

Supplementary information

Electrochemical Behavior of Pt-Ru Catalysts Supported on Graphitised Ordered Mesoporous Carbons Toward the CO and Methanol Oxidation

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The XPS spectra and their deconvolution for the catalysts supported on gCMK-3 are presented in this Supplementary Information. Figure S1 shows the XPS spectra of Pt 4f for Pt/gCMK-3 catalysts. As described in the manuscript, three pairs of Pt peaks were observed, which correspond to the three-oxidation states of this metal.

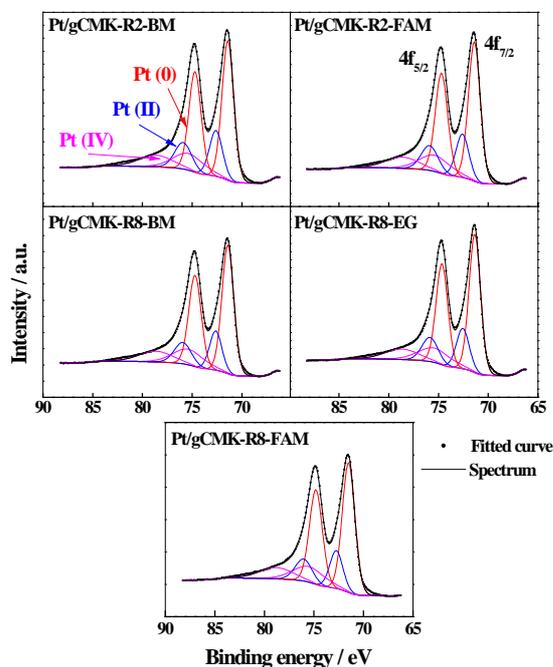


Figure S1. Pt 4f XPS spectra for the synthesised Pt/gCMK-3 catalysts. Red line: Pt (0). Blue line: Pt (II). Pink line: Pt (IV).

Figure S2 shows the XPS spectra of Pt 4f for Pt-Ru/gCMK-3 catalysts, displaying the same pairs of Pt peaks observed in the Figure S1.

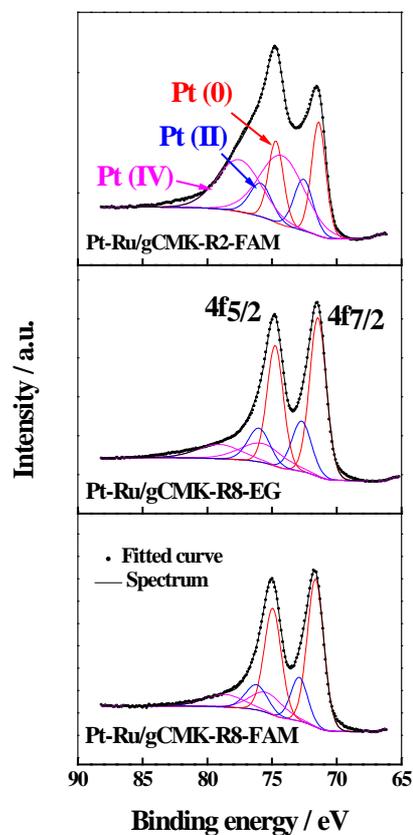


Figure S2. Pt 4f XPS spectra for the synthesised Pt-Ru/gCMK-3 catalysts. Red line: Pt (0). Blue line: Pt (II). Pink line: Pt (IV).

Figure S3 depicts the XPS spectra of Ru 3p for Pt-Ru/gCMK-3 catalysts. Three pairs of Ru peaks corresponding to Ru (0), Ru (IV) and Ru (IV) hydrated were observed in these spectra.

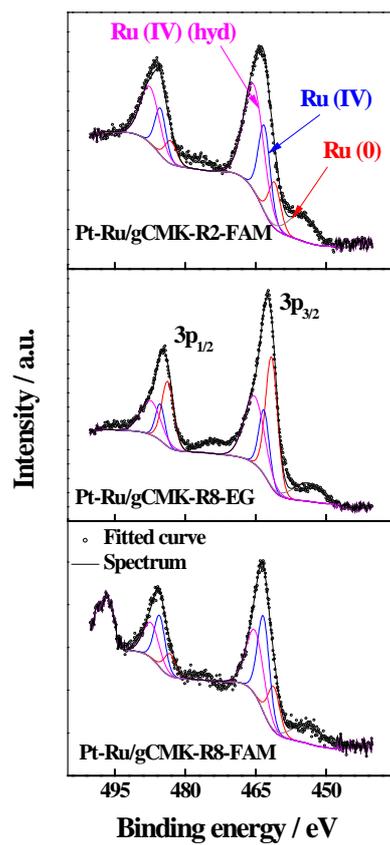


Figure S3. Ru 3p XPS spectra for the synthesised Pt-Ru/gCMK-3 catalysts. Red line: Ru (0). Blue line: Ru (IV). Pink line: Ru (IV) hydrated.