Electronic Supplementary Information

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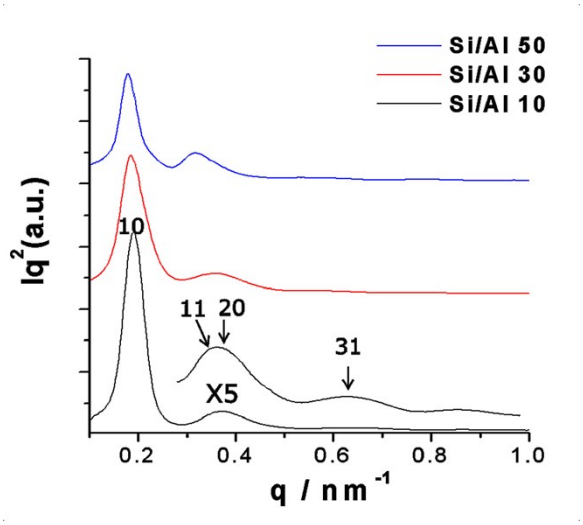

Figure S1. SAXS patterns of Ru@OMAS.

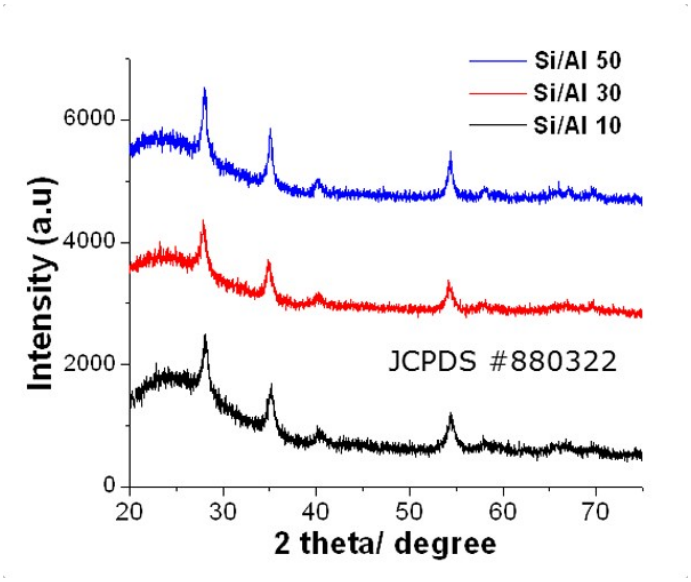

Figure S2. XRD patterns of Ru@OMAS.

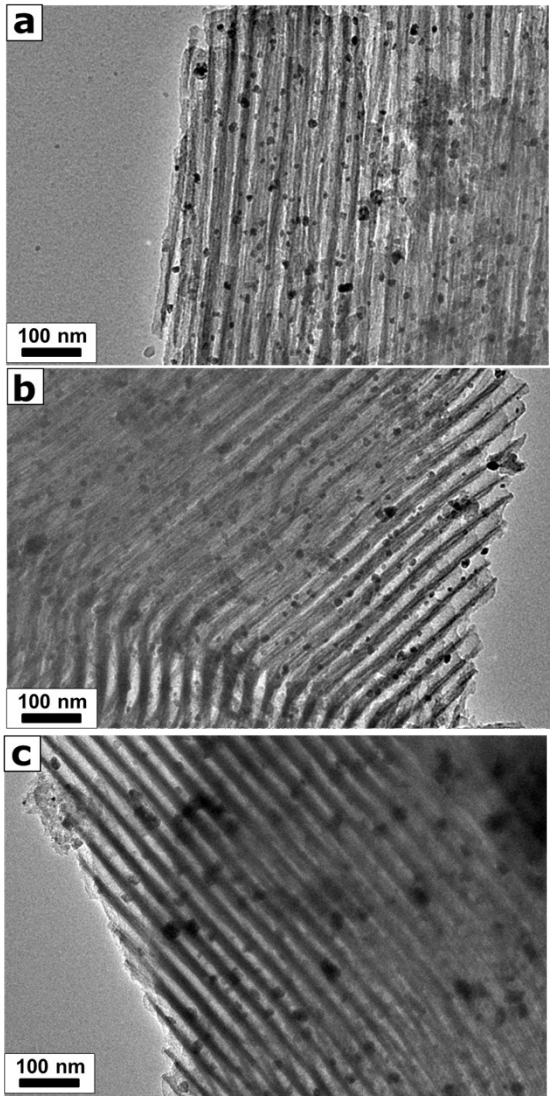

Figure S3. TEM images of a) Si/Al-10, b) Si/Al-30, and c) Si/Al-50 after reduction under H_2/He atmosphere.

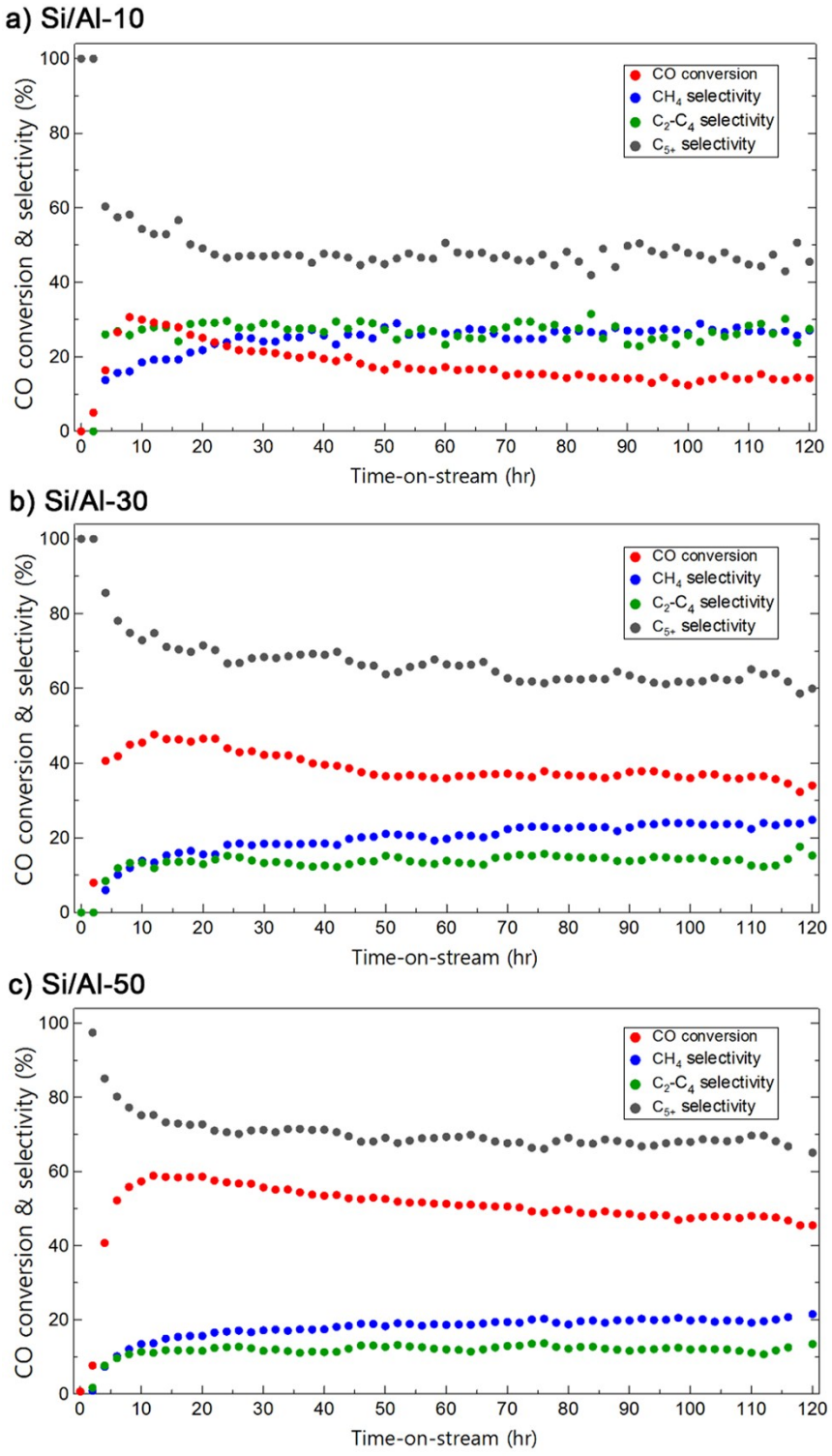

Figure S4. Changes in CO conversion and hydrocarbon selectivities with time on stream during FTS for a) Si/Al-10, b) Si/Al-30, and c) Si/Al-50

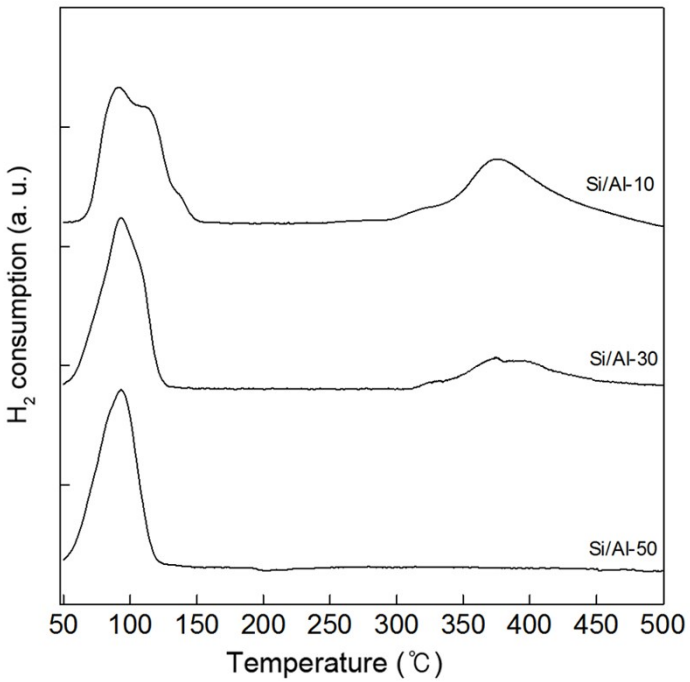

Figure S5. TPR profiles of Ru@OMAS samples.

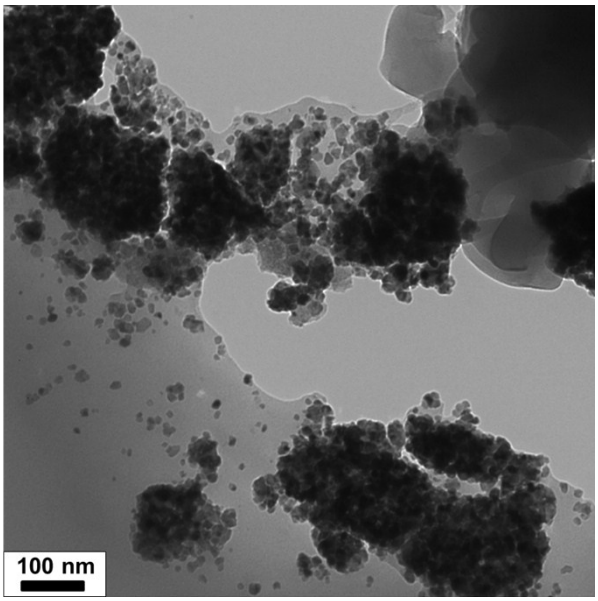

Figure S6. TEM image of Ru supported nonporous aluminosilicate (Ru/NAS). The Si/Al ratio is 50.

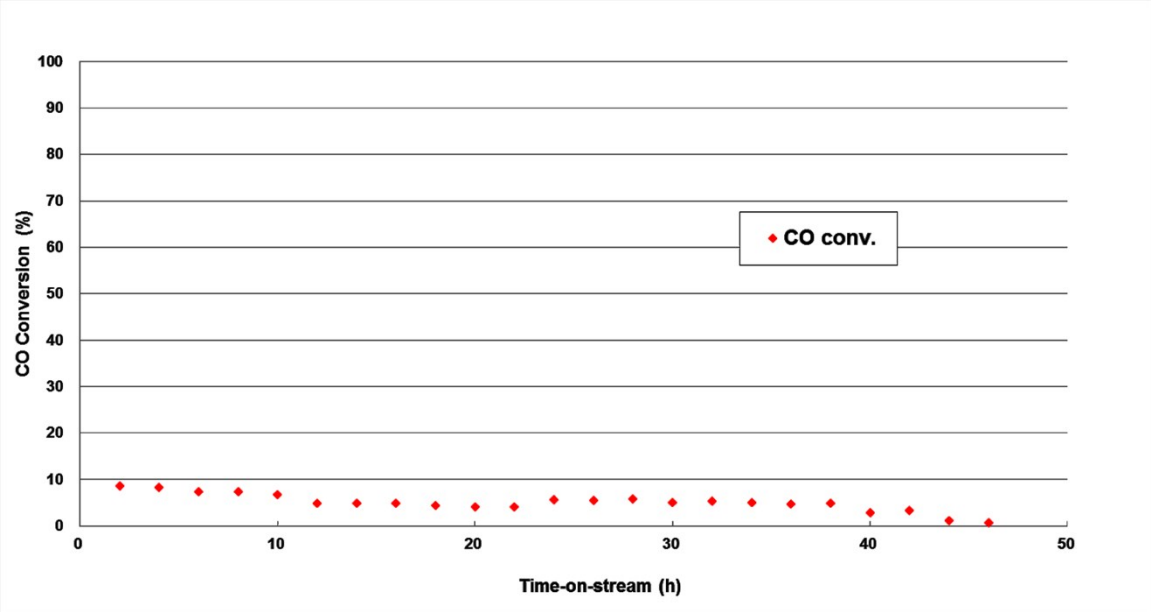

Figure S7. Changes in CO conversion with time on stream during FTS.

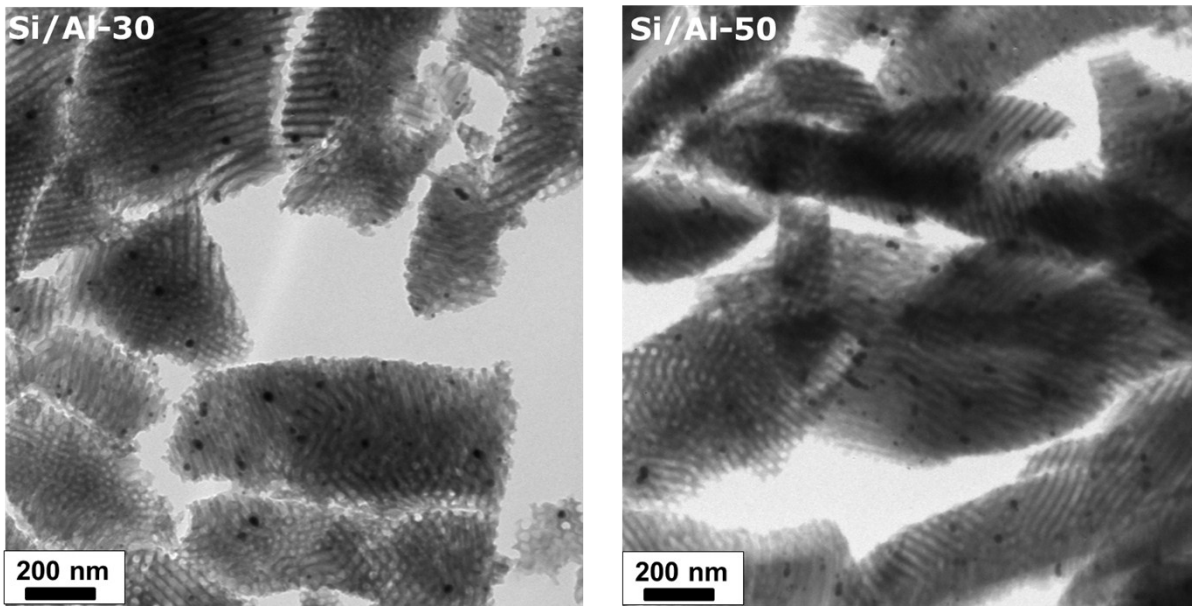

Figure S8. TEM images of spent catalysts after FTS.

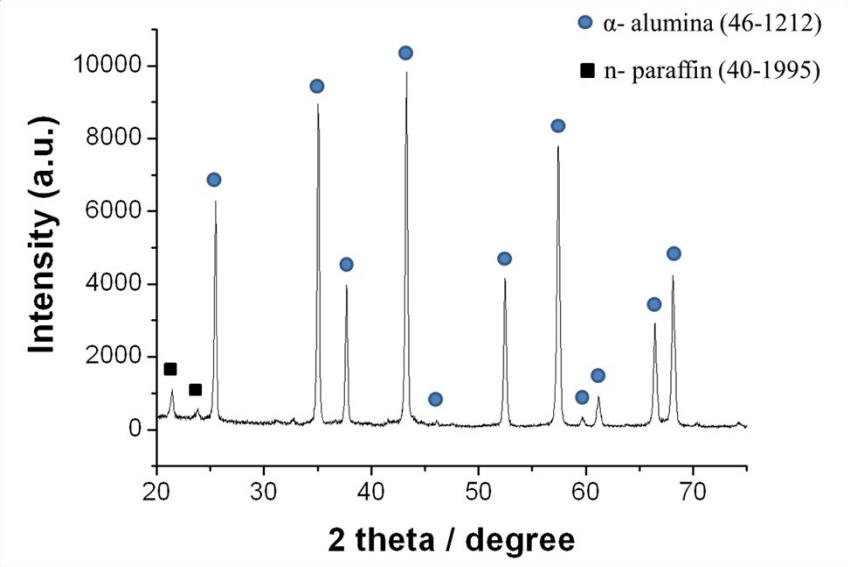

Figure S9. Representative XRD pattern of spent catalyst (spent-50). All the other spent catalysts also showed the similar results.

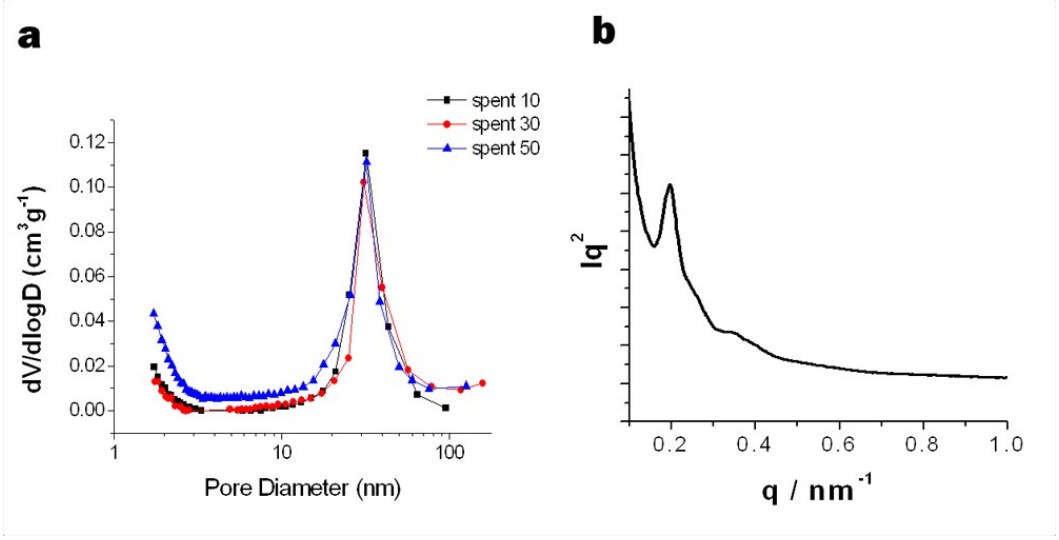

Figure S10. (a) Pore size distributions of the spent catalysts and (b) representative SAXS pattern of spent catalyst (spent-50).