## **Electronic Supplementary Information**

## **Figure captions**

**Figure S1. (1)** Small-angle and **(2)** wide-angle X-ray diffraction patterns of the as-prepared OMA-5Ni and OMA-5Co; X-ray diffraction patterns of the **(3)** as-prepared and **(4)** 50 h spent (SP-) 5Co5Ni/Al<sub>2</sub>O<sub>3</sub>.

**Figure S2. (1)** Nitrogen adsorption-desorption isotherms and **(2)** pore size distribution curves of the as-prepared OMA-5Ni and OMA-5Co.

Figure S3. Nitrogen adsorption-desorption isotherms and pore size distribution curves (inset) of

the (1) commercial alumina ( $\gamma$ -Al<sub>2</sub>O<sub>3</sub>) support and (2) as-prepared 5Co5Ni/Al<sub>2</sub>O<sub>3</sub> catalyst.

Figure S4. TEM and SAED images of the as-prepared (a, b) OMA-5Ni and (c, d) OMA-5Co.

**Figure S5.** H<sub>2</sub>-TPR profiles of the **(1)** as-prepared OMA-5Ni and OMA-5Co supports and (2) asprepared 5Co5Ni/Al<sub>2</sub>O<sub>3</sub> catalyst.

**Figure S6.** XPS profiles of the **(1)** as-prepared OMA-5Ni (Ni 2p), **(2)** OMA-5Co (Co 2p) ordered mesoporous supports and **(3)** Ni 2p, **(4)** Co 2p profiles of the as-prepared 5Co5Ni/Al<sub>2</sub>O<sub>3</sub> supported catalyst.



Figure S1



Figure S2



Figure S3



Figure S4



Figure S5



Figure S6