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Supporting Information

Bioinspired porous organic polymers functionalized membranes for efficient CO₂ capture

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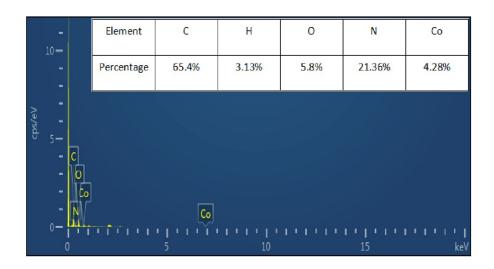


Fig. S1 Element distribution of powder Co-BBP@POP-1

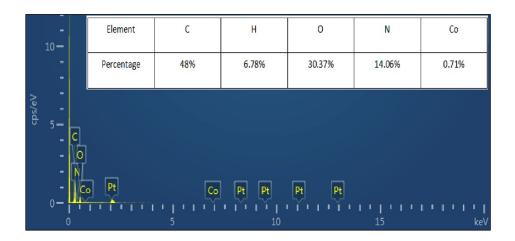
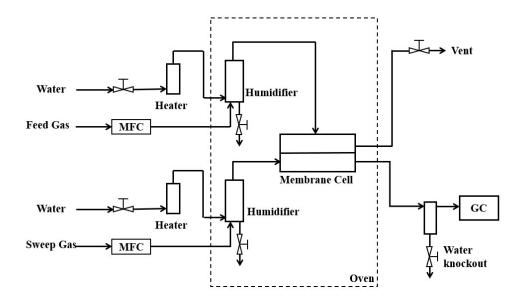


Fig. S2 Elemental distribution of the cross section of the mixed matrix membrane (5wt%)



 $\textbf{Fig. S3} \ \textbf{Schematic diagram of dense membrane gas permeation testing apparatus}$

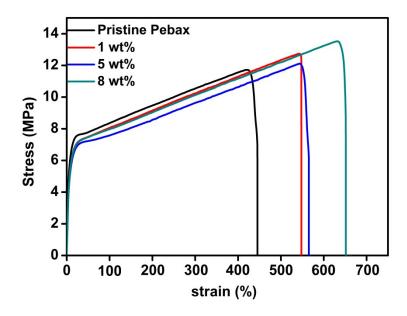


Fig. S4 The stress-strain curves of the pristine Pebax membrane and Co-BBP@POP-1Pebax membranes

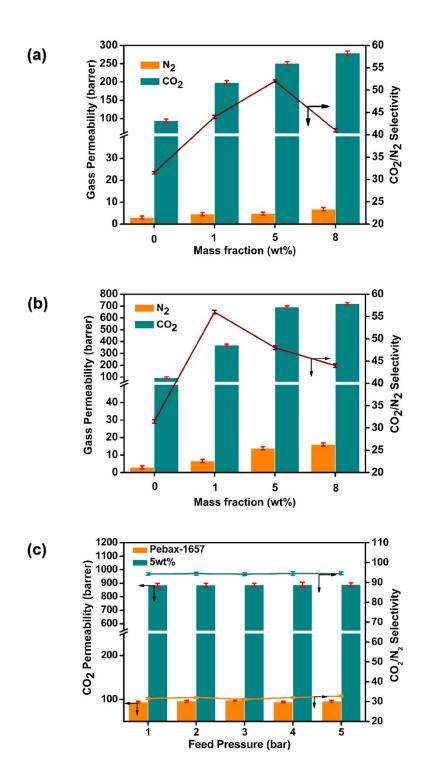


Fig. S5 CO₂/N₂ permeability and selectivity of pristine Pebax membrane and POP-1 Pebax membranes (a), Co-BBP Pebax membranes (b); Performance of MMMs with 5wt% Co-BBP@POP loading and pristine Pebax membrane under1-5 bar (c).