**Supplementary Material**

Fabrication of CuO-1.5ZrO\textsubscript{2} composite thin film, from heteronuclear molecular complex and its electrocatalytic activity towards methanol oxidation

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**Elemental Analysis of complex \([Cu_4Zr_6(μ-O)_8(dmap)_4(OAc)_{12}]\cdot H_2O\) (1)**

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Figure S1: EDX spectrum recorded from different areas of CuO-1.5 ZrO$_2$ composite oxide film deposited from methanol solution of (1) on FTO substrate at 550 °C in air atmosphere.
Figure S2: EDX spectrum recorded from different areas of CuO-1.5 ZrO$_2$ composite oxide film deposited from ethanol solution of (1) on FTO substrate at 550 °C in air atmosphere.