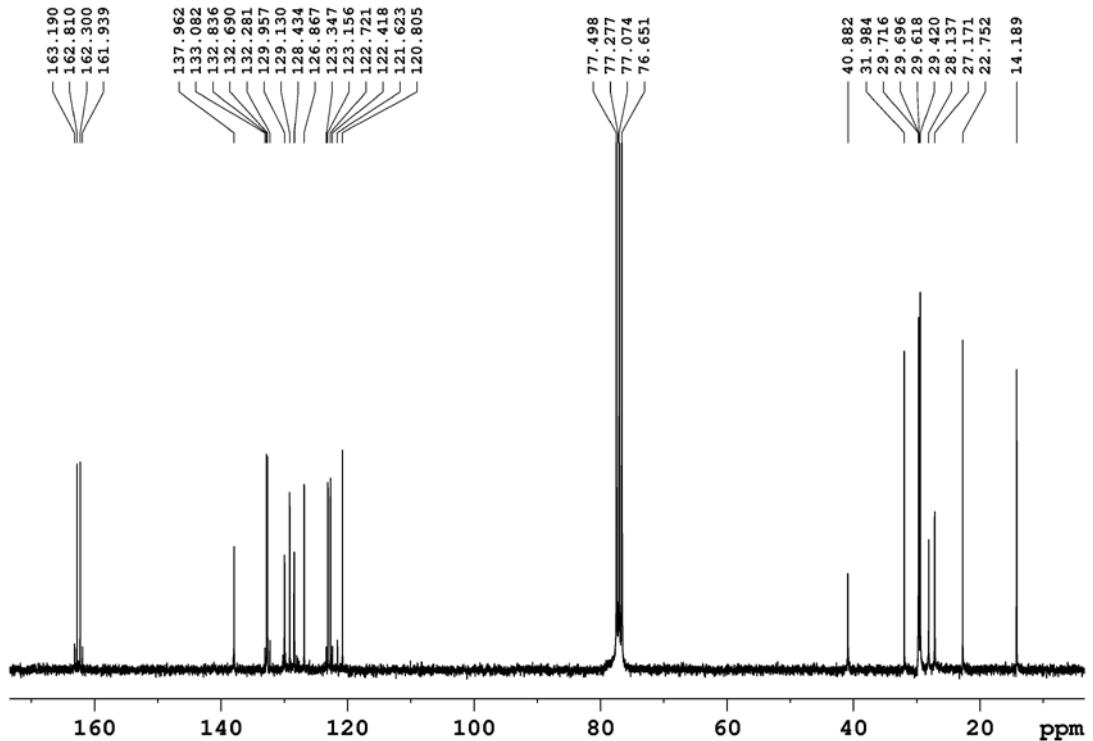


Fig. S5: ^{13}C NMR (150.96 MHz) spectrum of **DDPDI-Br** in CDCl_3 .

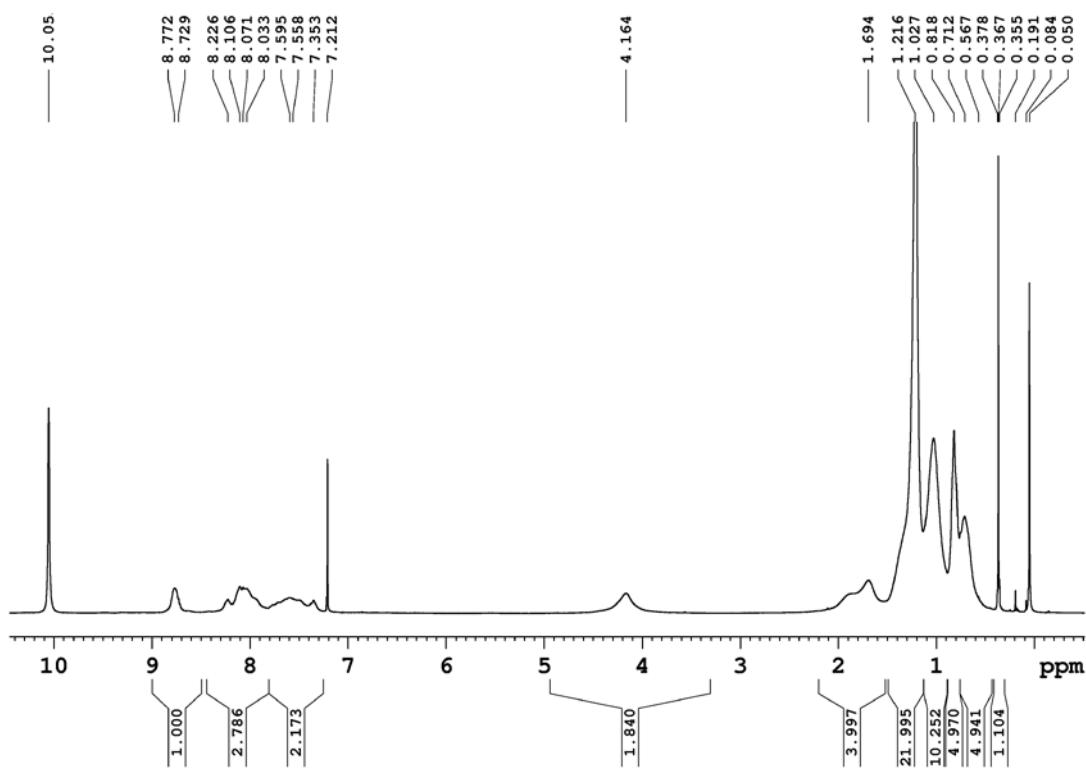


Fig. S6: ¹H NMR (300.13 MHz) spectrum of **CFC8-DDPDI** in CDCl₃:CF₃COOD (20:1 v/v).

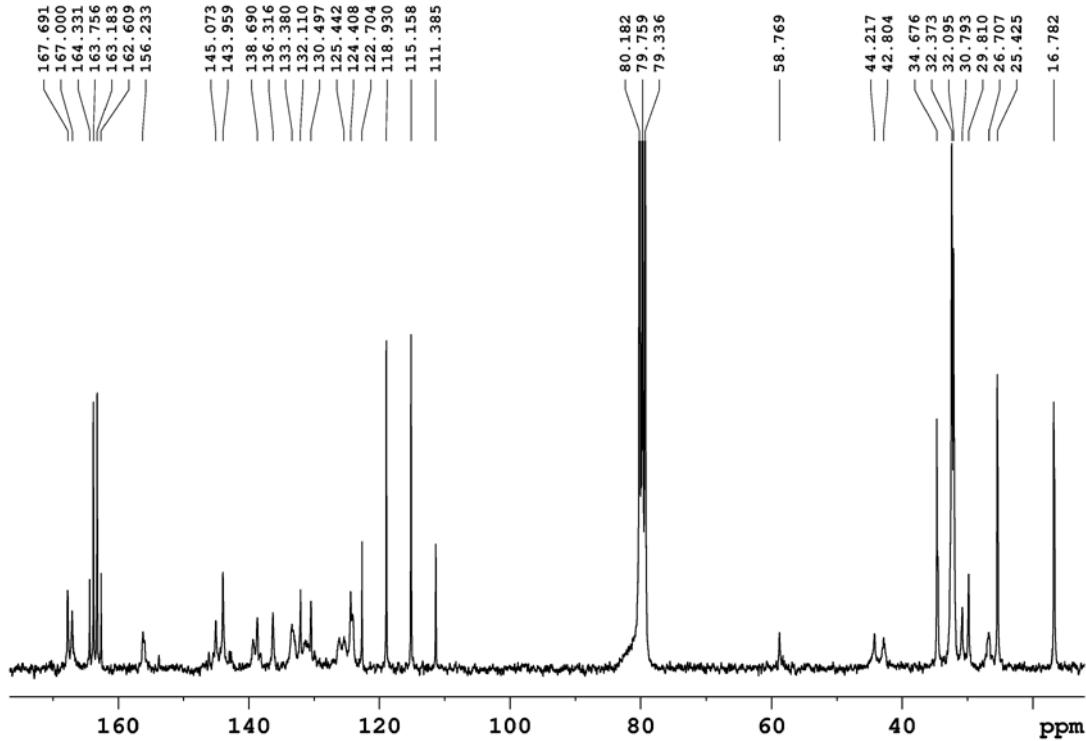


Fig. S7: ¹³C NMR (75.45 MHz) spectrum of **CFC8-DDPDI** in CDCl₃:CF₃COOD (20:1 v/v).

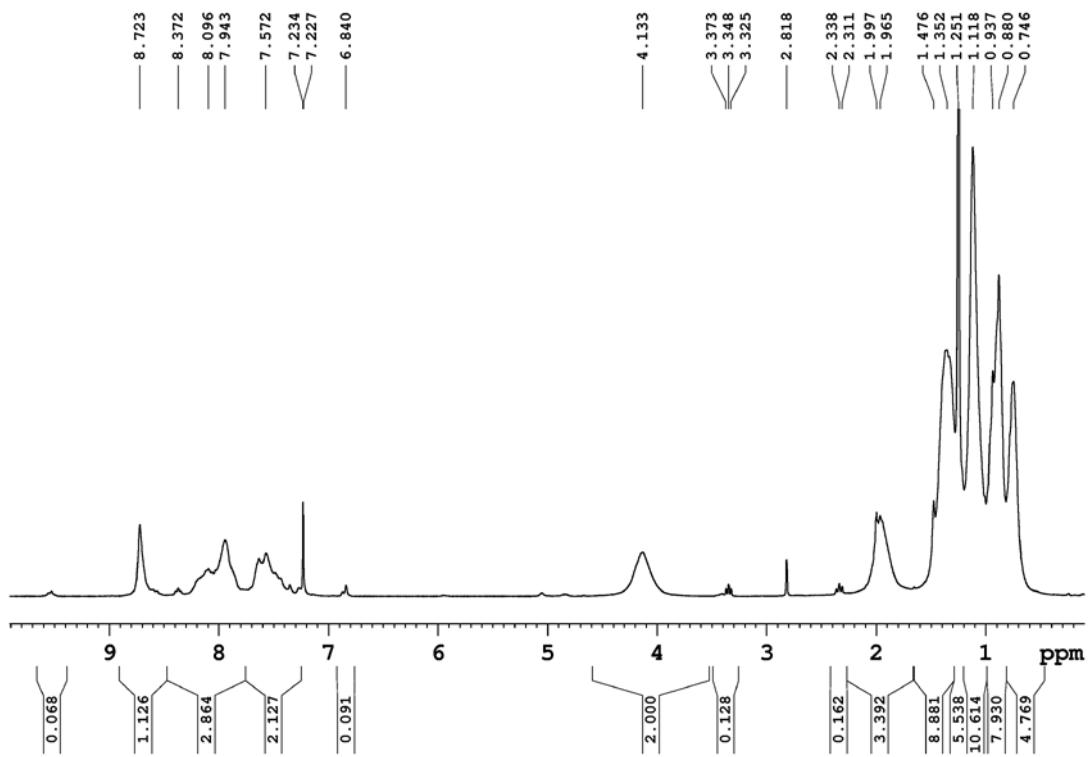


Fig. S8: ^1H NMR (300.13 MHz) spectrum of **CFC8-EHPDI** in CDCl_3 .

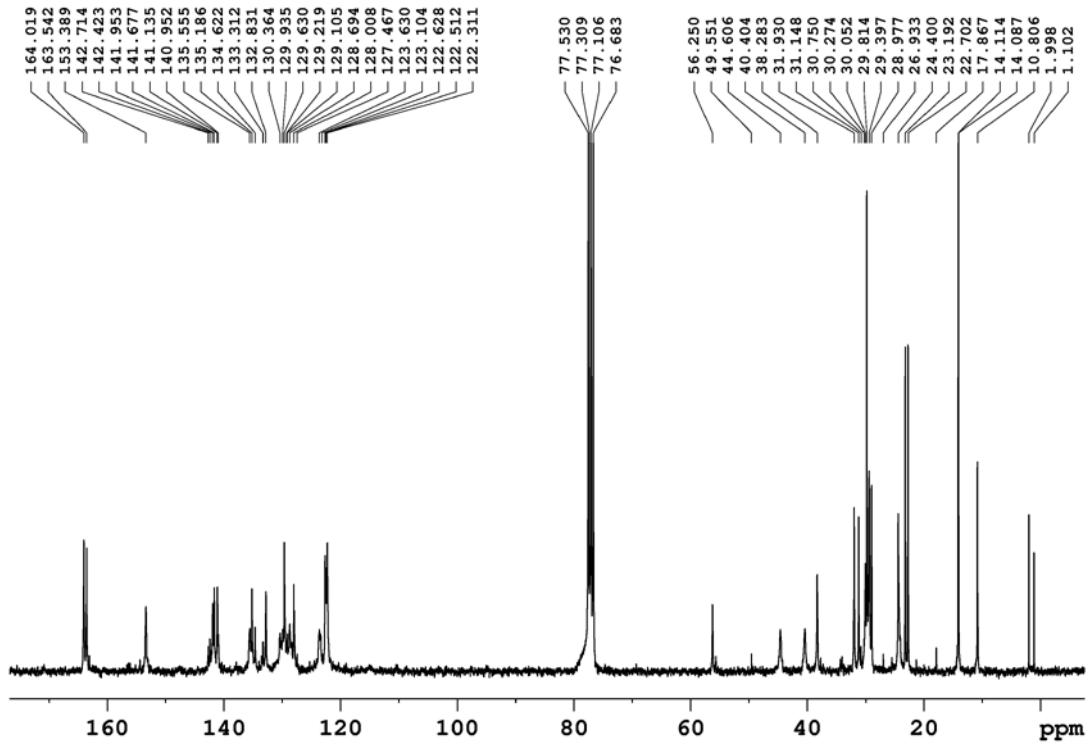


Fig. S9: ^{13}C NMR (75.45 MHz) spectrum of **CFC8-EHPDI** in CDCl_3 .

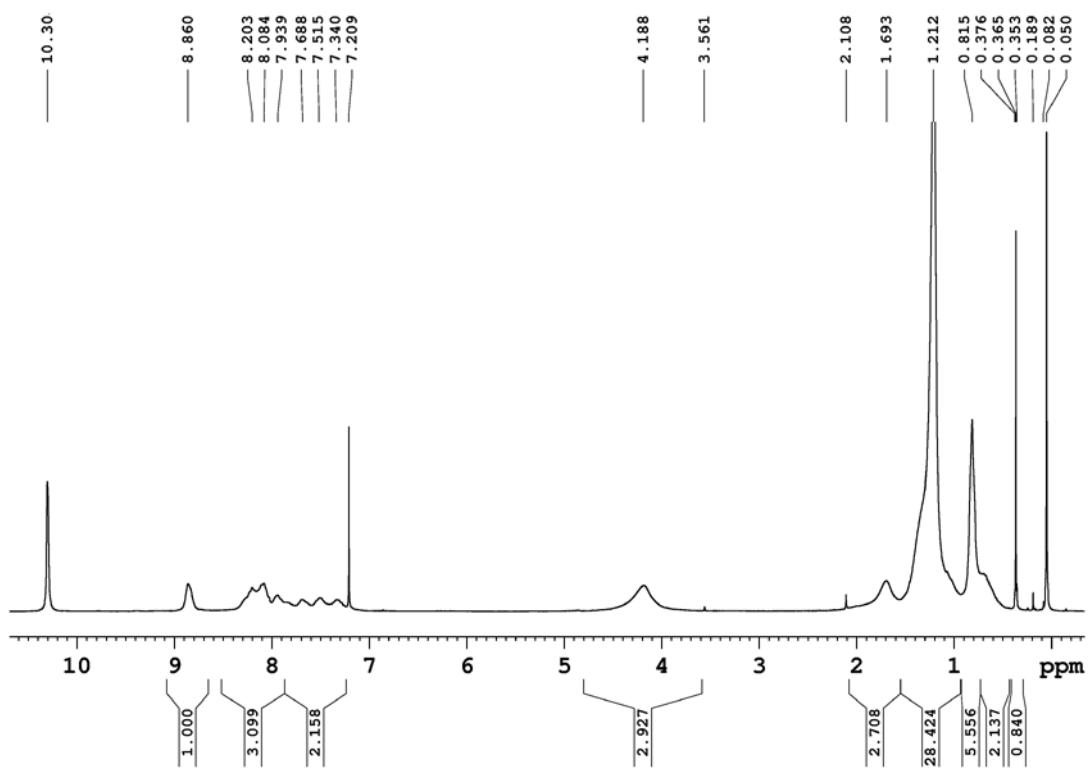


Fig. S10: ¹H NMR (300.13 MHz) spectrum of **CEHCz-DDPDI** in CDCl₃:CF₃COOD (30:1 v/v).

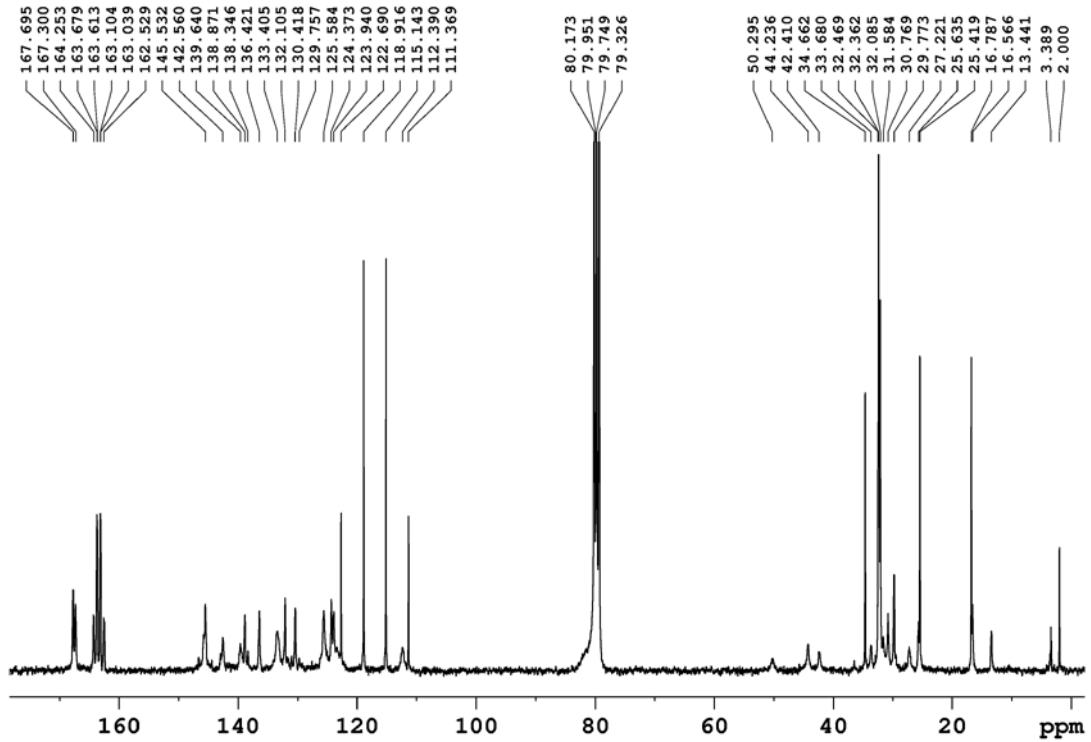


Fig. S11: ¹³C NMR (75.45 MHz) spectrum of **CEHCz-DDPDI** in CDCl₃:CF₃COOD (30:1 v/v).

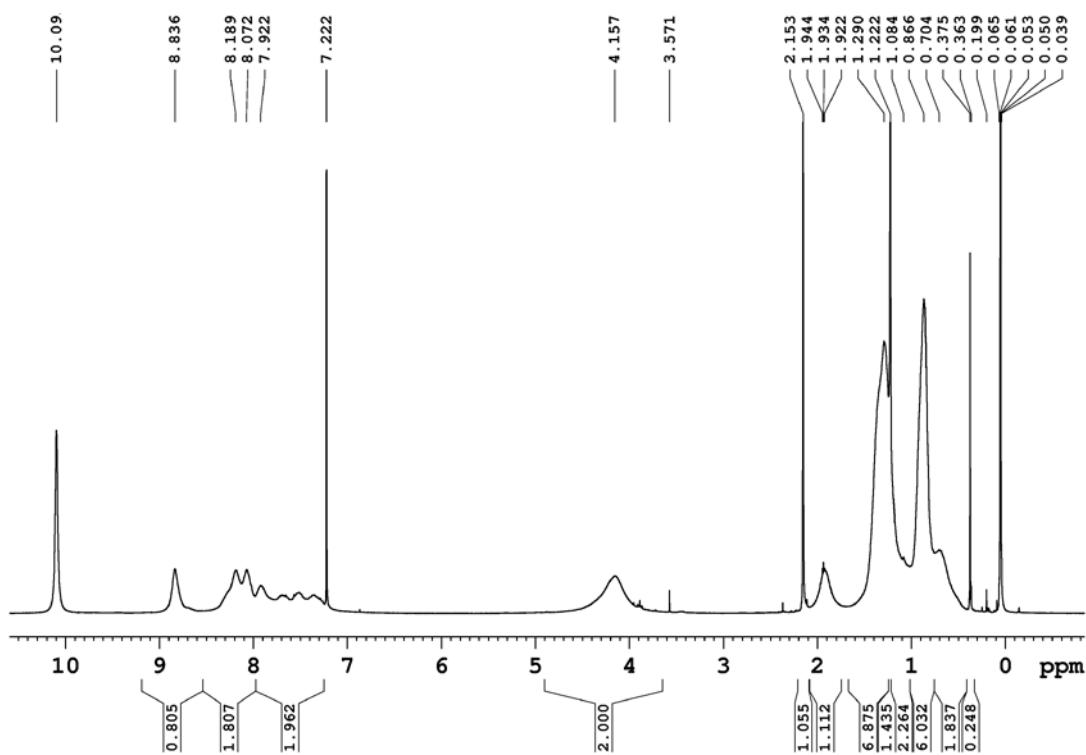


Fig. S12: ¹H NMR (300.13 MHz) spectrum of **CEHCz-EHPDI** in CDCl₃:CF₃COOD (30:1 v/v).

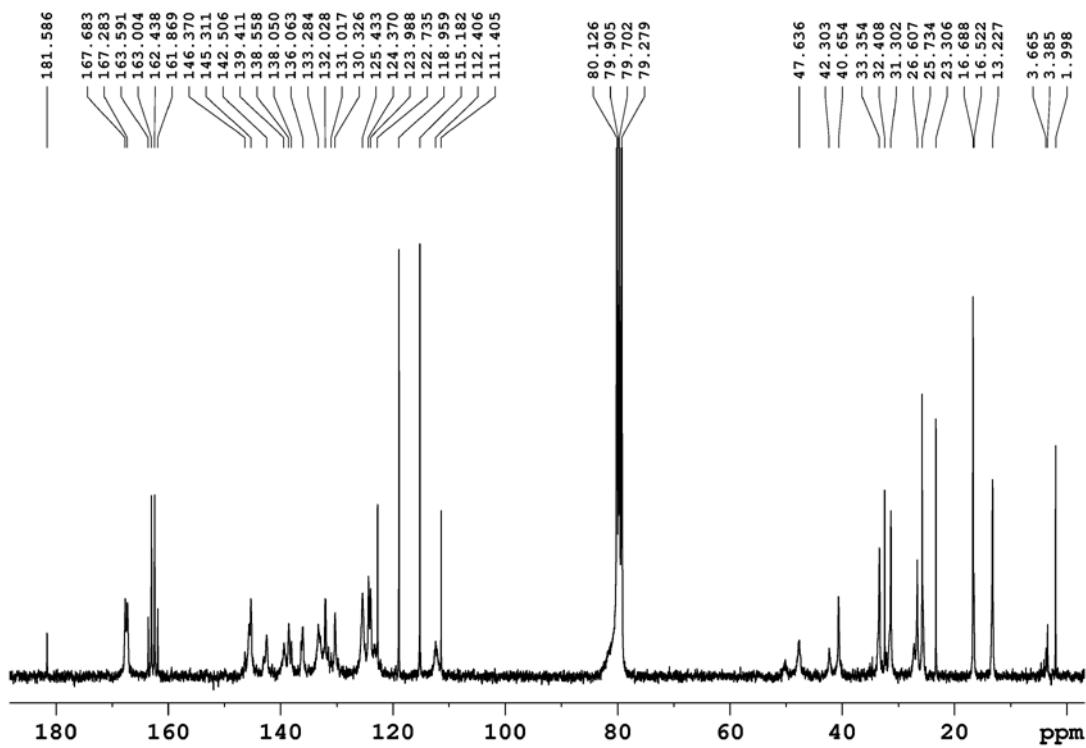


Fig. S13: ¹³C NMR (75.45 MHz) spectrum of **CEHCz-EHPDI** in CDCl₃:CF₃COOD (30:1 v/v).

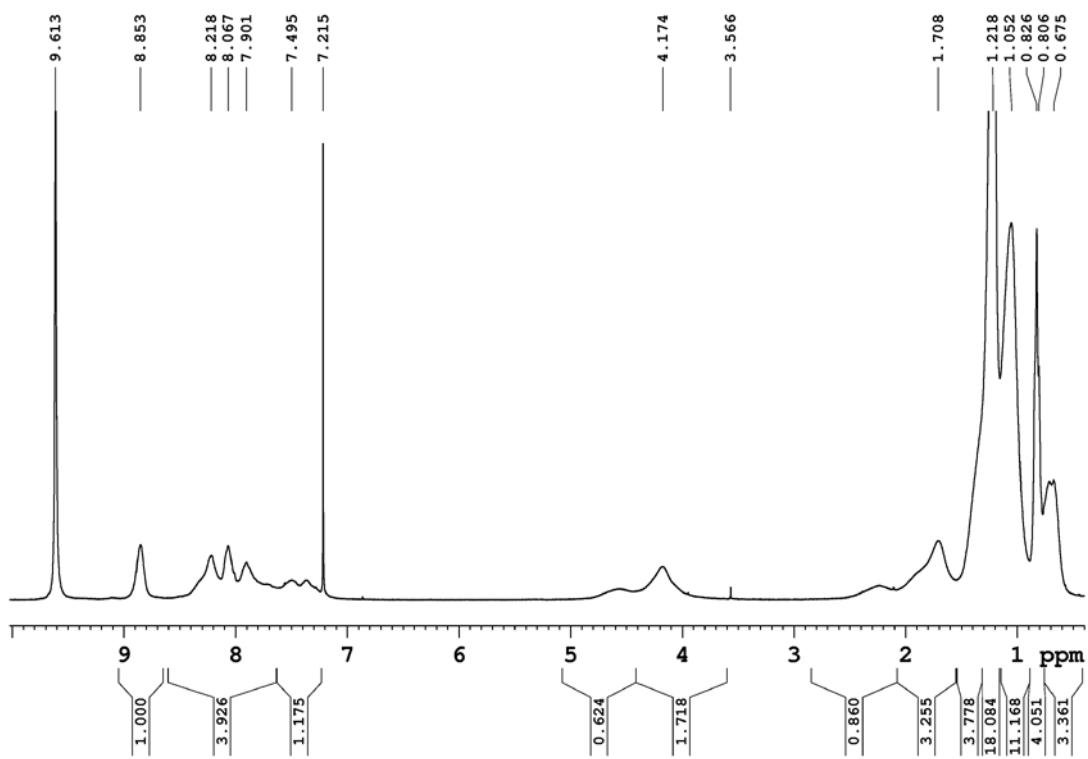


Fig. S14: ^1H NMR (300.13 MHz) spectrum of **CHDCz-DDPDI** in $\text{CDCl}_3:\text{CF}_3\text{COOD}$ (20:1 v/v).

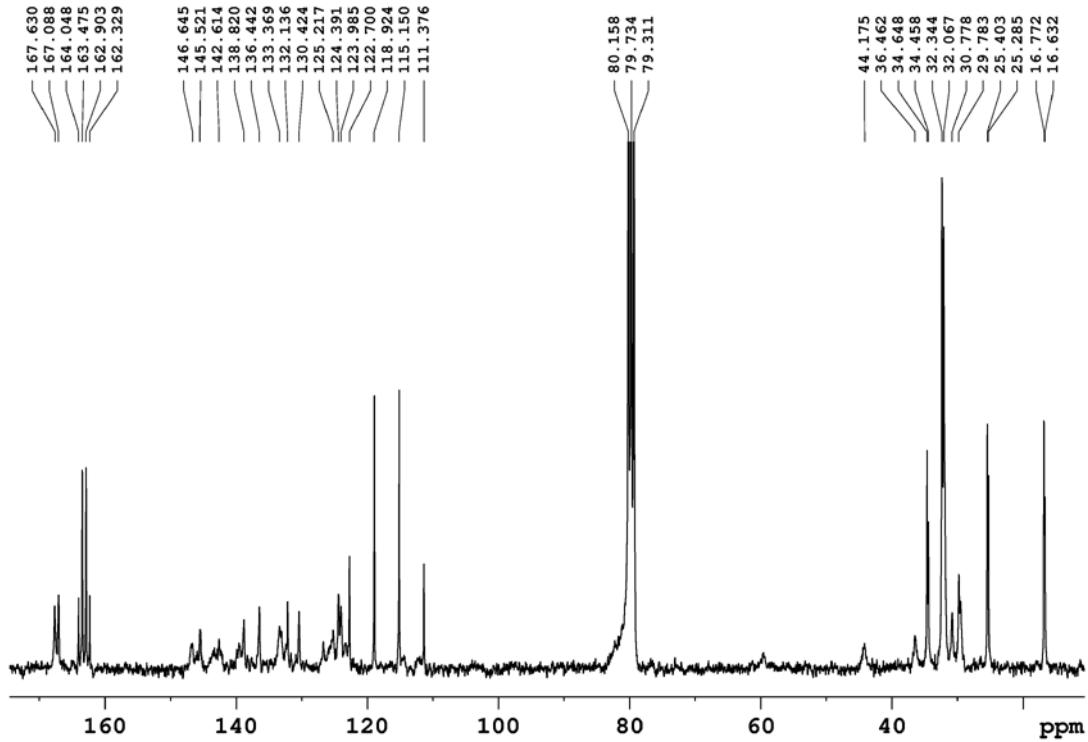


Fig. S15: ^{13}C NMR (75.45 MHz) spectrum of **CHDCz-DDPDI** in $\text{CDCl}_3:\text{CF}_3\text{COOD}$ (20:1 v/v).

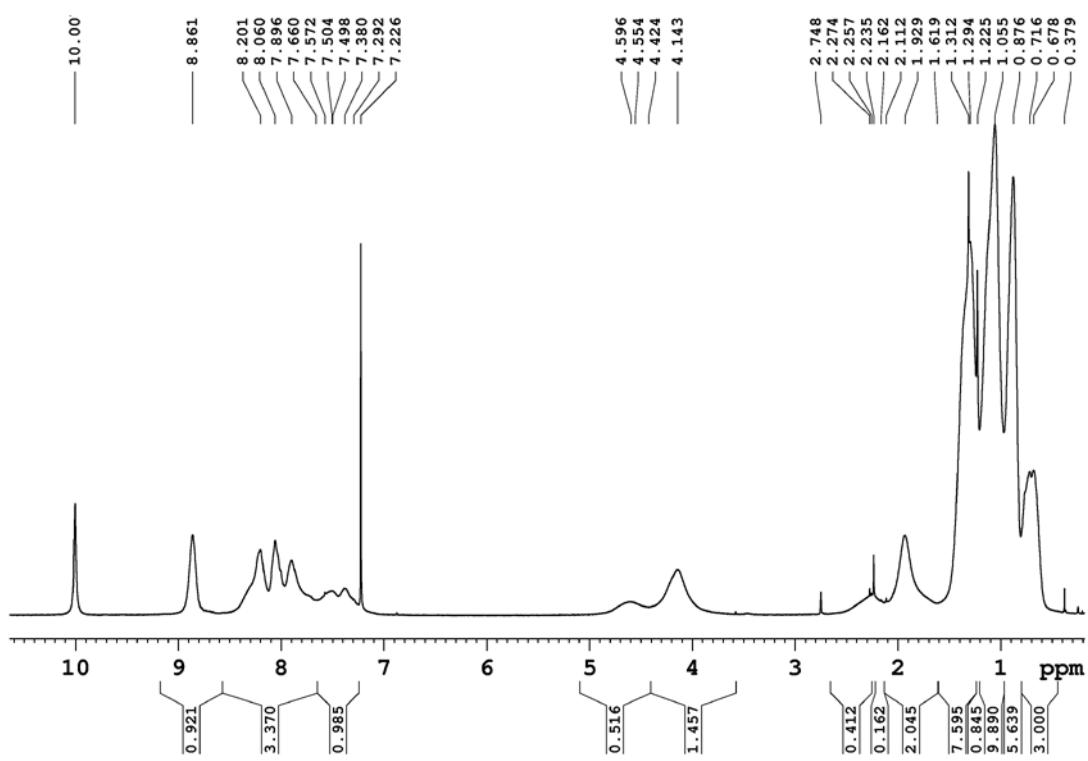


Fig. S16: ¹H NMR (300.13 MHz) spectrum of **CHDCz-EHPDI** in CDCl₃:CF₃COOD (60:1 v/v).

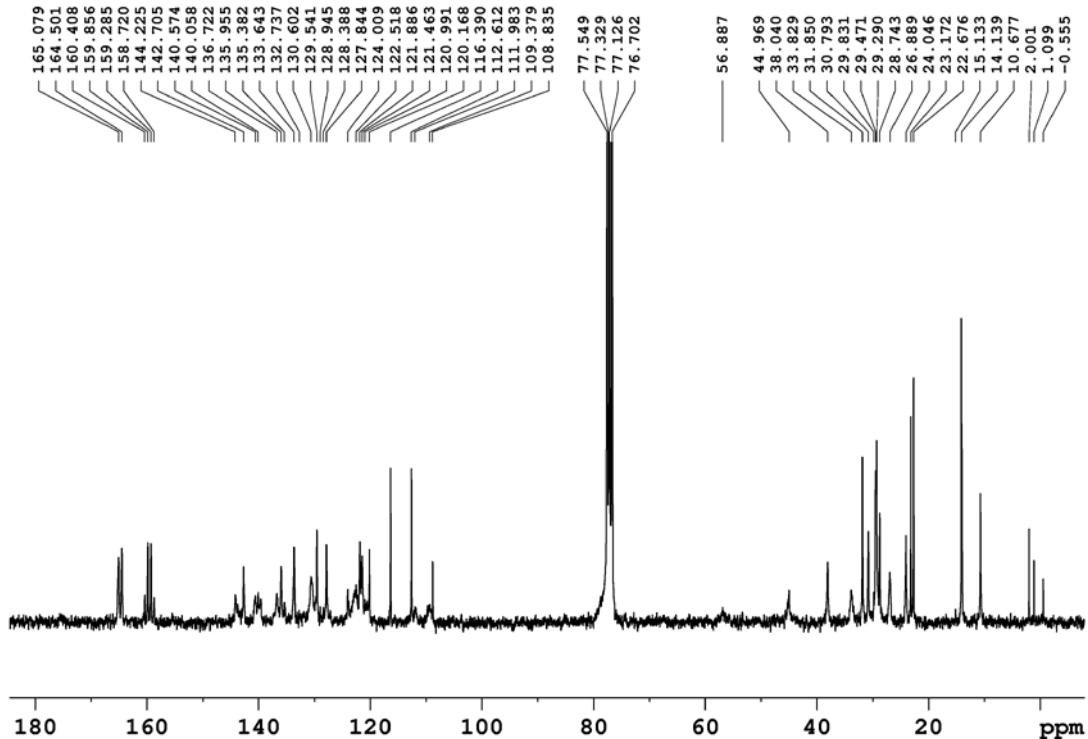


Fig. S17: ¹³C NMR (75.45 MHz) spectrum of **CHDCz-EHPDI** in CDCl₃:CF₃COOD (60:1 v/v).

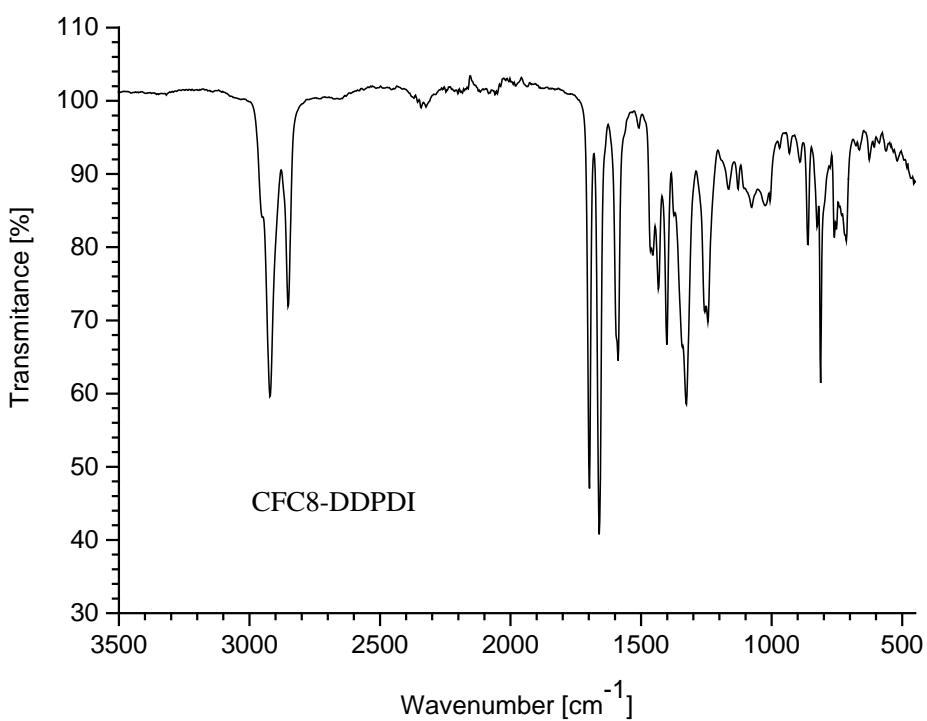


Fig. S18: FT IR spectrum of copolymer **CFC8-DDPDI**.

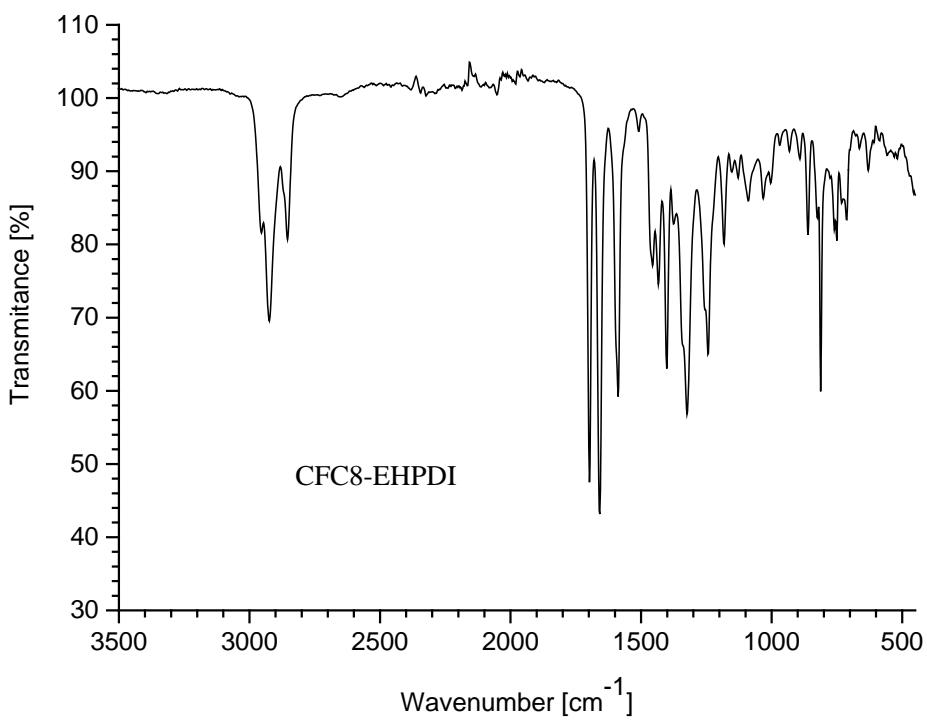


Fig. S19: FT IR spectrum of copolymer **CFC8-EHPDI**.

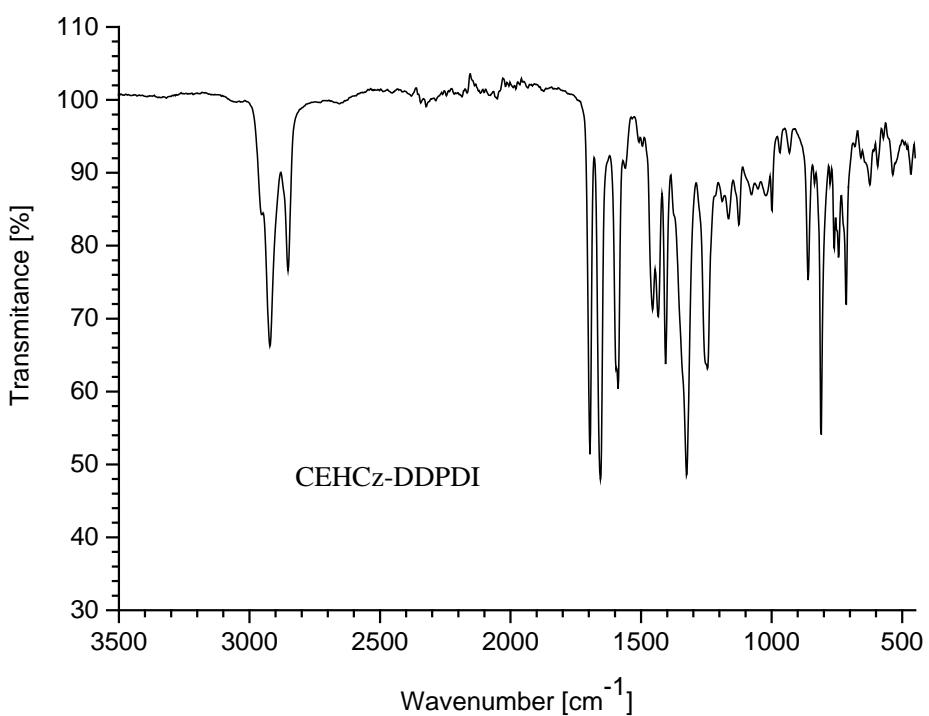


Fig. S20: FT IR spectrum of copolymer **CEHCz-DDPDI**.

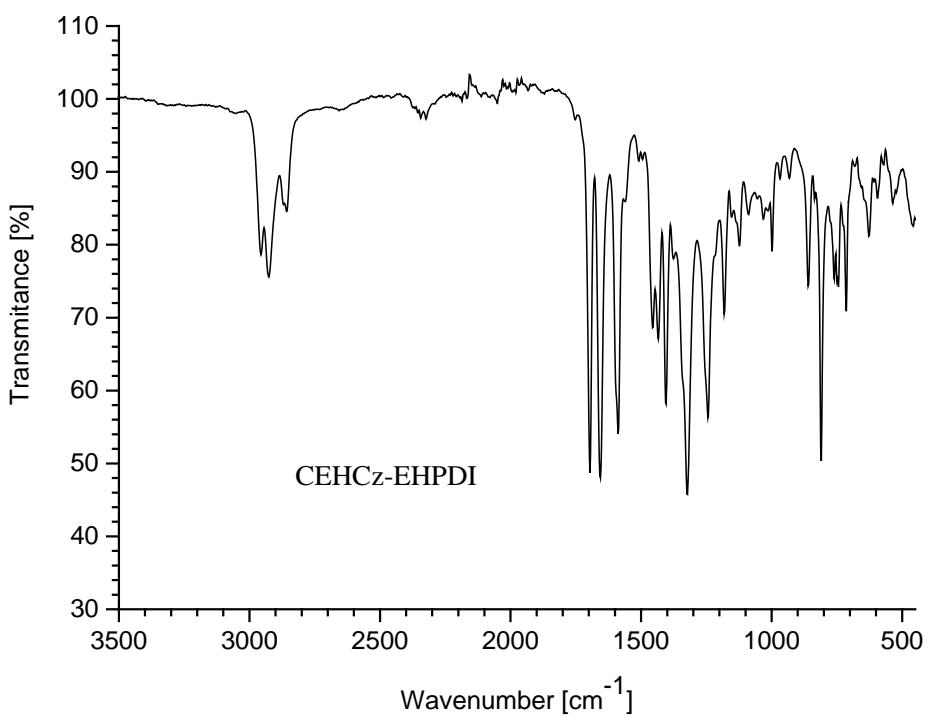


Fig. S21: FT IR spectrum of copolymer **CEHCz-EHPDI**.

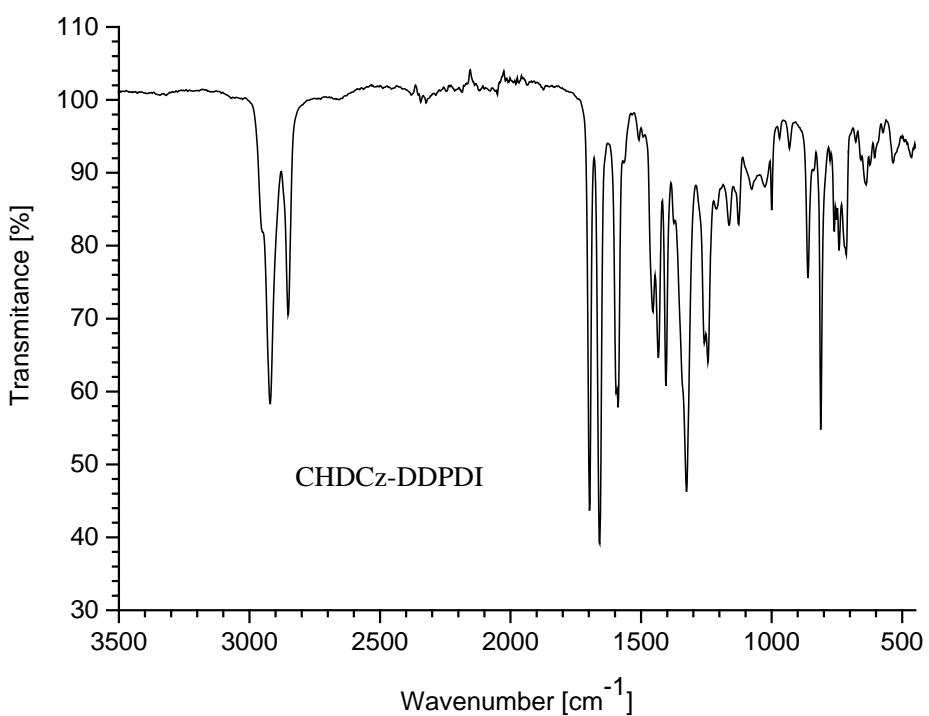


Fig. S22: FT IR spectrum of copolymer **CHDCz-DDPDI**.

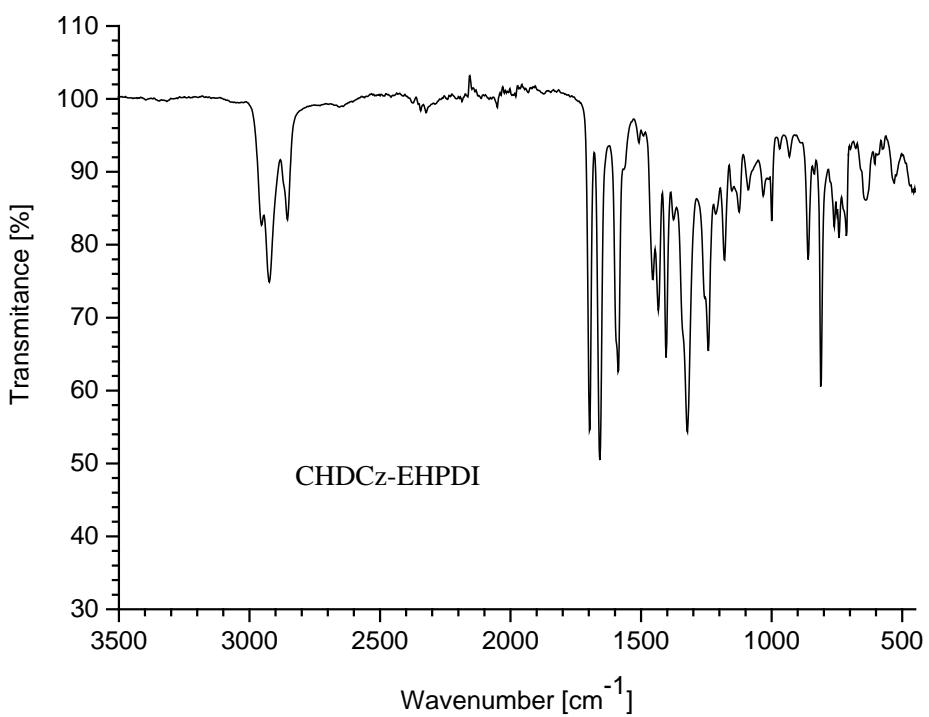


Fig. S23: FT IR spectrum of copolymer **CHDCz-EHPDI**.