

*Electronic Supplementary Information* for

**Electrocatalytic Oxygen Evolution with a Cobalt Complex**

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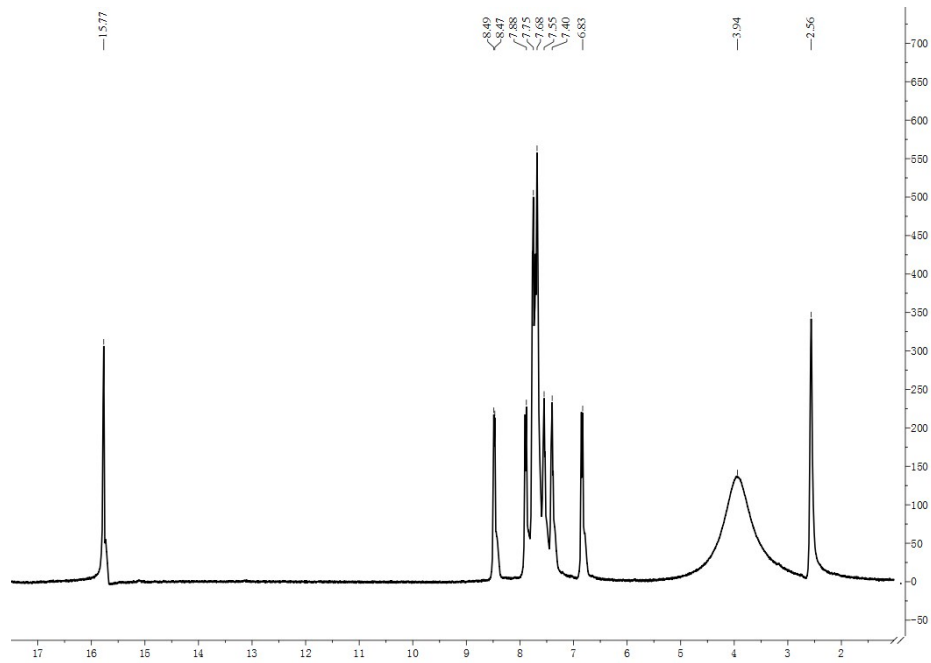
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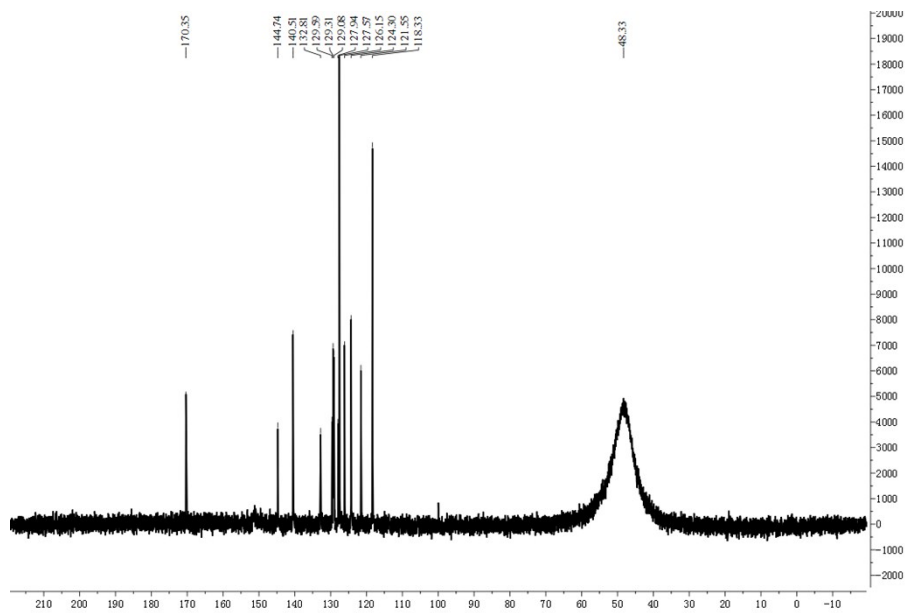
**Table S1.** Crystallographic data and structure refinement parameters for the cobalt complex.

1	
formula	C <sub>36</sub> H <sub>38</sub> CoN <sub>4</sub> O <sub>12</sub> S <sub>2</sub>
<i>Mr</i>	841.75
crystal system	Monoclinic
space group	<i>P</i> 21/ <i>c</i>
<i>a</i> [Å]	17.7878(13)
<i>b</i> [Å]	34.714(6)
<i>c</i> [Å]	7.1082(11)
$\alpha$ [°]	90
$\beta$ [°]	105.722(2)
$\gamma$ [°]	90
<i>V</i> [Å <sup>3</sup> ]	1849.8(5)
<i>T</i> [K]	296(2)
<i>Z</i>	2
$\rho_{\text{calcd}}$ [g cm <sup>-3</sup> ]	1.511
$\mu$ [mm <sup>-1</sup> ]	0.647
<i>F</i> (000)	874
data/restraints/parameters	4215 / 0 / 261
<i>R</i> <sub>1</sub> / <i>wR</i> <sub>2</sub> [ <i>I</i> >2 $\sigma$ ( <i>I</i> )] <sup>a</sup>	0.0720/0.1857
<i>R</i> <sub>1</sub> / <i>wR</i> <sub>2</sub> (all data) <sup>a</sup>	0.1048/0.2071
goodness-of-fit	0.959
largest residuals [e Å <sup>-3</sup> ]	1.662 and -0.375

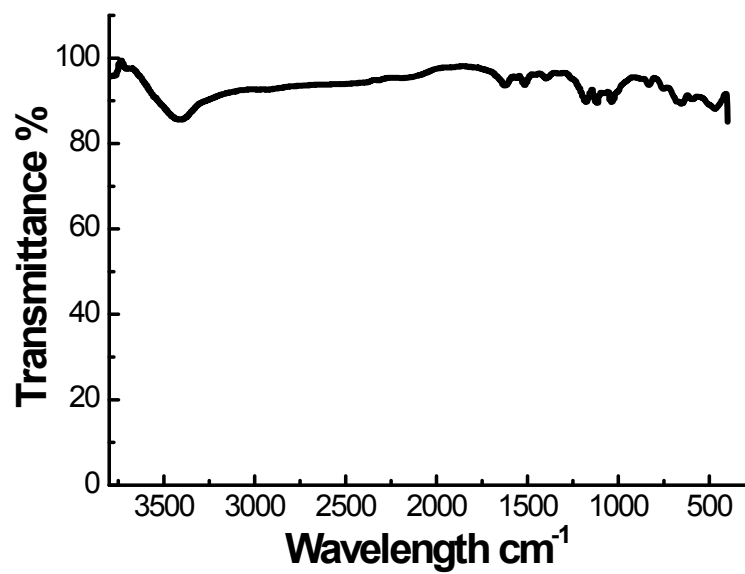
<sup>a</sup> $R_1 = \sum ||F_o| - |F_c||$  (based on reflections with  $F_o^2 > 2\sigma F^2$ );  $wR_2 = \{\sum[\omega(F_o^2 - F_c^2)^2] / \sum[\omega(F_o^2)^2]\}^{1/2}$ ;  $w = 1/[\sigma^2 F_o^2 + (0.095P)^2]$ ;  $P = [\max(F_o^2, 0) + 2F_c^2] / 3$  (also with  $F_o^2 > 2\sigma F^2$ )



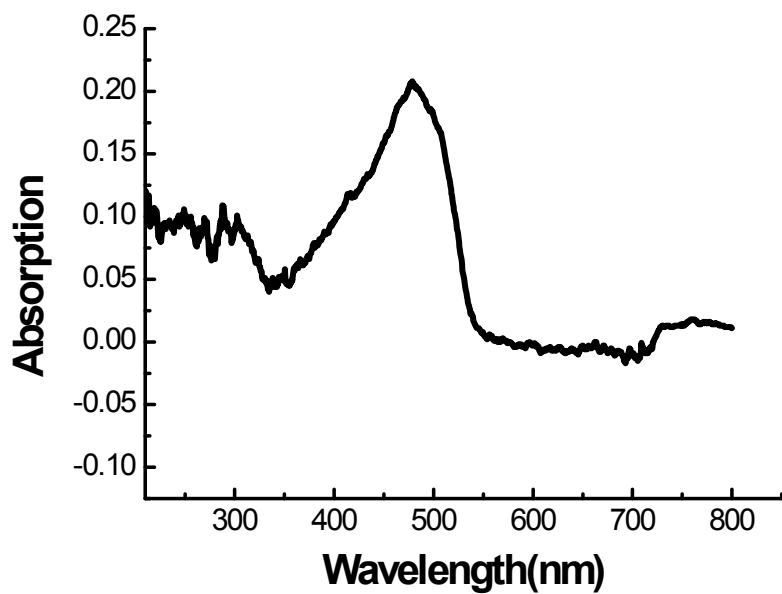
**Figure S1.**  $^1\text{H}$  NMR spectrum of the cobalt complex.



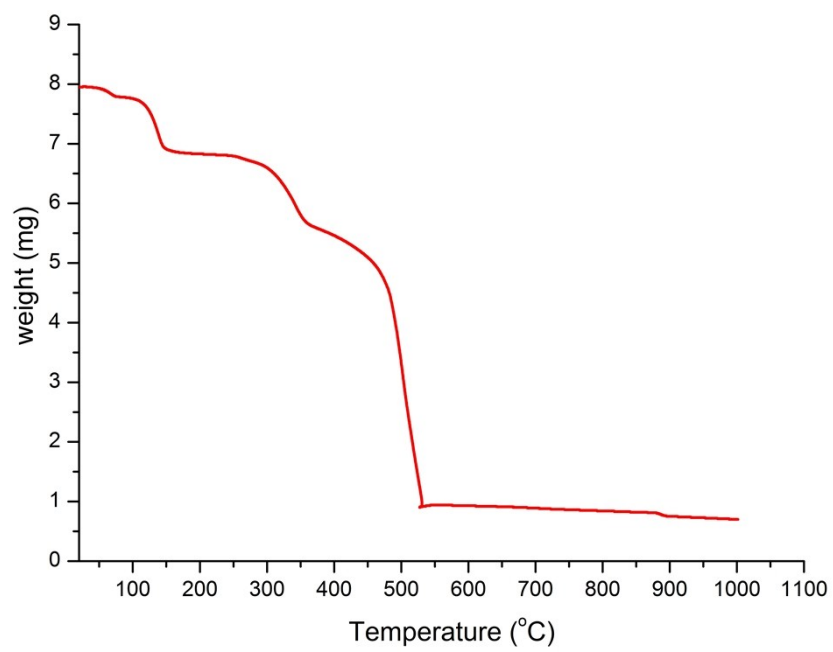
**Figure S2.**  $^{13}\text{C}$  NMR spectrum of the cobalt complex.



**Figure S3.** The IR spectrum of the cobalt complex.



**Figure S4.** The UV-vis spectrum of the cobalt complex.



**Figure S5.** TGA curve of the cobalt complex.