

Supporting Information

Vinylene and Benzo[*c*][1,2,5]thiadiazole: Effect of the π -Spacer Unit on the Properties of Bis(2-oxoindolin-3-ylidene)-benzodifuran-dione Containing Polymers for n-Channel Organic Field-Effect Transistors

Thu Trang Do,^{a#} Basanagouda B Patil,^{a#} Samarendra P. Singh,^b Soniya D. Yambem,^a

Krishna Feron,^{c,d} Kostya (Ken) Ostrikov,^a John M. Bell,^a Prashant Sonar^{a}*

^aSchool of Chemistry, Physics and Mechanical Engineering, Queensland University of Technology (QUT), 2 George Street, Brisbane, QLD-4001, Australia.

^bDepartment of Physics, School of Natural Sciences, Shiv Nadar University (SNU), Gautam Buddha Nagar, Uttar Pradesh, India-201307

^cCSIRO Energy Centre, NSW-2304, Australia.

^dCentre for Organic Electronics, University of Newcastle, Callaghan, NSW 2308, Australia.

[#]Both authors contributed equally to this work

Corresponding email: sonar.prashant@qut.edu.au

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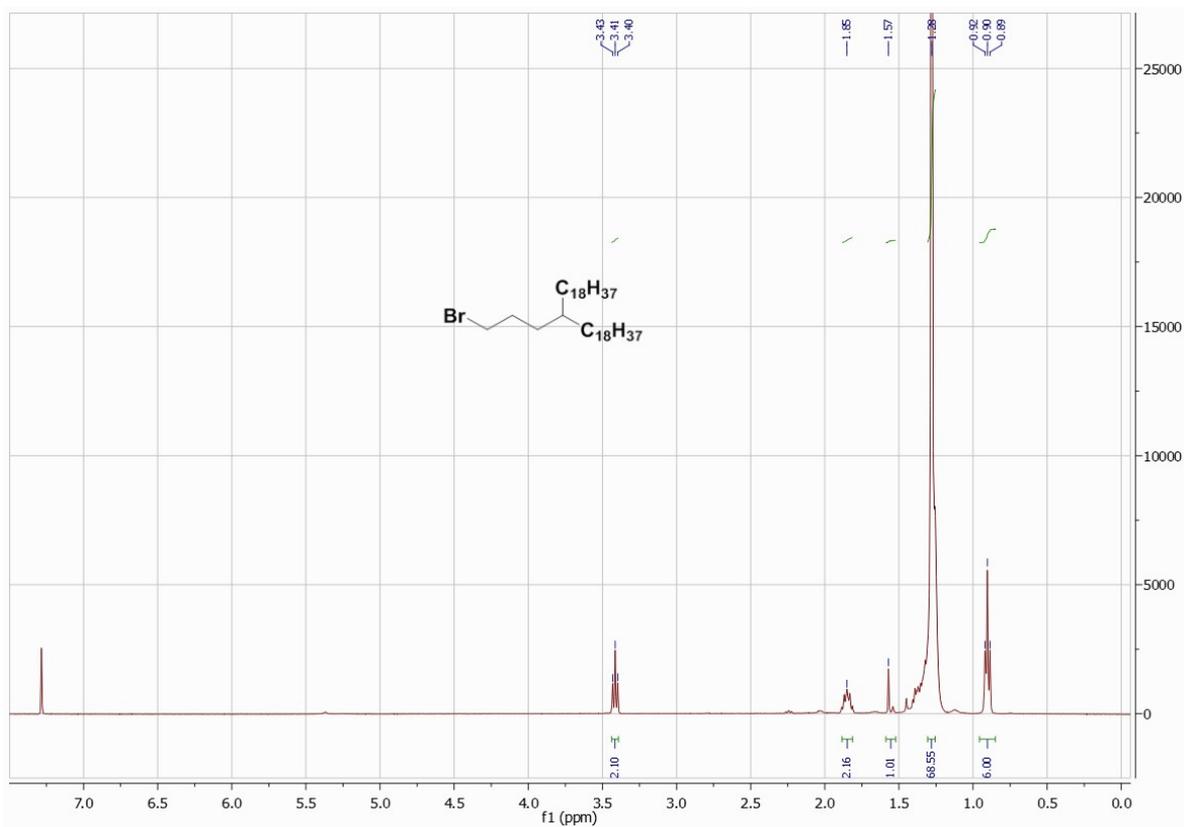


Figure S1. ^1H NMR (600 MHz, CDCl_3) spectrum of **1**

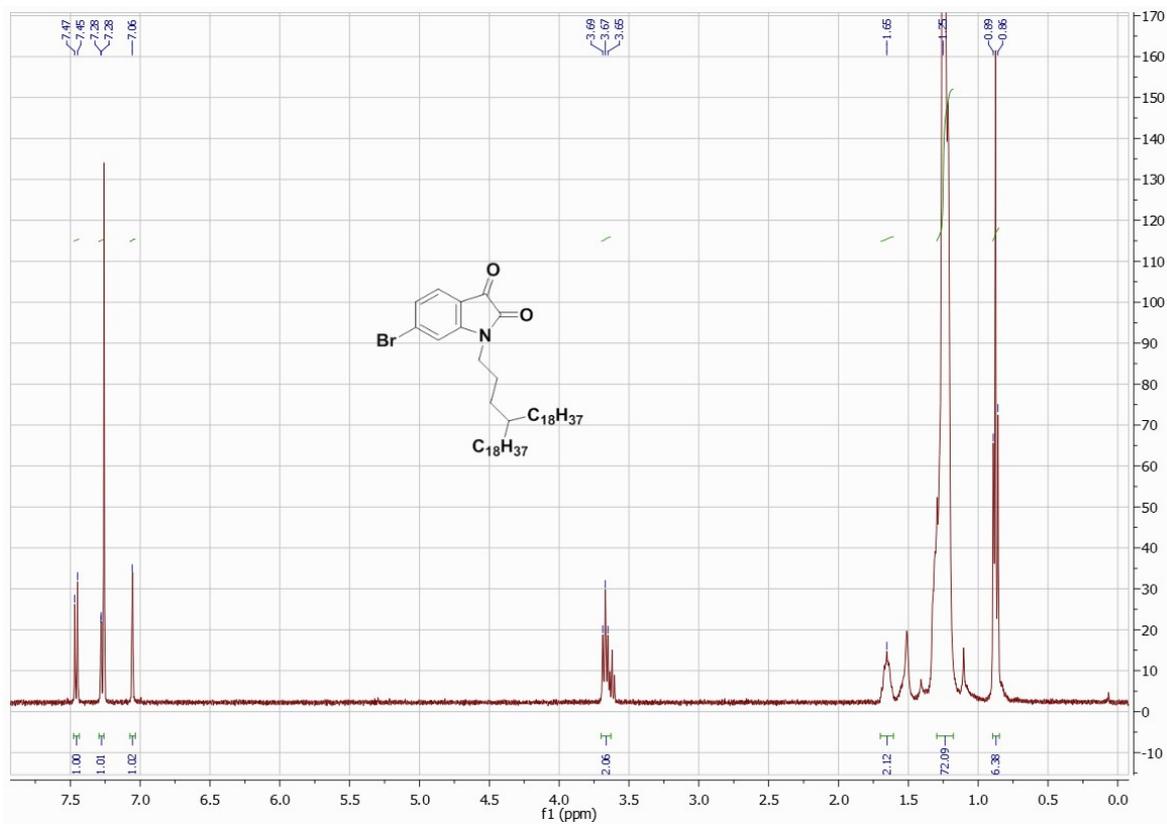


Figure S2. ^1H NMR (600 MHz, CDCl_3) spectrum of **3**

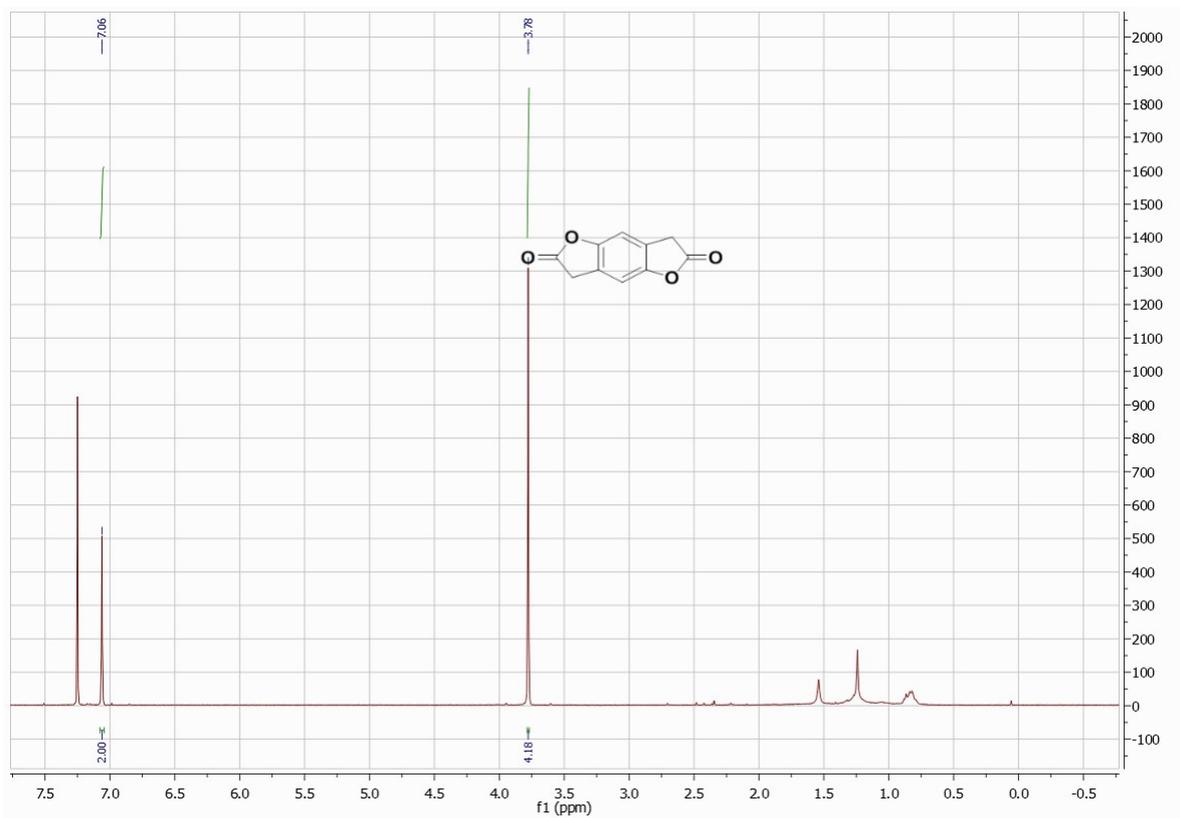


Figure S3. ^1H NMR (600 MHz, CDCl_3) spectrum of **4**

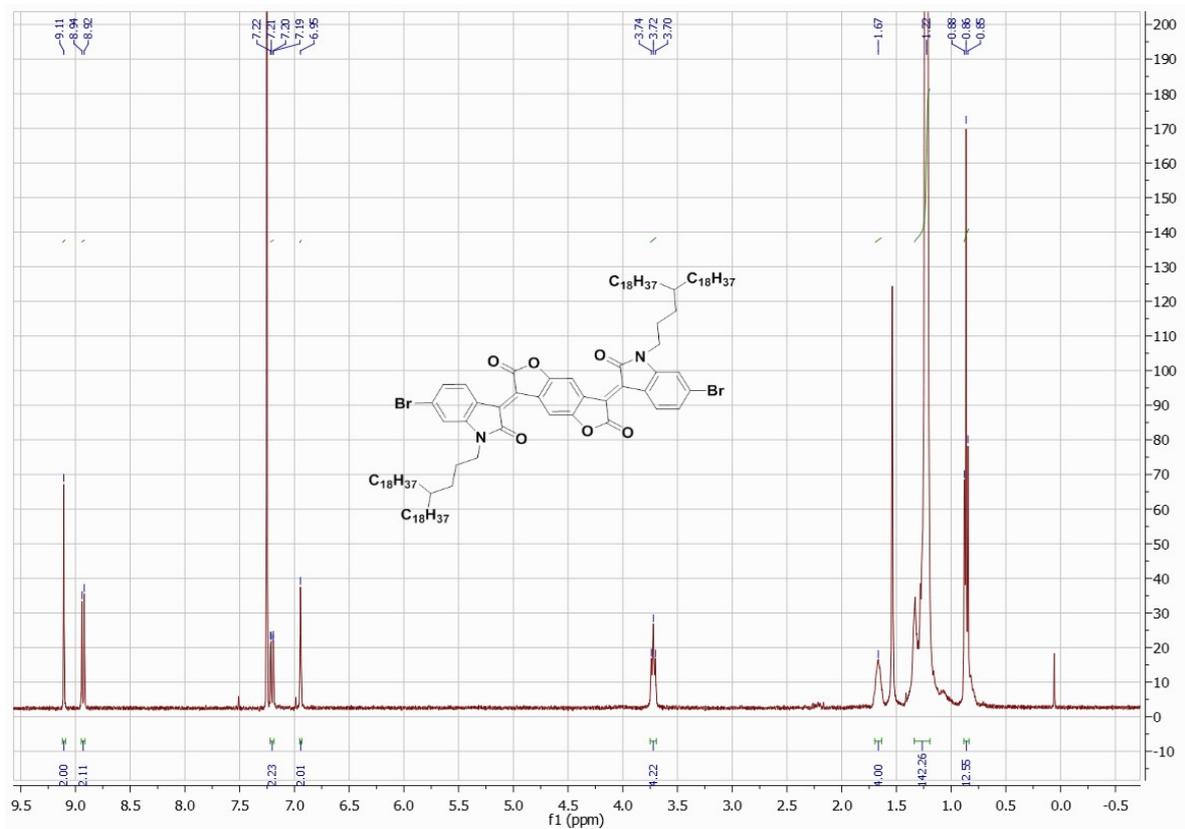


Figure S4. ^1H NMR (600 MHz, CDCl_3) spectrum of **BIBDF**

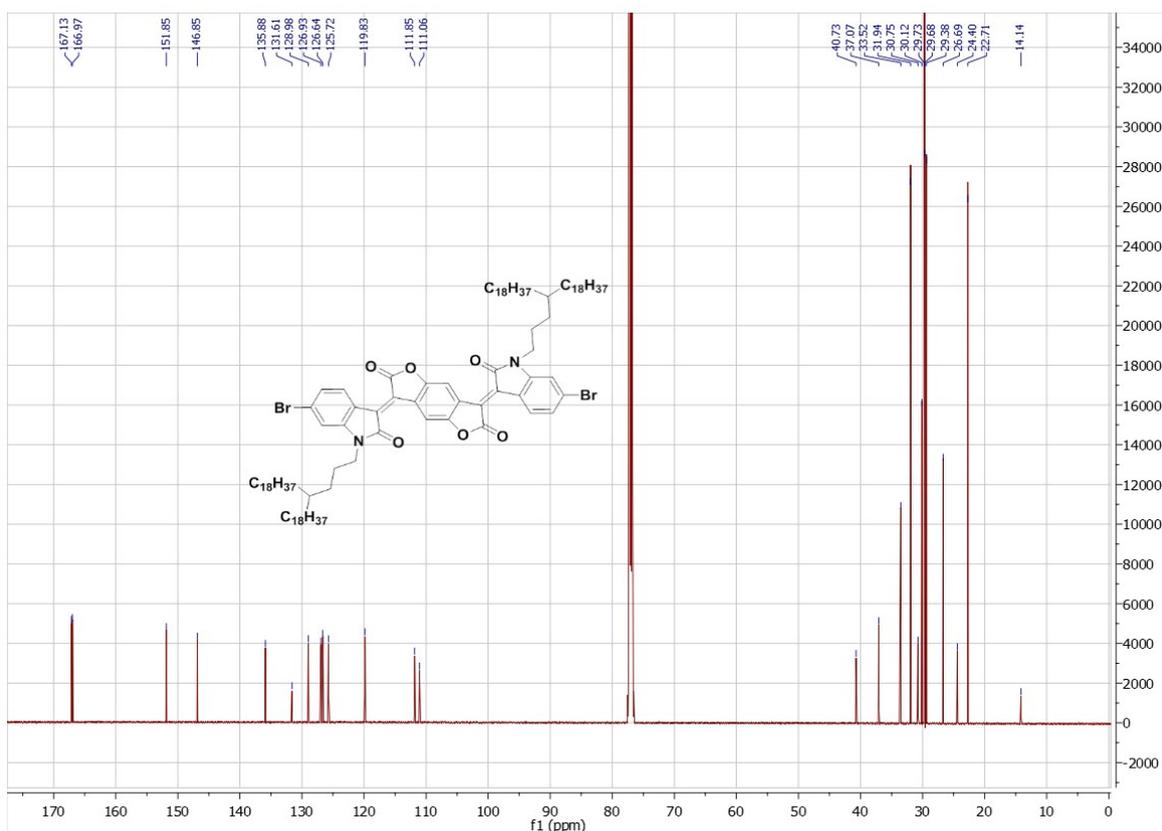


Figure S5. ^{13}C NMR (150 MHz, CDCl_3) spectrum of **BIBDF**

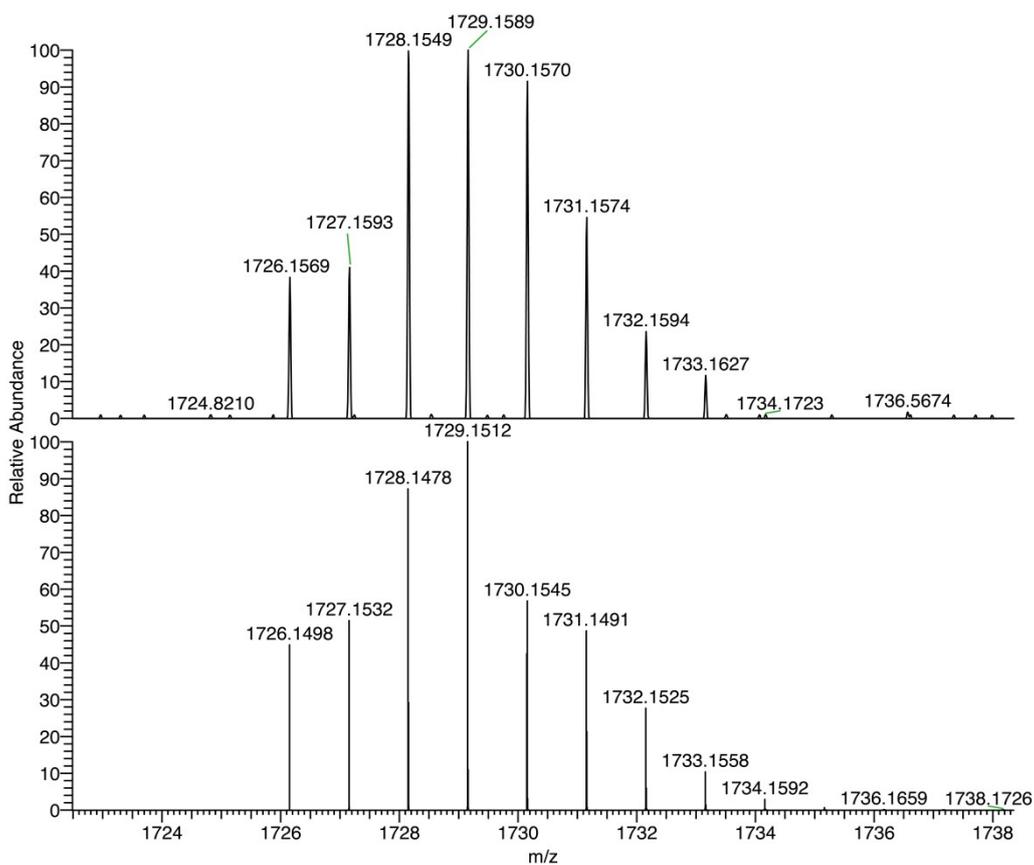
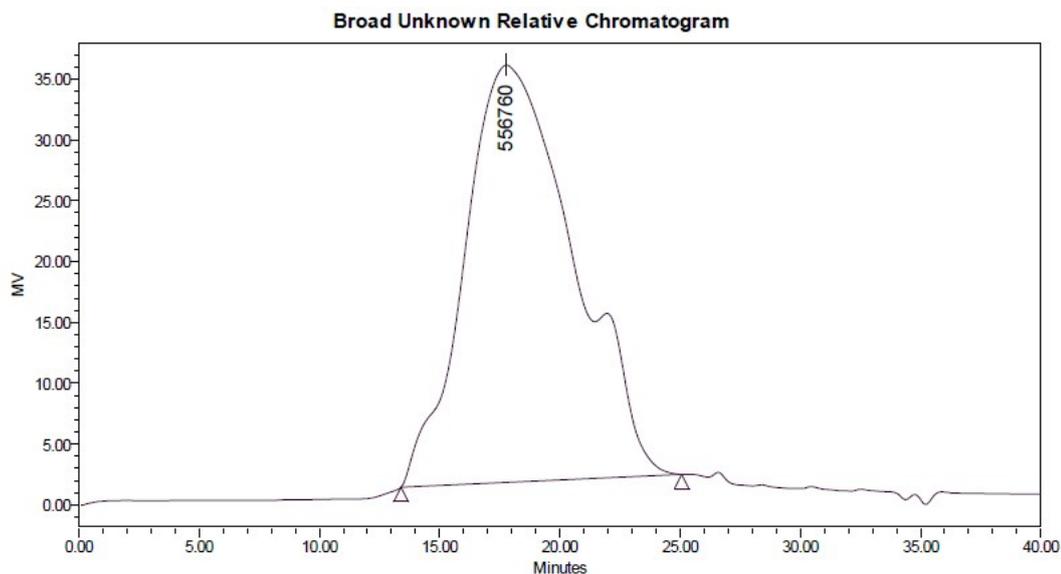


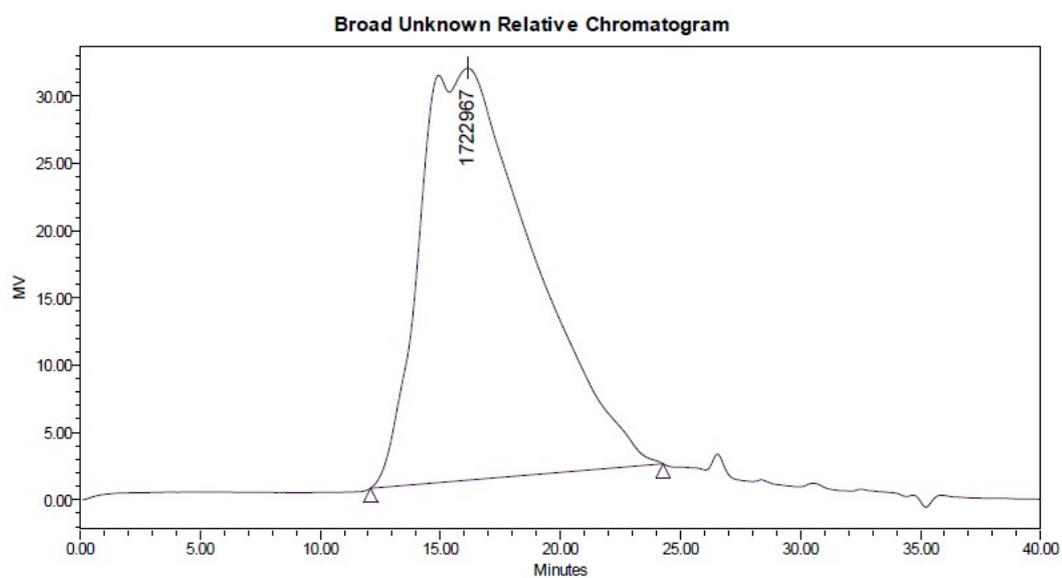
Figure S6. HRMS spectrum of **BIBDF**



Broad Unknown Relative Peak Table

Distribution Name	Mn (Daltons)	Mw (Daltons)	MP (Daltons)	Mz+1 (Daltons)	Polydispersity	Mz/Mw	Mz+1/Mw
1	173529	870172	556760	7743232	5.014567	4.229790	8.898509

Figure S7. Gel permeation chromatogram of polymer **PIBDF-TV T** in chloroform at 30°C.



Broad Unknown Relative Peak Table

Distribution Name	Mn (Daltons)	Mw (Daltons)	MP (Daltons)	Mz+1 (Daltons)	Polydispersity	Mz/Mw	Mz+1/Mw
1	360648	3064874	1722967	25140504	8.498248	3.959119	8.202786

Figure S8. Gel permeation chromatogram of polymer **PIBDF-TB T** in chloroform at 30°C.

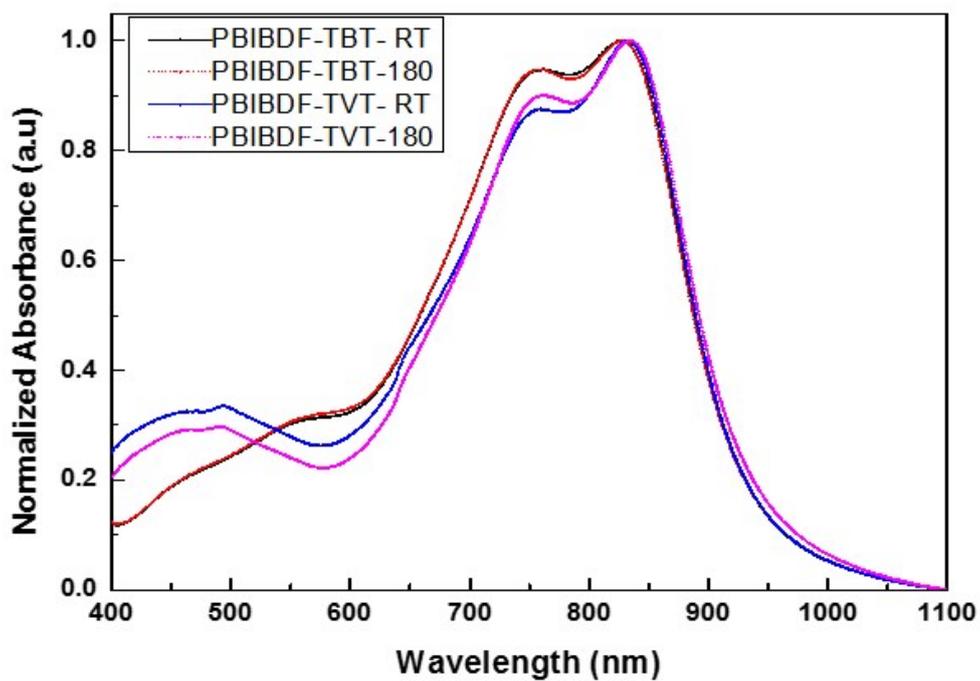


Figure S9. UV-Vis absorption spectra of **PBIBDF-TVT** and **PBIBDF-TBT** thin films at RT and 180 °C.

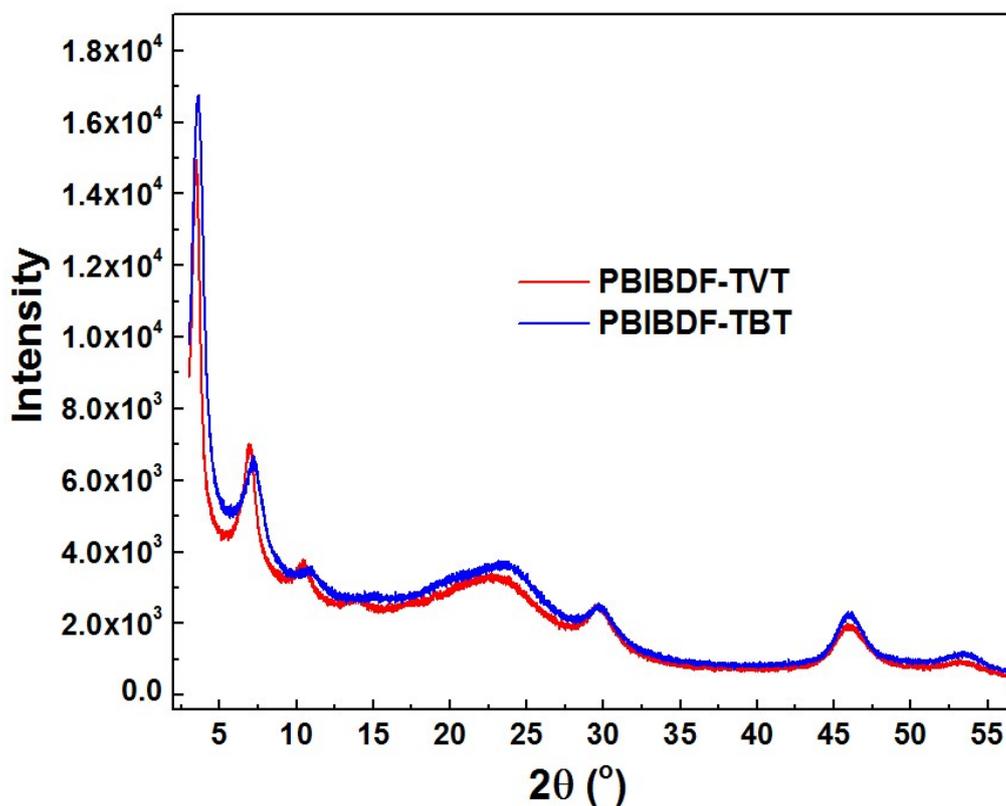


Figure S10. Powder X-ray diffraction (XRD) Patterns at RT and after annealing at 180°C for **PBIBDF-TVT** and **PBIBDF-TBT** polymers.

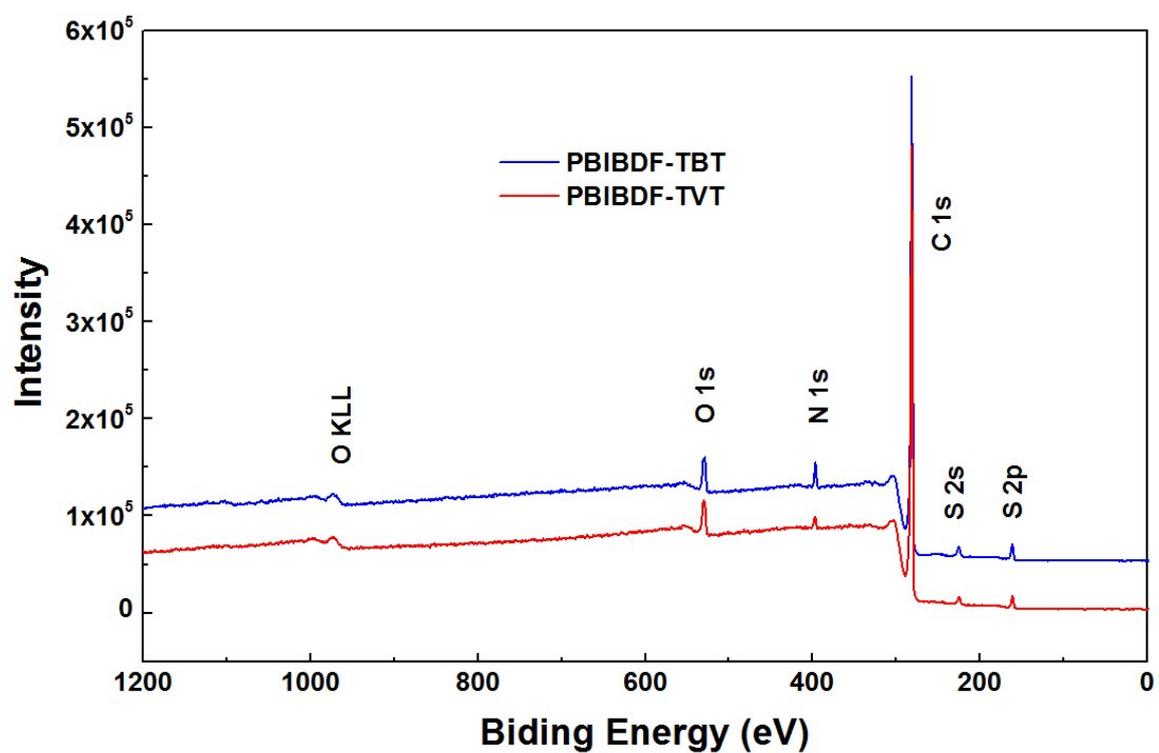


Figure S11. XPS survey spectrum of **PBIBDF-TVT** and **PBIBDF-TBT**



Figure S12. Polymers are aggregated in the mixture of chlorobenzene and DCM (7:3 v/v)
PBIBDF-TVT (left) and **PBIBDF-TBT** (right)