

Supplementary Data

New Fluorescent, Thermally stable and Film Forming Polyimines Containing Naphthyl Rings

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1. E.I mass spectra of monomers

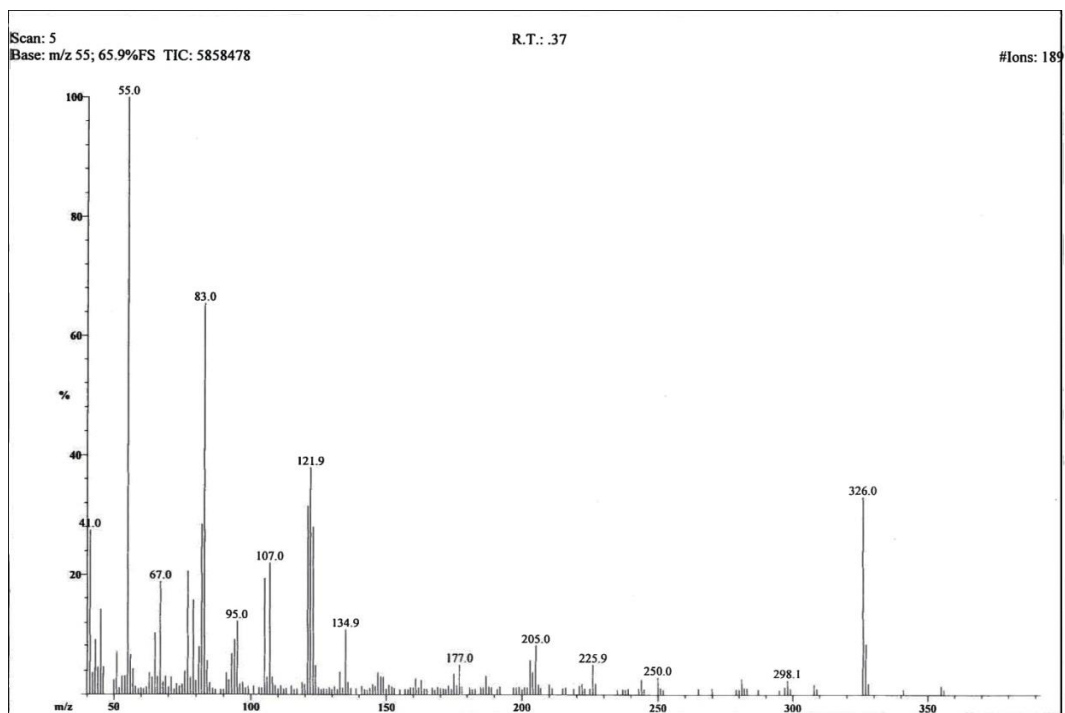


Figure S1: E.I mass spectrum of dialdehyde monomer *m*-HOB

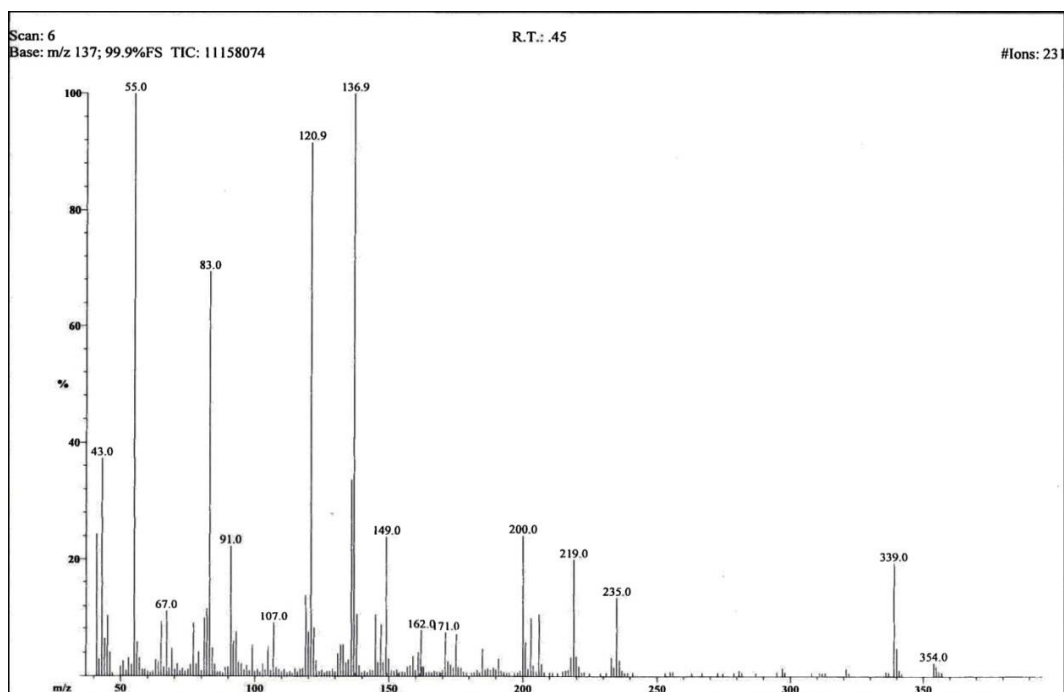


Figure S2: E.I mass spectrum of diketone monomer *o*-HOA

1. FT-IR spectrum of monomers and Polymers

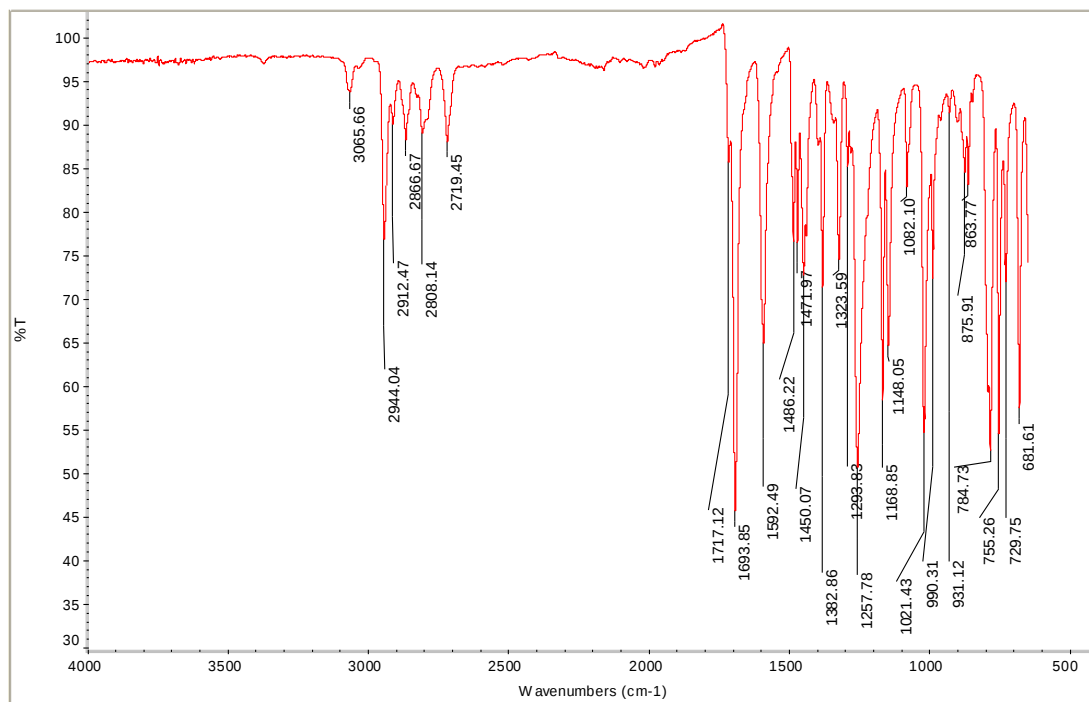


Figure S3: FT-IR spectrum of dialdehyde monomer *m*-HOB

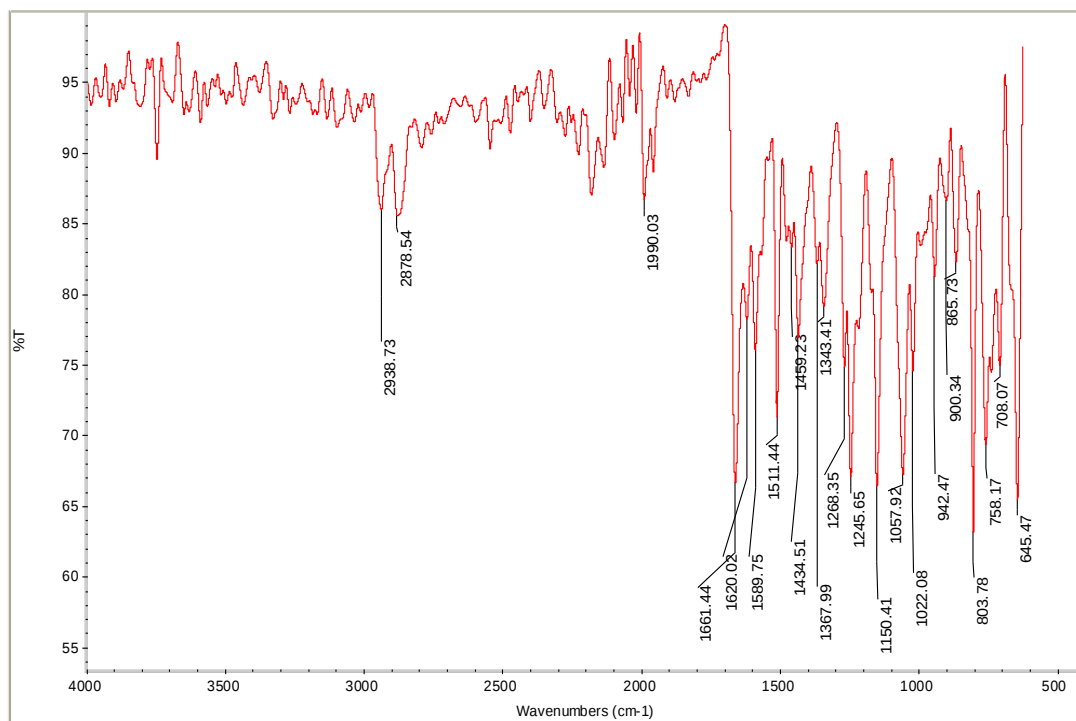


Figure S4: FT-IR spectrum of dialdehyde monomer *o*-HON

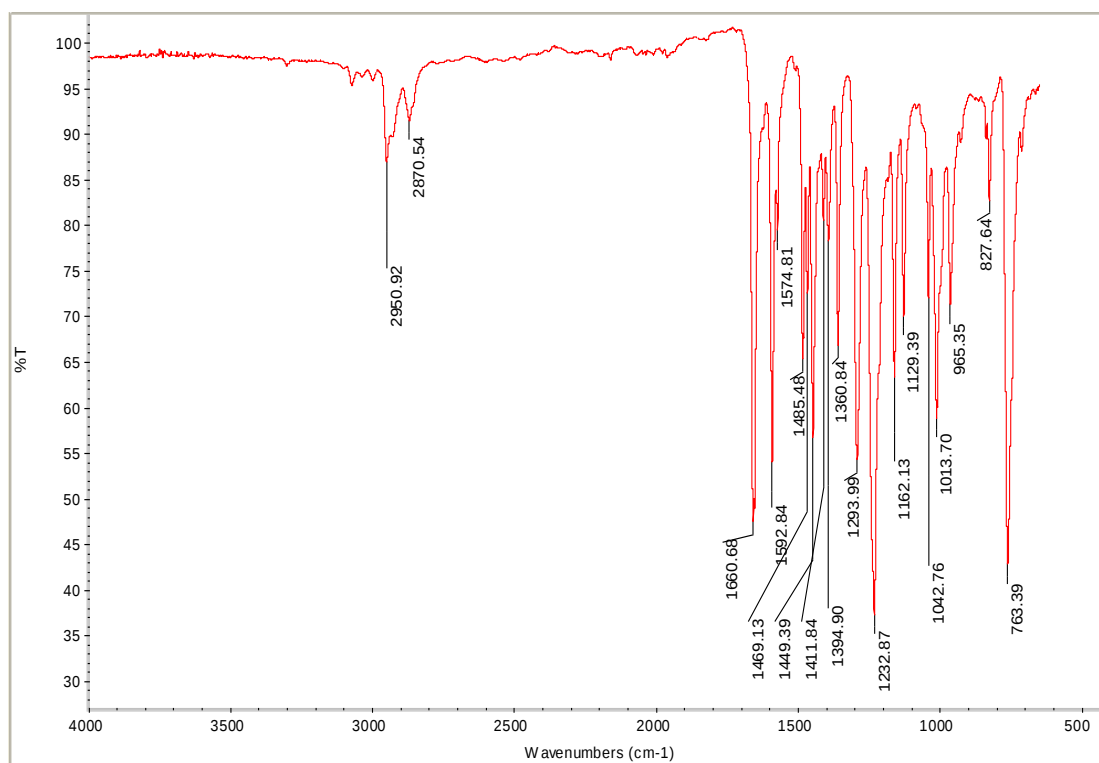


Figure S5: FT-IR spectrum of dialdehyde monomer *o*-HOA

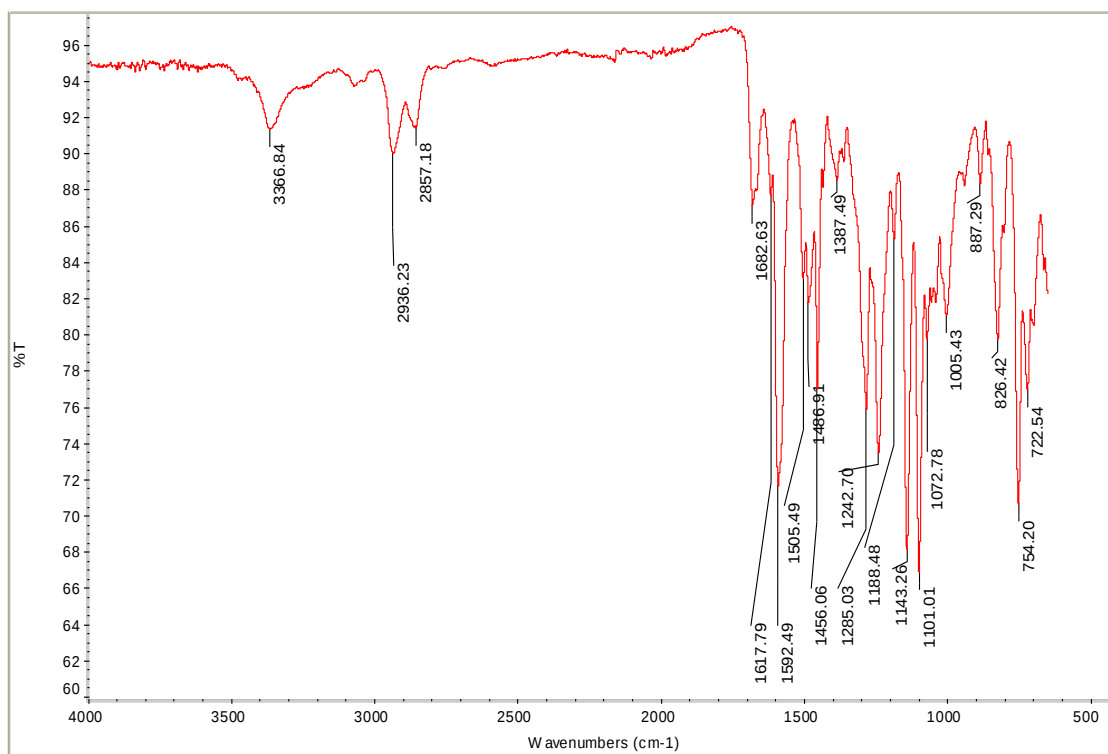


Figure S6: FT-IR spectrum of Schiff base polyether PoHONPD

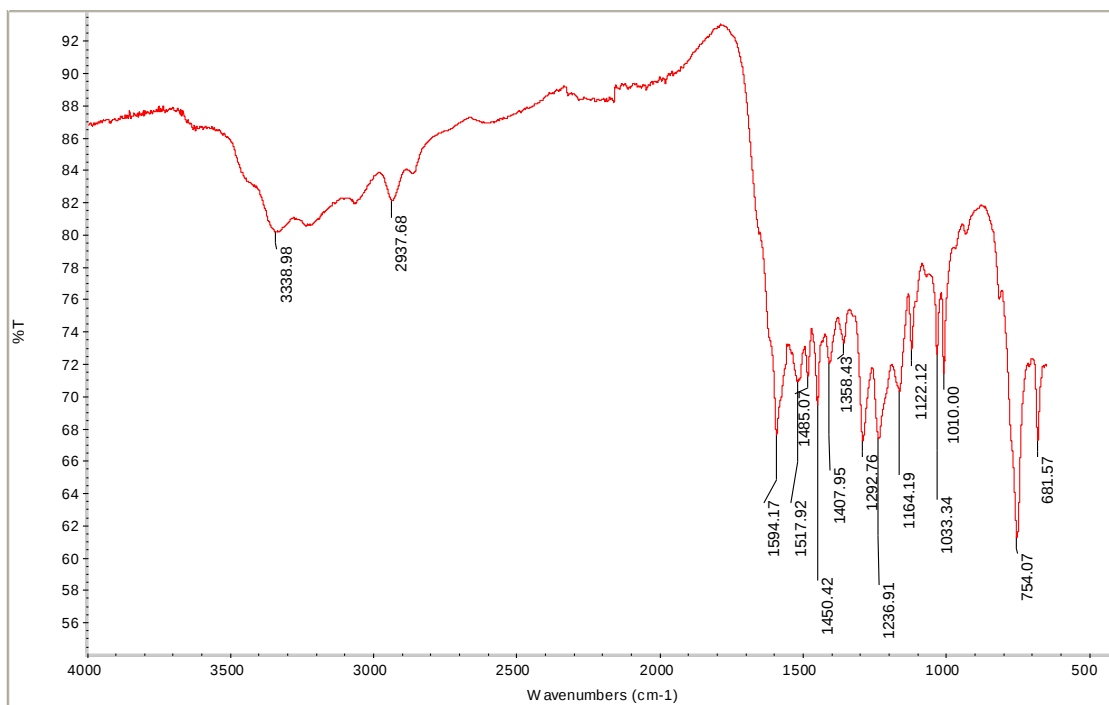


Figure S7: FT-IR spectrum of Schiff base polyether PoHOAND

2. ¹HNMR spectra of monomers

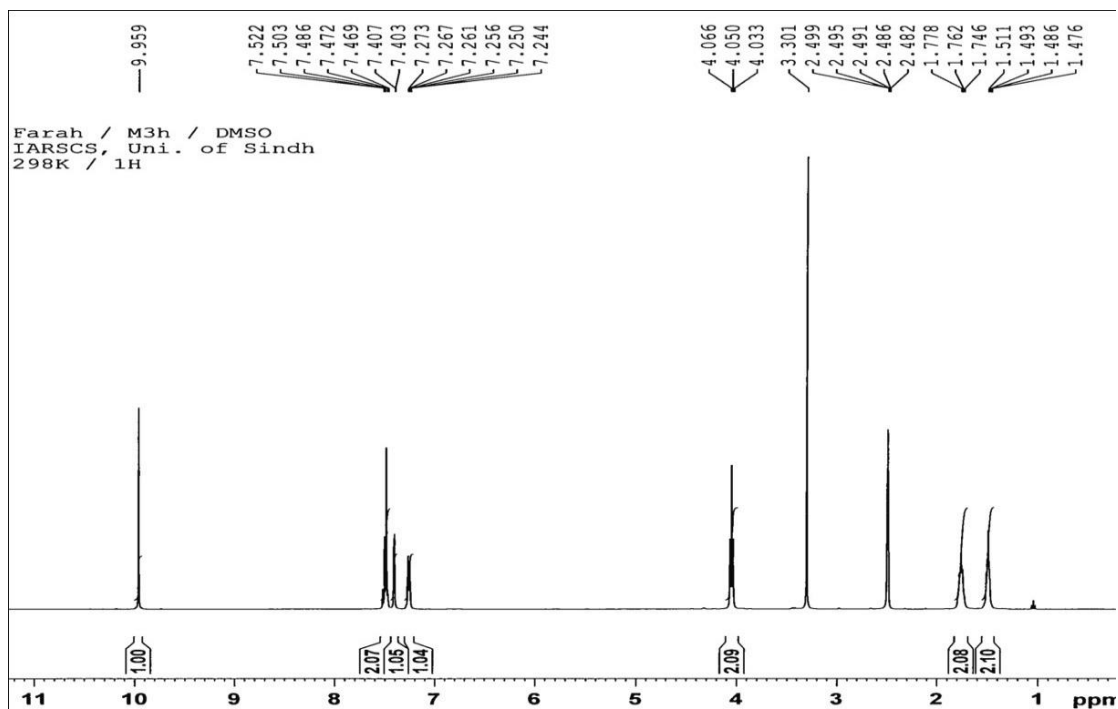


Figure S8: ¹H NMR spectrum of dialdehyde monomer *m*-HOB

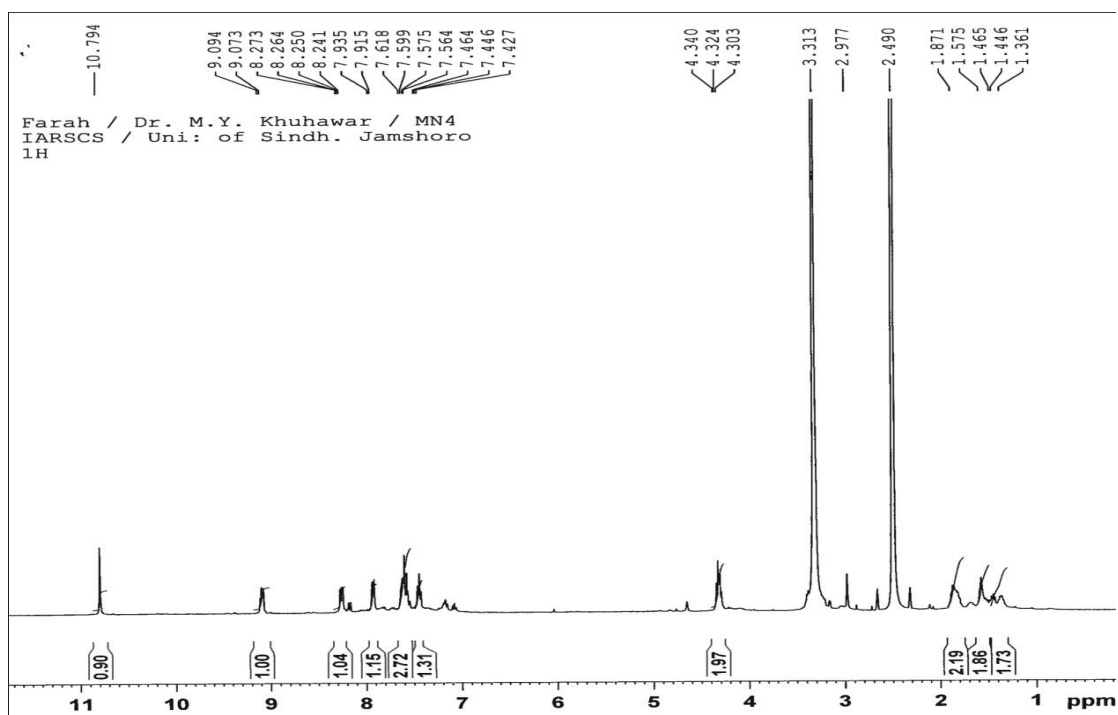


Figure S9: ^1H NMR spectrum of dialdehyde monomer *o*-HON

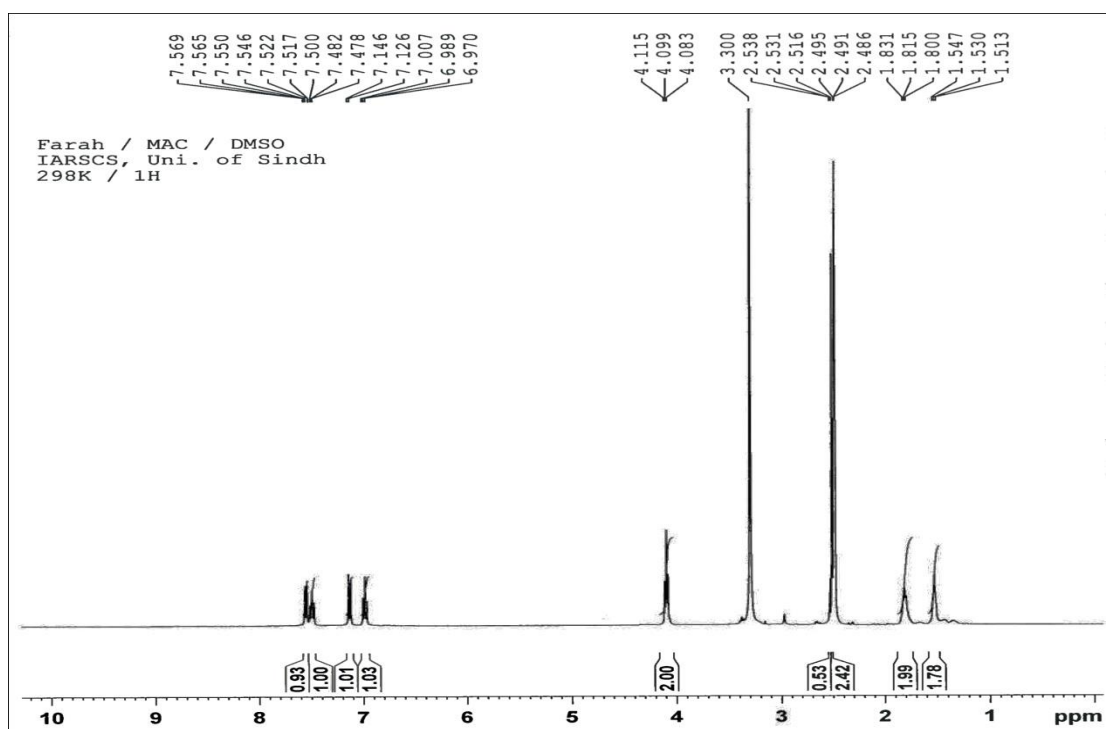


Figure S10: ^1H NMR spectrum of diketone monomer *o*-HOA

4. UV/Visible Spectra of monomers and polymers

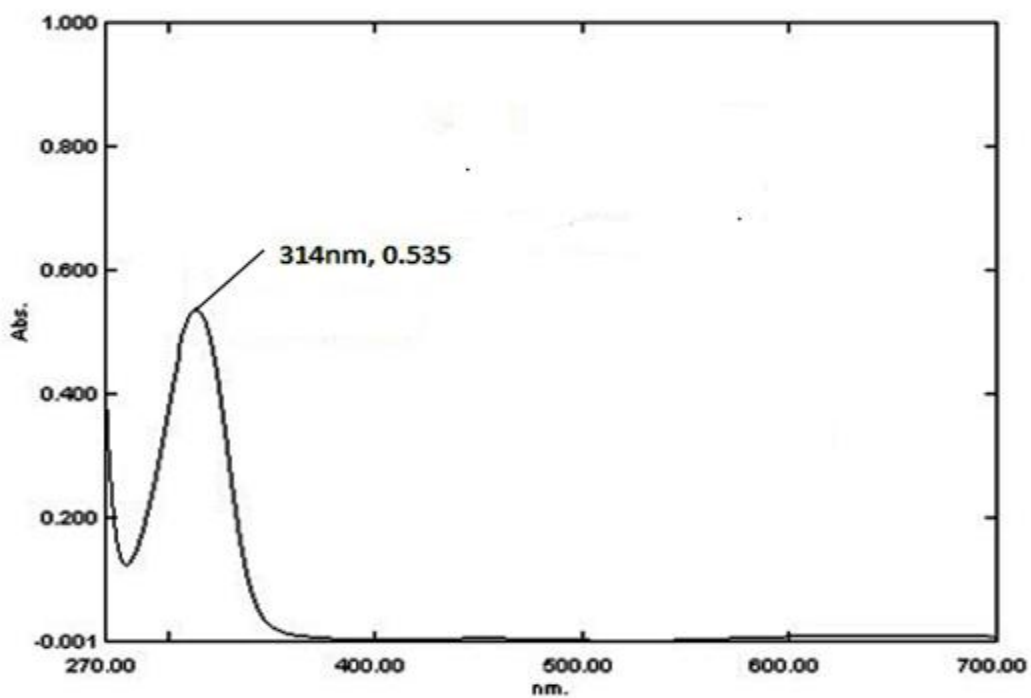


Figure S11: UV/Visible spectrum of dialdehyde monomer *m*-HOB

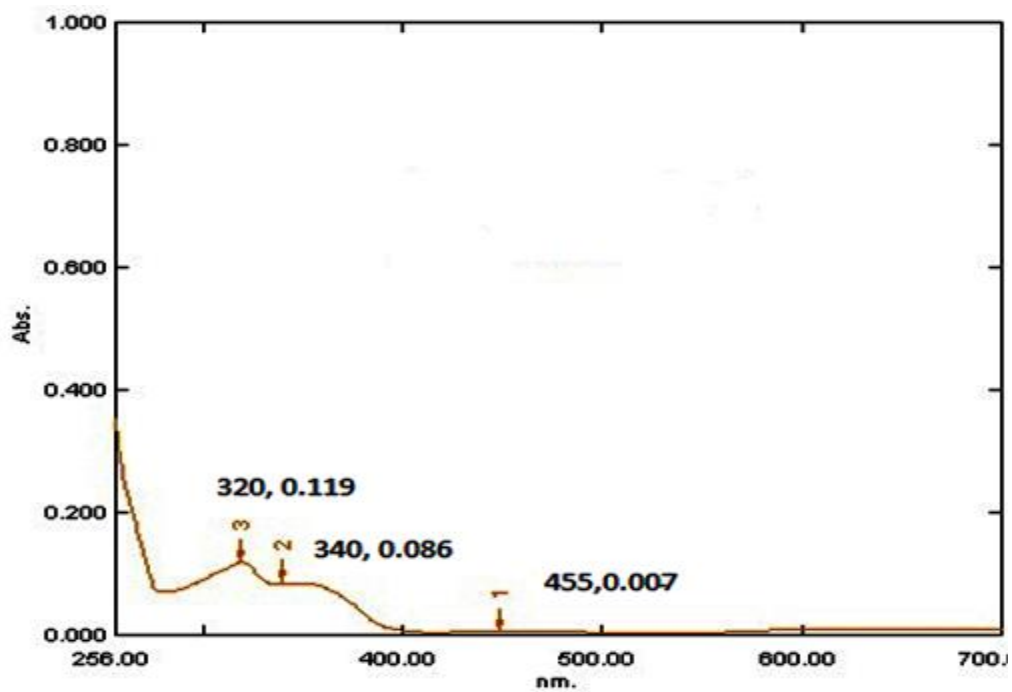


Figure S12: UV/Visible spectrum of dialdehyde monomer *o*-HON

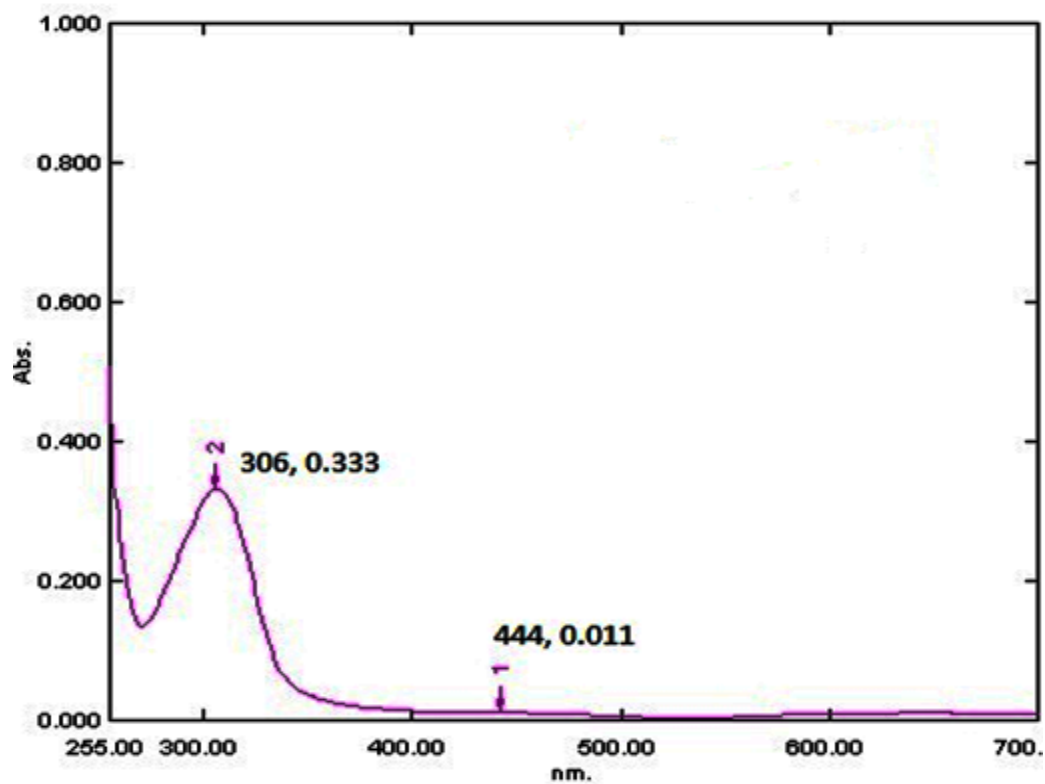


Figure S13: UV/Visible spectrum of diketone monomer *o*-HOA

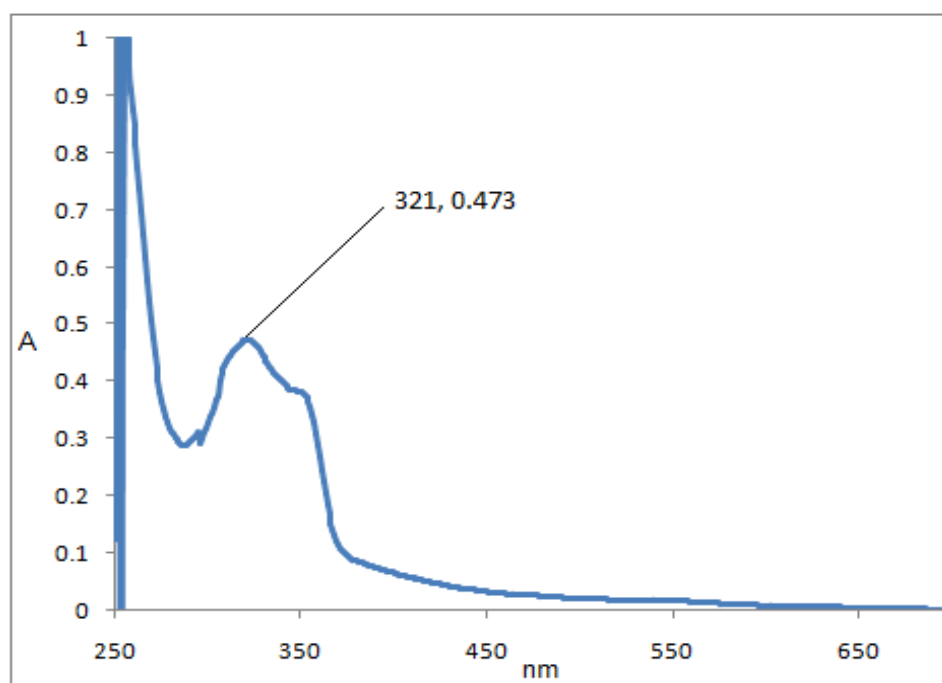


Figure S14: UV/Visible spectrum of Schiff base polyether PmHOBND

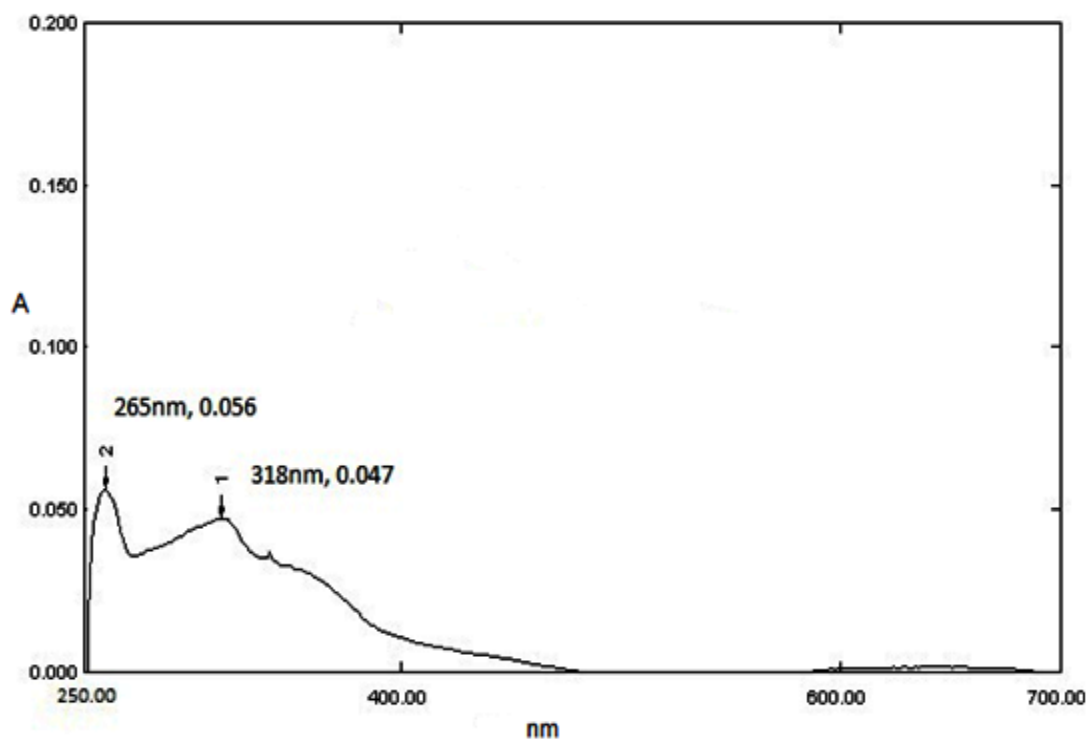


Figure S15: UV/Visible spectrum of Schiff base polyether PoHONPD

5. Fluorescence emission spectra of monomers and polymers

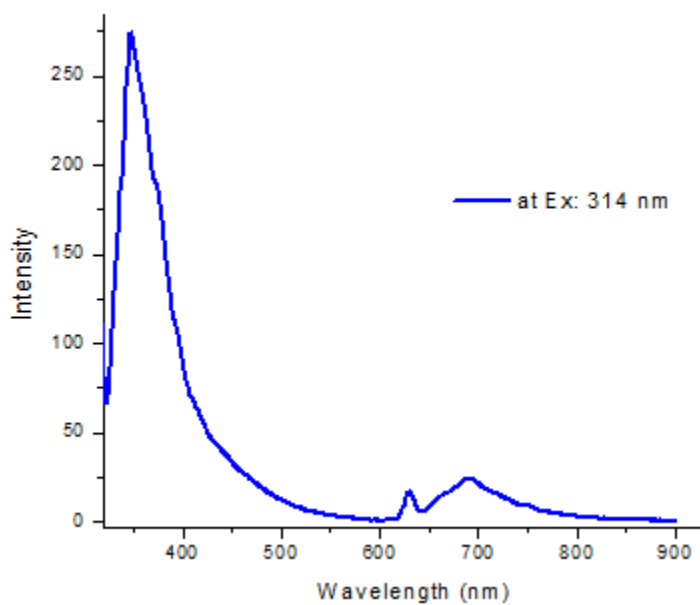


Figure S16: Emission spectrum of dialdehyde *m*-HOB

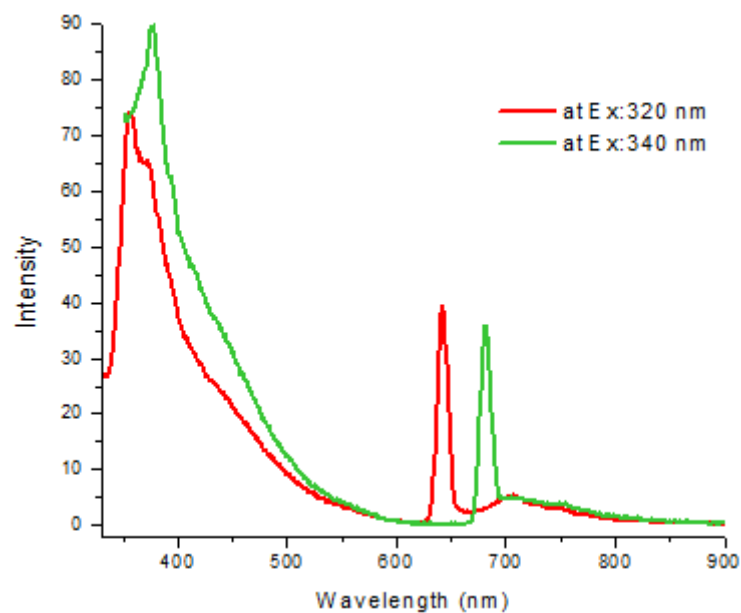


Figure S17: Emission spectra of dialdehyde *o*-HON at different excitation wavelengths

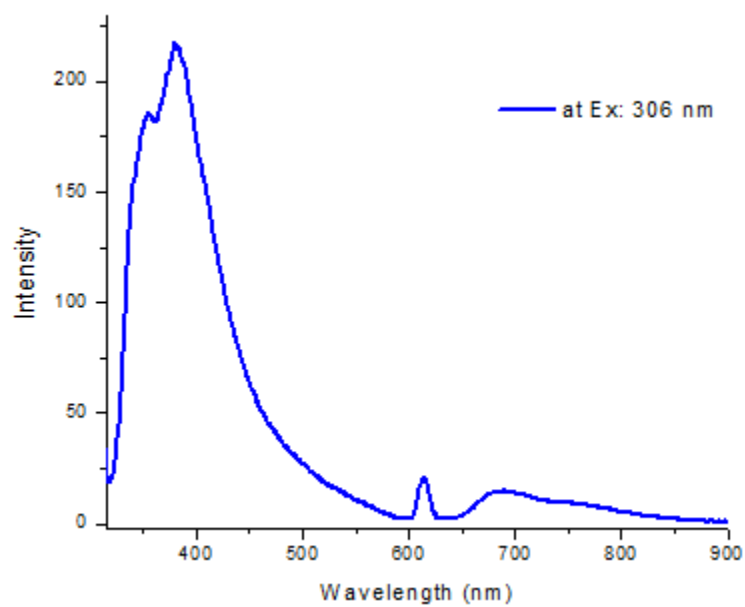


Figure S18: Emission spectrum of diketone *o*-HOA

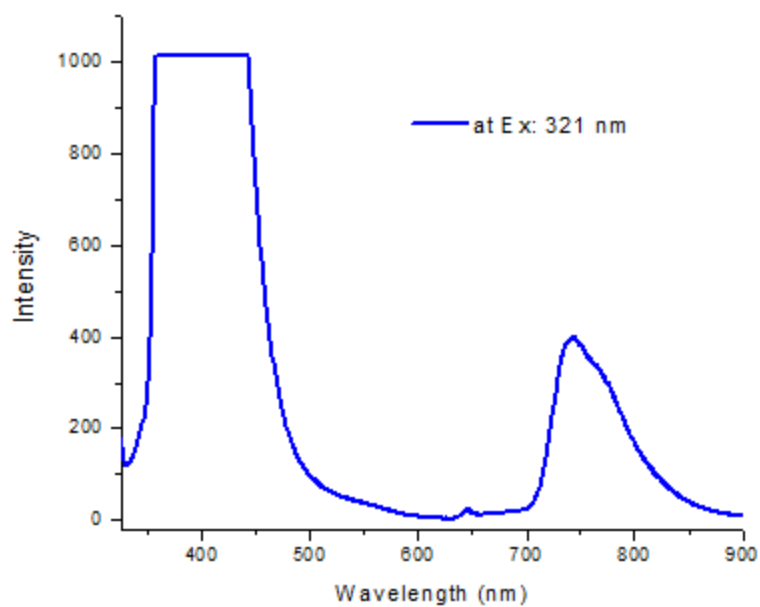


Figure S19: Emission spectrum of Schiff base polymer PmHOBND

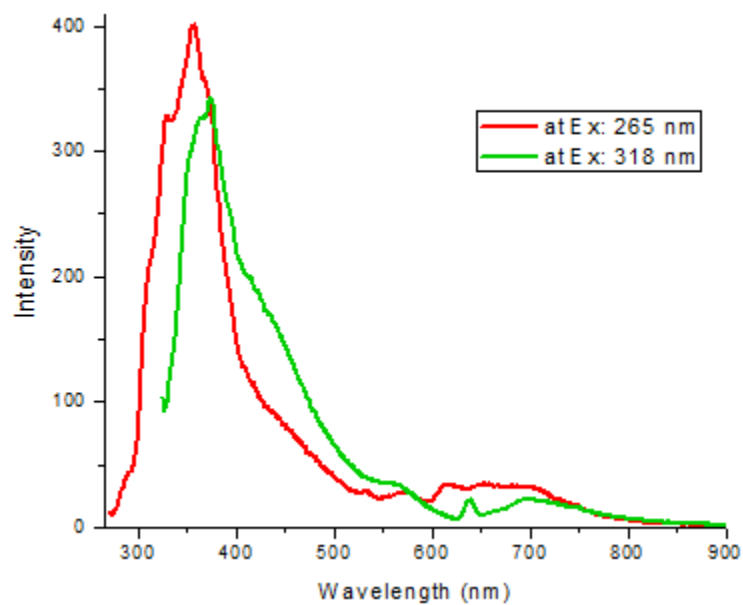


Figure S20: Emission spectra of Schiff base polymer PoHONPD at different excitation wavelengths

6. SEM images of monomers and polymers

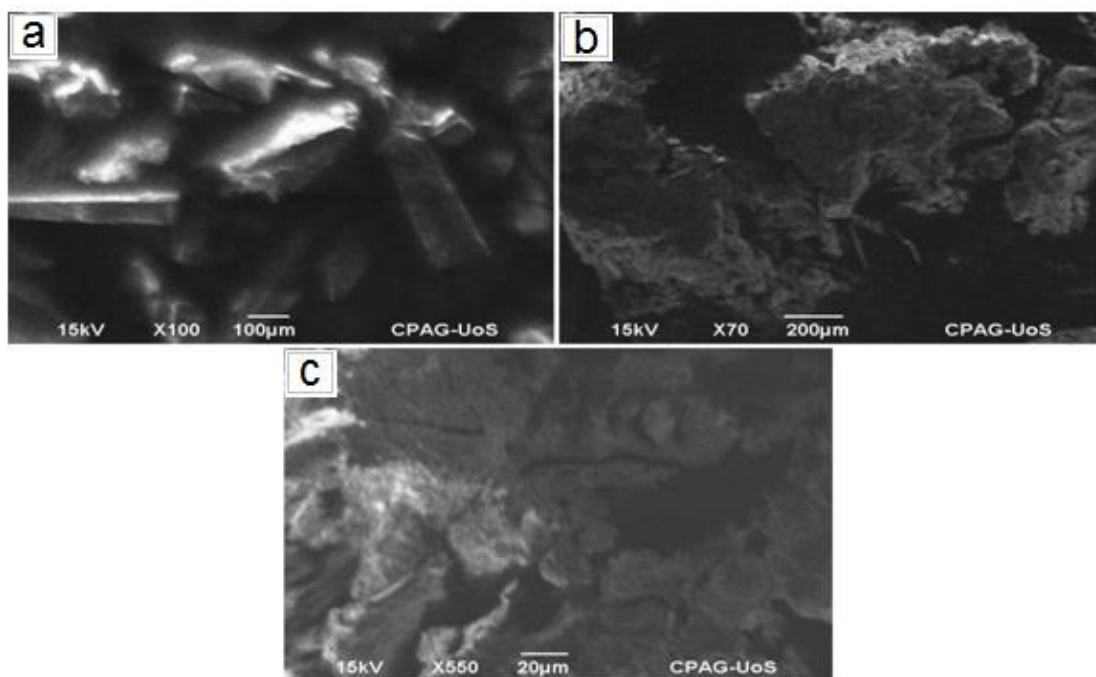


Figure S21: SEM images of monomer *m*-HOB and its derived polymer PmHOBND, (a) *m*-HOB, (b) PmHOBND at 200 μ m and (c) PmHOBND at 20 μ m

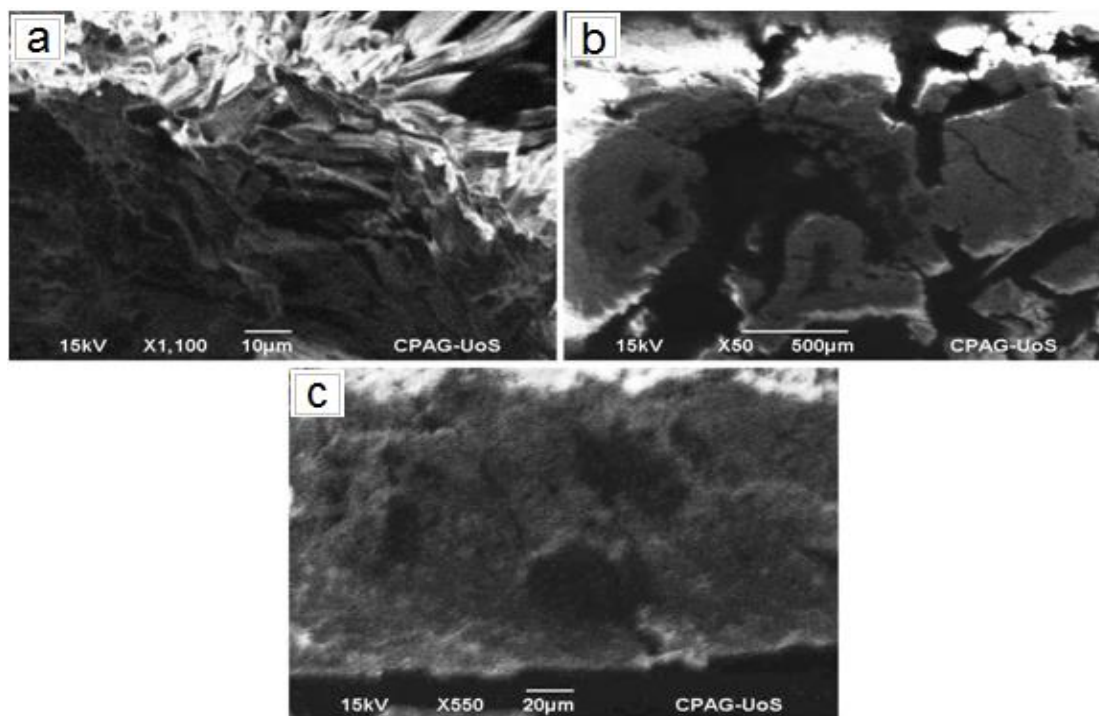


Figure S22: SEM images of monomer *o*-HON and its derived polymer PoHONPD, (a) *o*-HON, (b) PoHONPD at 500 μ m (c) PoHONPD at 20 μ m

7. TG/DTA graphs of monomers

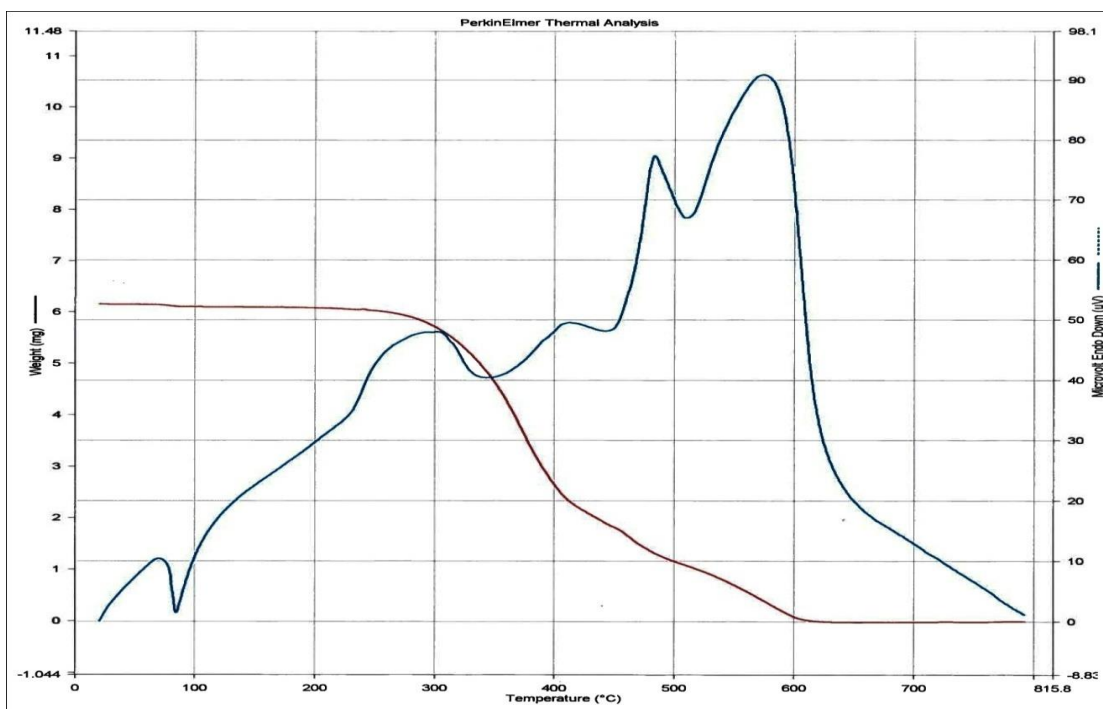


Figure S23: TG/DTA graph of dialdehyde monomer *m*-HOB

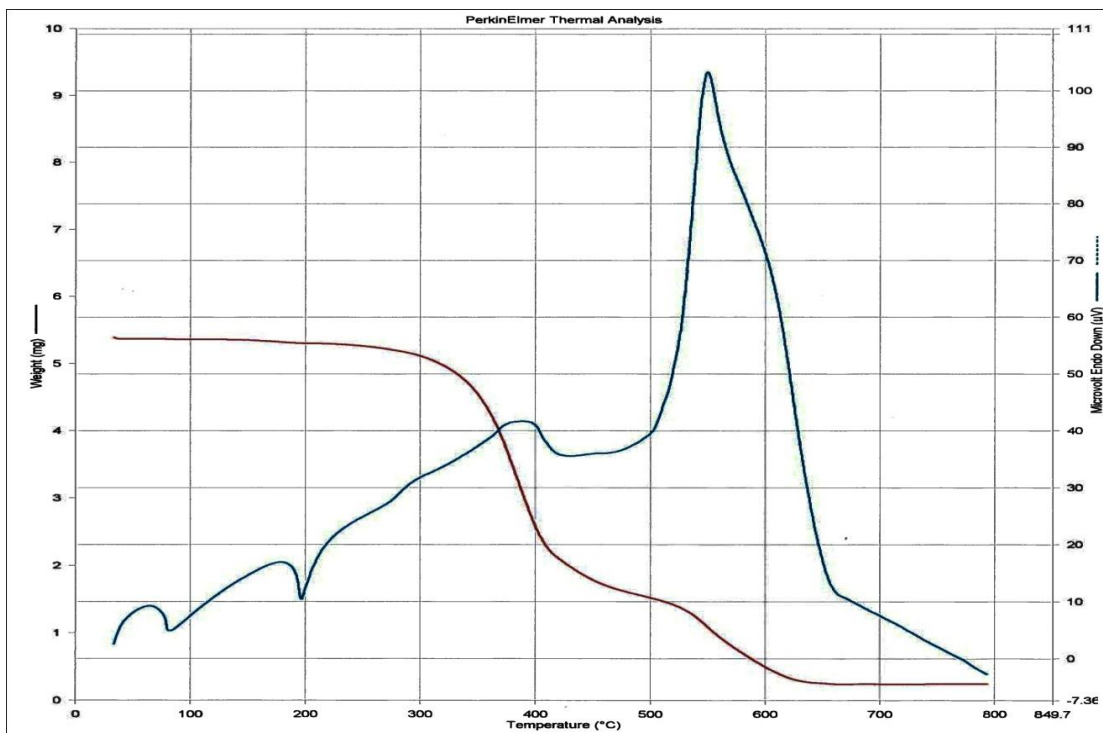


Figure S24: TG/DTA graph of dialdehyde monomer *o*-HON

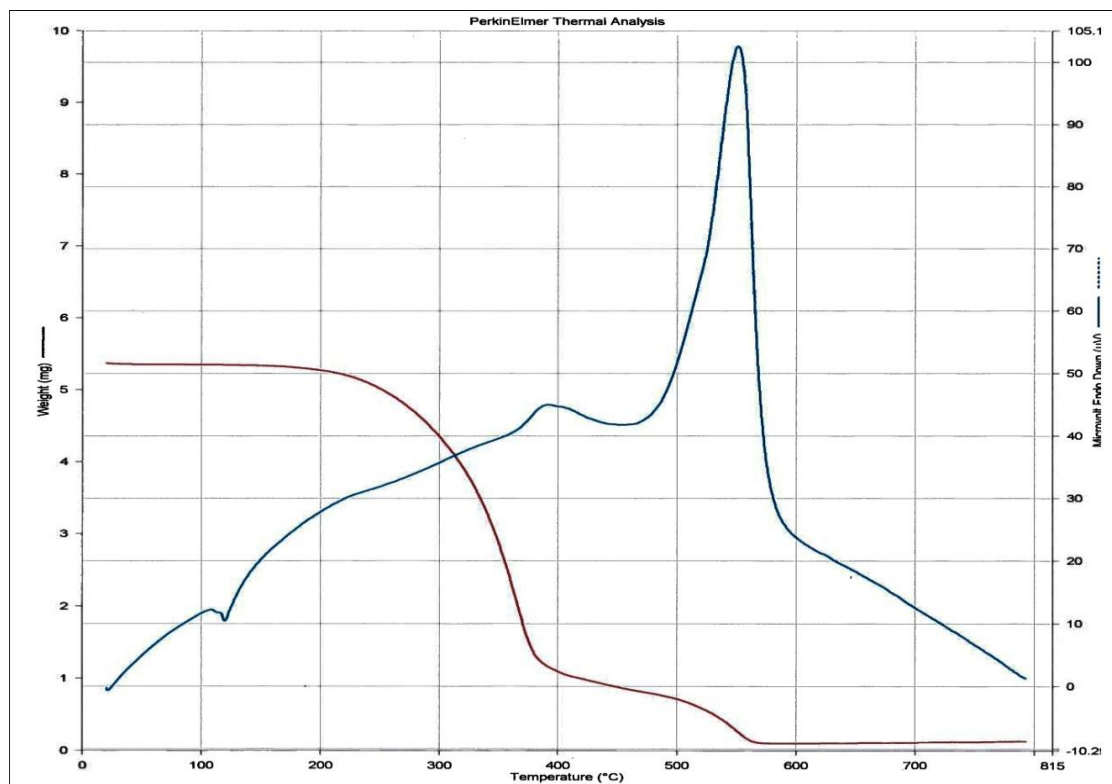


Figure S25: TG/DTA graph of diketone monomer *o*-HOA