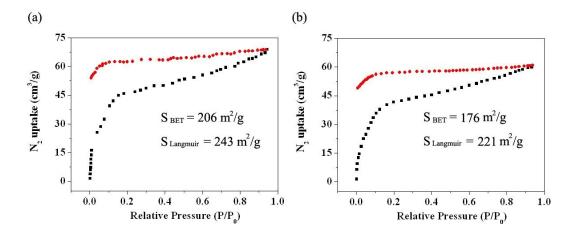
Electronic Supplementary Material (ESI) for Dalton Transactions. This journal is © The Royal Society of Chemistry 2014

Electronic Supplementary Information (ESI) 2 Photocatalytic Activity of Transition-Metal-Ion-Doped Coordination 3 Polymer (CP): Photoresponse Region Extension and Quantum Yields 4 Enhancement via the Doping of Transition Metal Ion into the 5 Framework of CPs 6 Xin-Xin Xu*, Zhong-Ping Cui, Xin Gao and Xiao-Xia Liu 7 Department of Chemistry, College of Science, Northeast University, Shenyang, 8 Liaoning, 110819, People's Republic of China

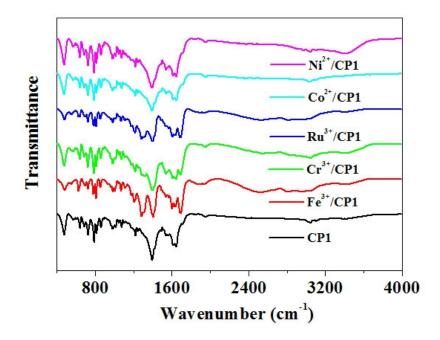


3 Figure S1 N₂ gas-sorption measured at 77 K, (a) CP1; (b) Fe³⁺/CP1. (The black

4 blocks and red circles represent adsorption and desorption branches, respectively)

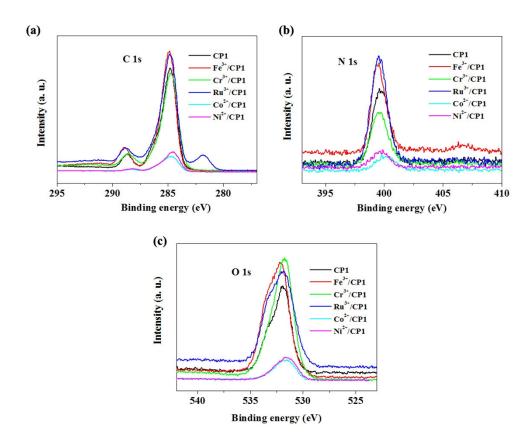
100 - 80 - 80 - 60 - 40 - 600 800 Temperature (°C)

Figure S2 TGA of **CP1**

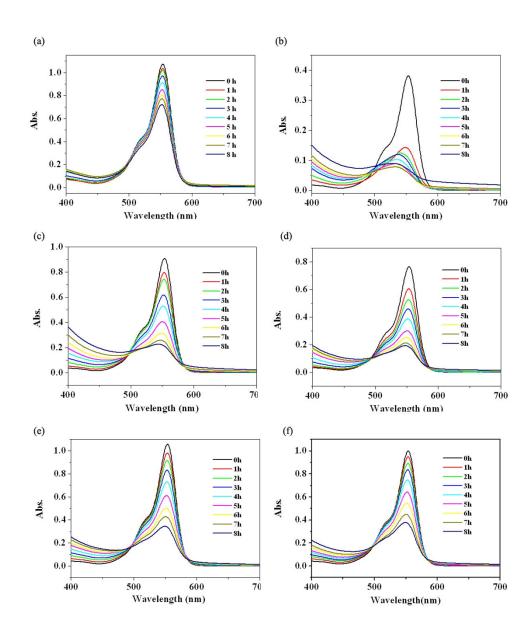


4 Figure S3 IR spectra of CP1, $Fe^{3+}/CP1$, $Cr^{3+}/CP1$, $Ru^{3+}/CP1$, $Co^{2+}/CP1$ and

Ni²⁺/CP1.



- 4 Figure S4 XPS spectrum of C, N and O elements in CP1 and TMI/CP1: (a) C1s; (b)
- 5 N1s; (c) O1s.



5 Figure S5 Absorption spectra of RhB degraded with different photocatalysts under

- 6 irradiation of ultraviolet light (a) CP1, (b) Fe³⁺/CP1, (c) Cr³⁺/CP1, (d) Ru³⁺/CP1, (e)
- 7 Co²⁺/CP1 and (f) Ni²⁺/CP1.

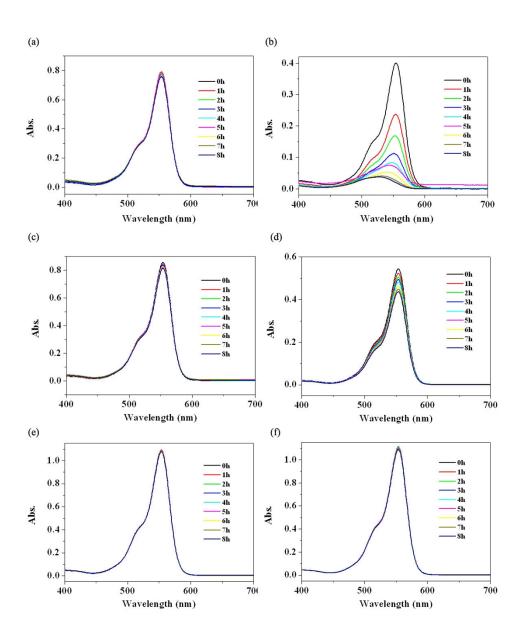
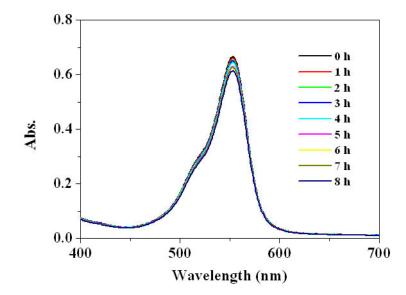


Figure S6 Absorption spectra of RhB degraded with different photocatalysts under irradiation of visible light (a) CP1, (b) Fe³⁺/CP1, (c) Cr³⁺/CP1, (d) Ru³⁺/CP1, (e) Co²⁺/CP1 and (f) Ni²⁺/CP1.



7 Figure S7 Absorption spectra of RhB degraded with Fe(NO₃)₃·6H₂O under irradiation

8 of visible light.