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Supplementary information for

The Nanocomposites of SO₃H-hollow-nanosphere and Chiral Amine for Asymmetric Aldol Reaction

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Contents

1. **Fig. S1.** Separation of the reaction solution and the catalyst by centrifugation at a rate of 8000 r/min.
2. **Fig. S2.** FT-IR spectra of the support, SO₃H-HNS10 and the catalyst, PCYDN@SO₃H-HNS10.
3. **Fig. S3.** TEM images (left) and SEM image (right) of SO₃H-PMO10.
4. **Fig. S4.** Nitrogen adsorption and desorption isotherms of SO₃H-HNS10, PCYDN@SO₃H-HNS10 (left) and SO₃H-PMO10, PCYDN@SO₃H-PMO10 (right).
5. **Fig. S5** Pore size distribution of SO₃H-HNS10, PCYDN@SO₃H-HNS10 (left) and SO₃H-PMO10, PCYDN@SO₃H-PMO10 (right).
6. **Fig. S6.** TEM images of PCYDN@SO₃H-HNS10 (left) and PCYDN@SO₃H-HNS10-run 4 (right).
7. **Fig. S7.** ¹H NMR of the reaction solution after reacting for 10 h.

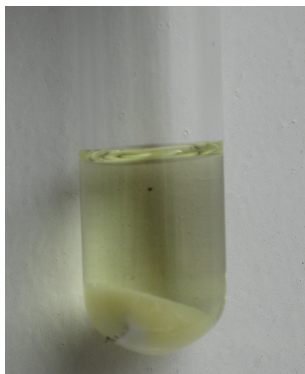


Fig. S1 Separation of the reaction solution and the catalyst by centrifugation at a rate of 8000 r/min.

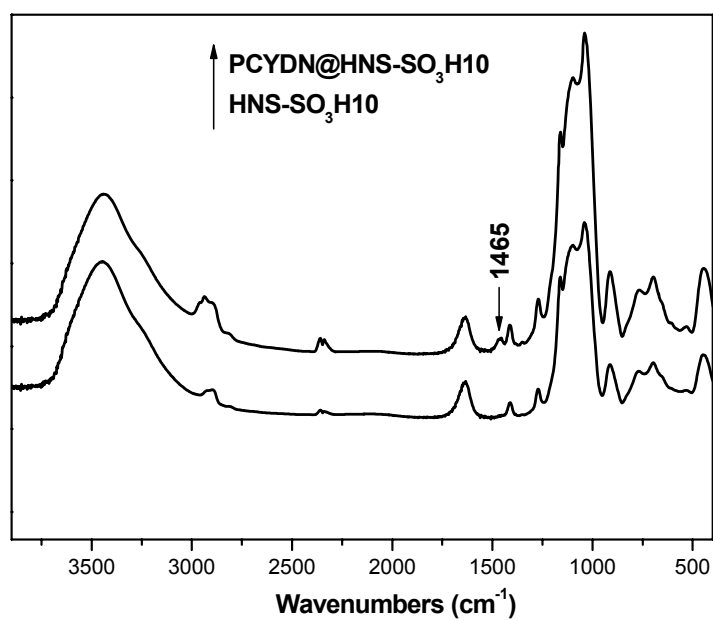


Fig. S2 FT-IR spectra of the support, SO₃H-HNS10 and the catalyst, PCYDN@SO₃H-HNS10.

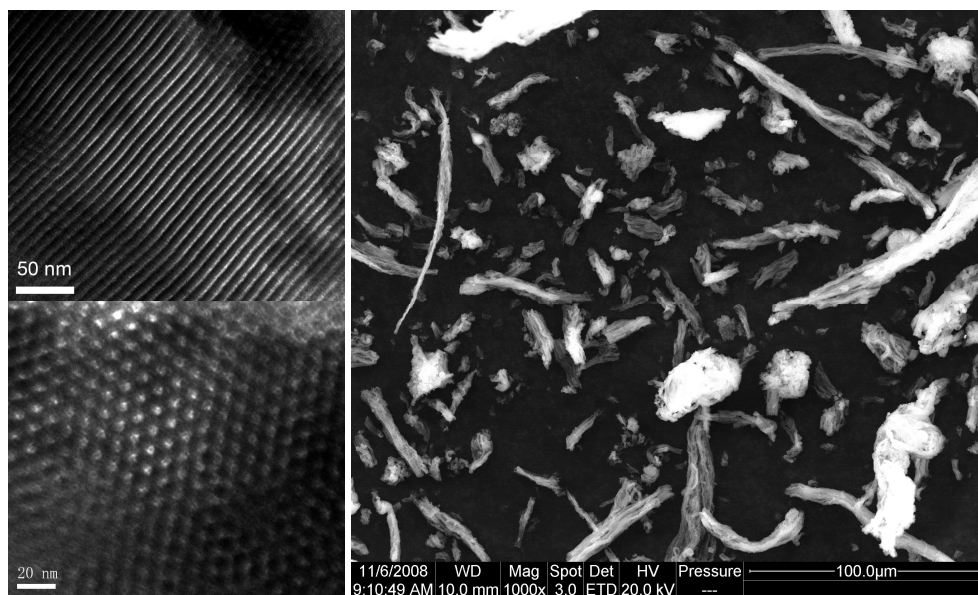


Fig. S3 TEM images (left) and SEM image (right) of $\text{SO}_3\text{H-PMO10}$.

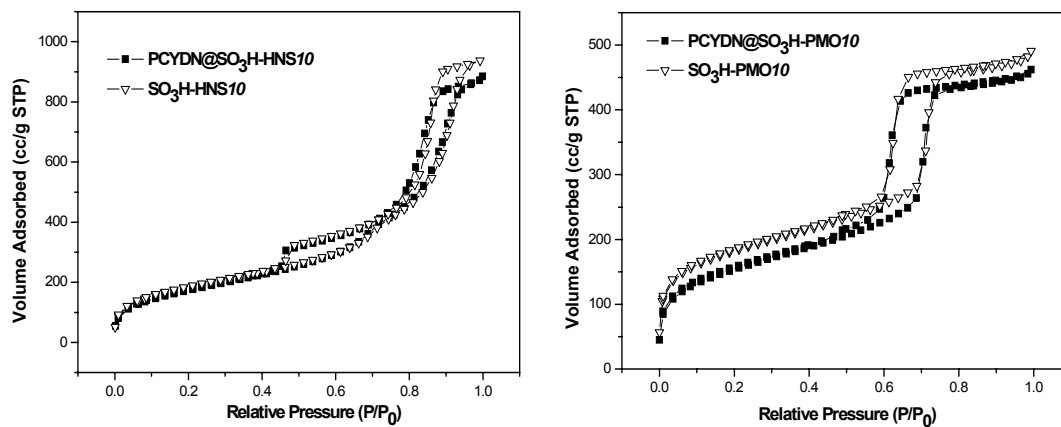


Fig. S4 Nitrogen adsorption and desorption isotherms of SO₃H-HNS10, PCYDN@SO₃H-HNS10 (left) and SO₃H-PMO10, PCYDN@SO₃H-PMO10 (right).

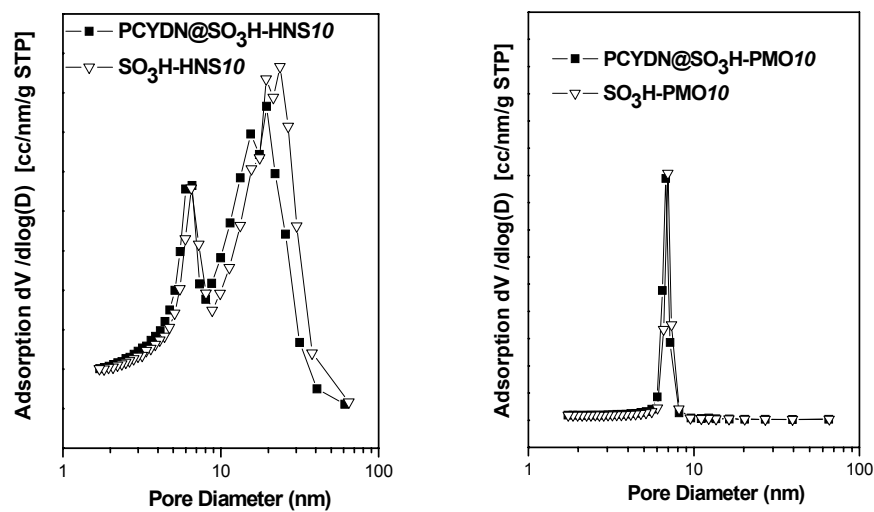


Fig. S5 Pore size distribution of SO₃H-HNS10, PCYDN@SO₃H-HNS10 (left) and SO₃H-PMO10, PCYDN@SO₃H-PMO10 (right).

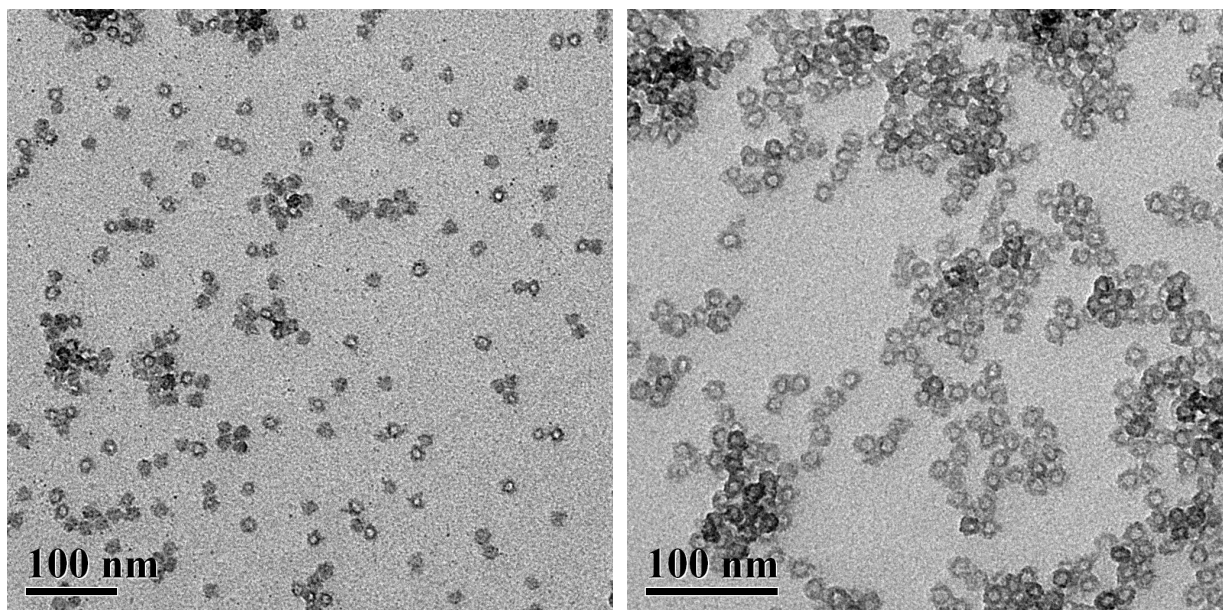


Fig. S6 TEM images of PCYDN@SO₃H-HNS10 (left) and PCYDN@SO₃H-HNS10-run4 (right).

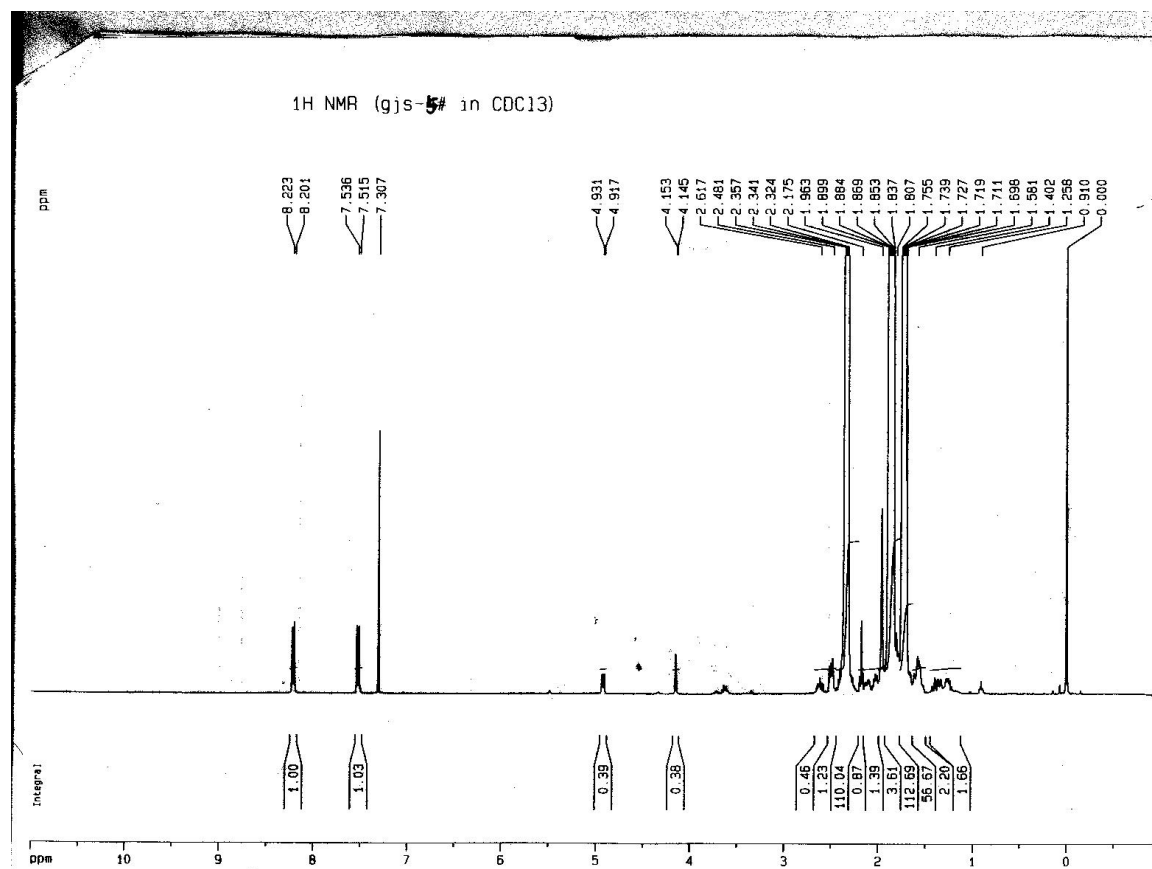


Fig. S7 ^1H NMR of the reaction solution after reacting for 10 h.