## **Supporting Information for**

One-step synthesis of polypyrazole and self-assembled polypyrazole-copper catalyst for click chemistry

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Figure S1. Fluorescence emission spectra of the obtained polymers in DMSO (0.4 mg/mL).



Figure S2. Fluorescence emission spectra of P3 and P3-Cu in DMSO (both 0.2 mg/mL).



Figure S3. EDX analysis result of P3-Cu.



Figure S4. EDX analysis result of recovered P3-Cu.



Figure S5. <sup>1</sup>H NMR spectrum of 6a.



Figure S6. <sup>13</sup>C NMR spectrum of 6a.



Figure S7. <sup>1</sup>H NMR spectrum of 6b.

![](_page_5_Figure_3.jpeg)

Figure S8. <sup>13</sup>C NMR spectrum of 6b.

![](_page_6_Figure_1.jpeg)

Figure S10. <sup>13</sup>C NMR spectrum of 6c.

![](_page_7_Figure_1.jpeg)

Figure S12. <sup>13</sup>C NMR spectrum of 6d.

![](_page_8_Figure_1.jpeg)

Figure S13. <sup>1</sup>H NMR spectrum of 6e.

![](_page_8_Figure_3.jpeg)

Figure S14. <sup>13</sup>C NMR spectrum of 6e.

![](_page_9_Figure_1.jpeg)

Figure S15. <sup>1</sup>H NMR spectrum of 6f.

![](_page_9_Figure_3.jpeg)

Figure S16. <sup>13</sup>C NMR spectrum of 6f.

![](_page_10_Figure_1.jpeg)

Figure S18. <sup>13</sup>C NMR spectrum of 6g.

![](_page_11_Figure_1.jpeg)

Figure S19. <sup>1</sup>H NMR spectrum of 6h.

![](_page_11_Figure_3.jpeg)

Figure S20. <sup>13</sup>C NMR spectrum of 6h.

![](_page_12_Figure_1.jpeg)

Figure S21. FTIR spectrum of 6a.

![](_page_13_Figure_1.jpeg)

Figure S22. FTIR spectrum of 6b.

![](_page_14_Figure_1.jpeg)

Figure S23. FTIR spectrum of 6c.

![](_page_15_Figure_1.jpeg)

Figure S24. FTIR spectrum of 6d.

![](_page_16_Figure_1.jpeg)

Figure S25. FTIR spectrum of 6e.

![](_page_17_Figure_1.jpeg)

Figure S26. FTIR spectrum of 6f.

![](_page_18_Figure_1.jpeg)

Figure S27. FTIR spectrum of 6g.

![](_page_19_Figure_1.jpeg)

Figure S28. FTIR spectrum of 6h.