## **Electronic Supplementary Information**

## **Understanding Catalysis**

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**Table S1:** Standard thermodynamic enthalpies of formation,  $H_{f^{\circ}}$ , and standard entropies,  $S^{\circ}$ , for the reactants of the reactions in Table 1 of the manuscript. These values are taken from the NIST library: webbook.nist.gov/chemistry/

Molecule	$H_{ m f}^{\circ}$	S°
	kJ mol⁻¹	J mol <sup>-1</sup> K <sup>-1</sup>
HCOOH(g)	-379	248.7
HCOOH(I)	-425	132
CO <sub>2</sub> (g)	-393.5	213.8
CO <sub>2</sub> (aq)	-413.0	121.4
CO(g)	-110.5	197.7
H <sub>2</sub> O(g)	-241.8	188.8
H <sub>2</sub> O(I)	-285.8	69.9
H <sub>2</sub> (g)	0	130.7
O <sub>2</sub> (g)	0	205.1