Supplementary Materials

Article

Sulfur-based Copolymeric Polyamidoamines as Efficient Flame-Retardants for Cotton

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Figures S1-S6: ^{1}H NMR spectra of PAA homopolymers and copolymers.

Figures S7 and **S8**: FT-IR/ATR spectra of PAAs and PAA-treated cotton fabrics.

Figure S9: Snapshots of PAA blends from VFST.

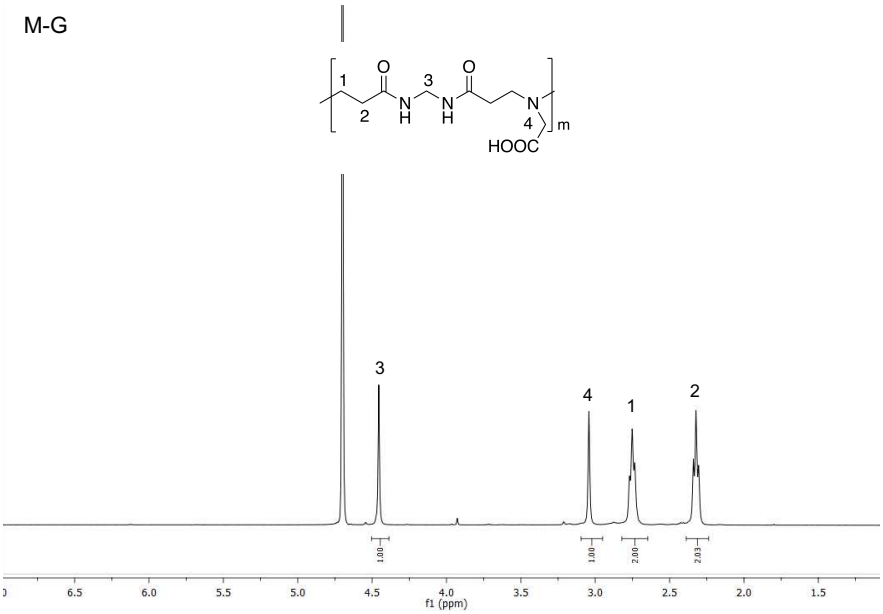

Figure S1. ^{1}H NMR spectrum of M-G homopolymer.

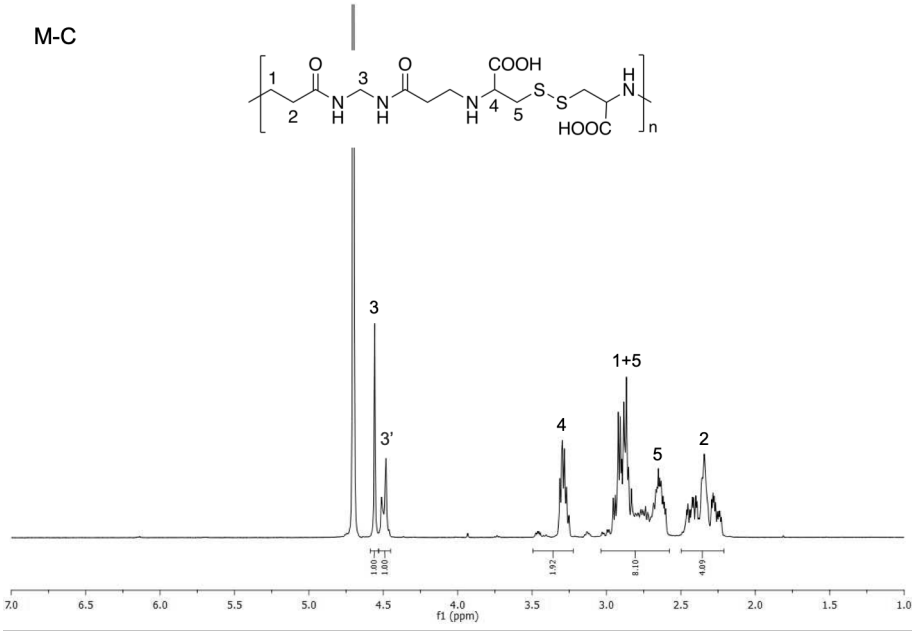

Figure S2. ^{1}H NMR spectrum of M-C homopolymer.

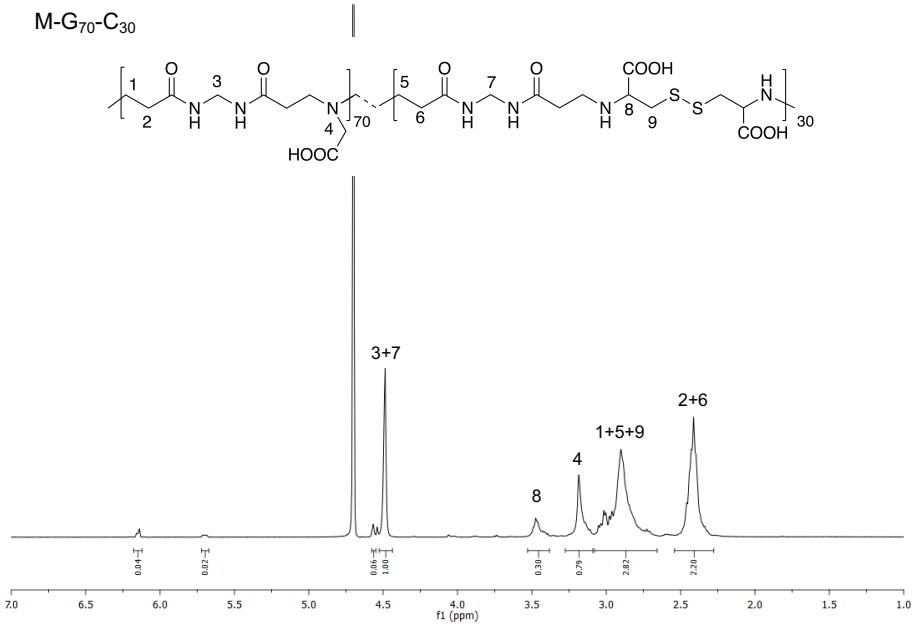

Figure S3. ^{1}H NMR spectrum of M-G$_{70}$-C$_{30}$ copolymer.

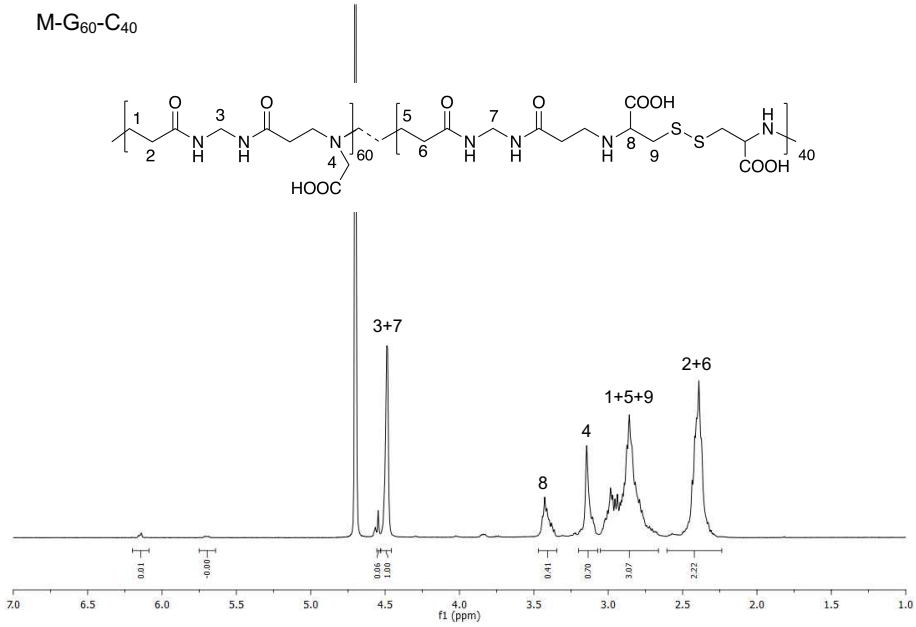

Figure S4. ^{1}H NMR spectrum of M-G$_{60}$-C$_{40}$ copolymer.

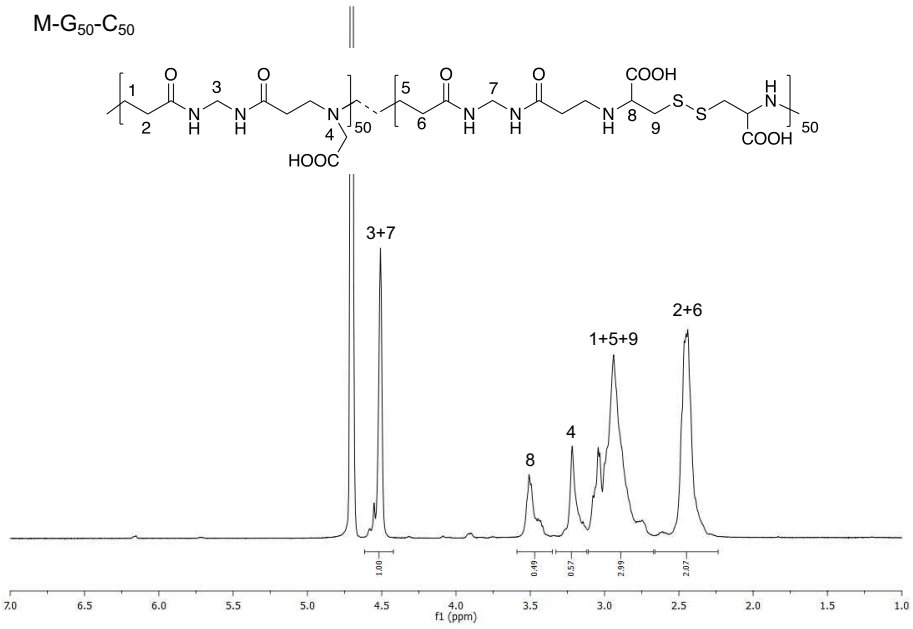

Figure S5. ^{1}H NMR spectrum of M-G$_{50}$-C$_{50}$ copolymer.

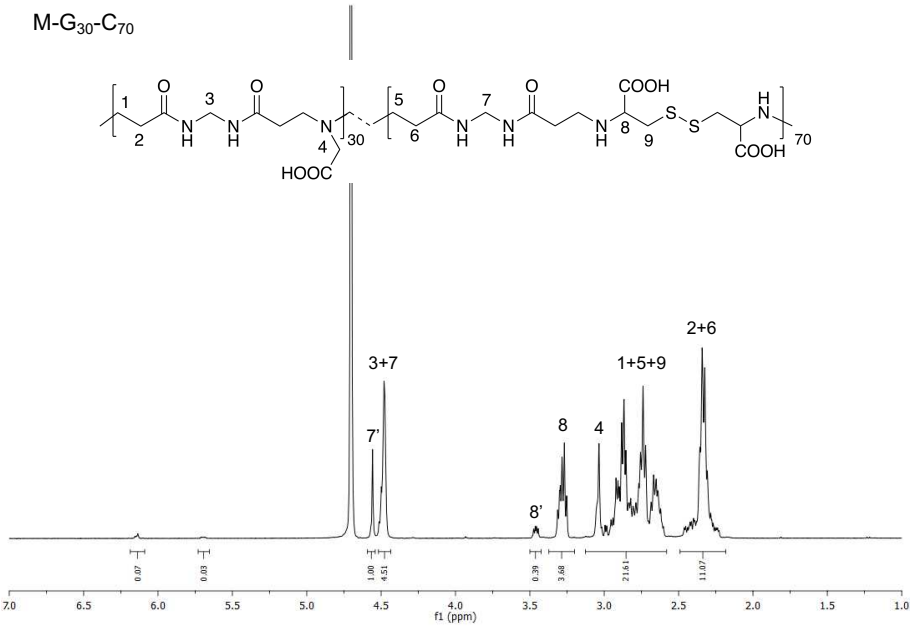

Figure S6. ^{1}H NMR spectrum of M-G$_{30}$-C$_{70}$ copolymer.

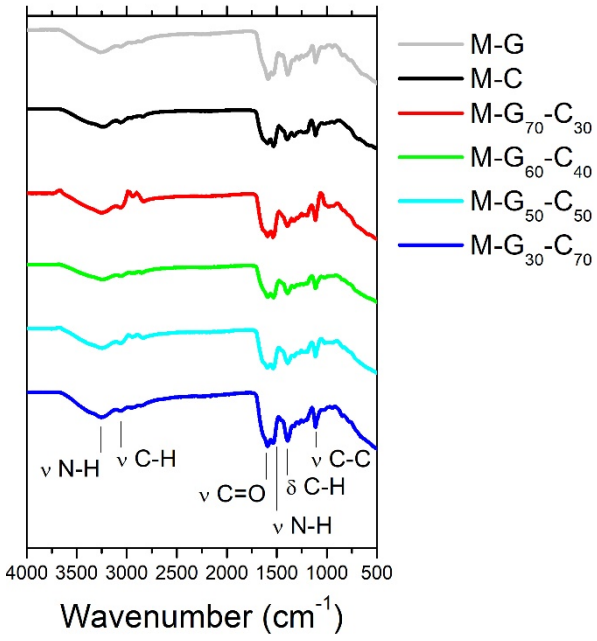

Figure S7. FT-IR/ATR of PAA homopolymers and copolymers.

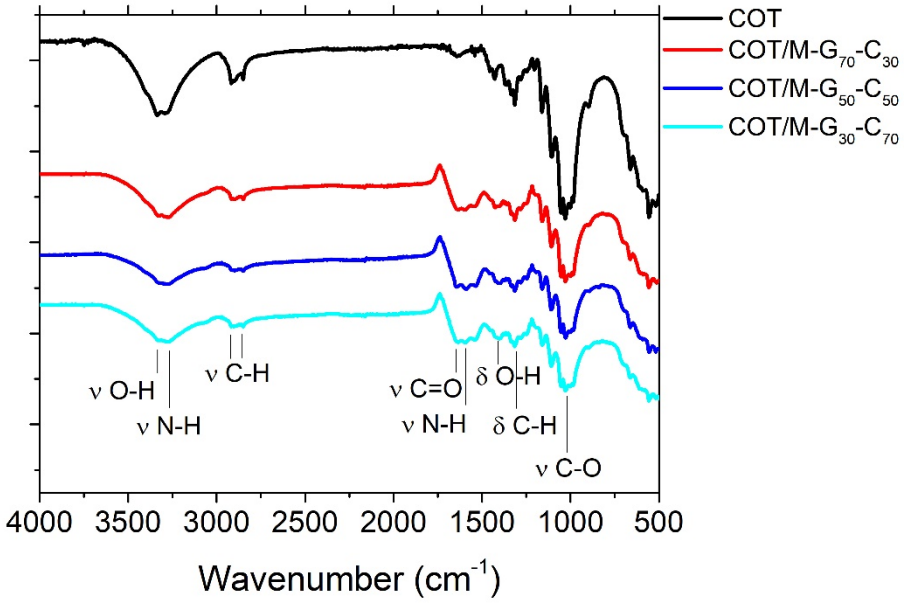

Figure S8. FT-IR/ATR of cotton untreated and treated with copolymeric PAAs.

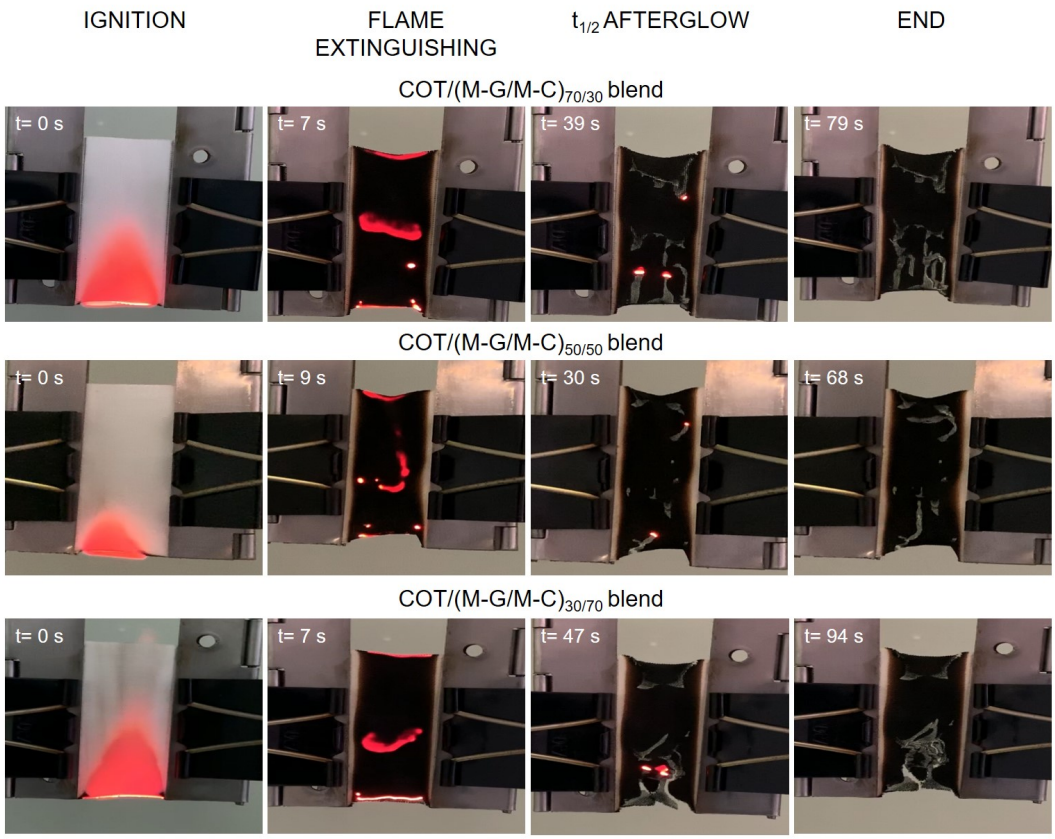

Figure S9. Snapshots of cotton fabrics treated with (M-G/M -C)$_{70/30}$ (add-on: 16.2%), (M-G/M-C)$_{50/50}$ (add-on: 16.5%) and (M-G/M-C)$_{30/70}$ (add-on: 16.5%) blends in vertical flame spread tests.