Supporting Information

The Acid Hydrolysis Mechanism of Acetals Catalyzed by a Supramolecular Assembly in Basic Solution

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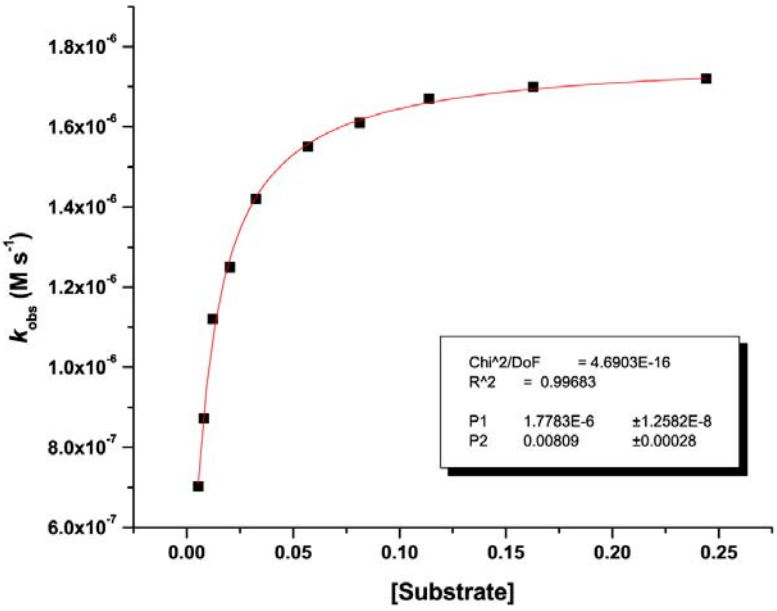

Figure S1 Kinetic data for the hydrolysis of 2,2-dimethoxypropane (**2**) by **1** in H_2O.

Table S1 Concentrations of substrate (**2**) and associated rates rate constants for the hydrolysis of **2** by **1** in H_2O.

[2] (M)	k_{obs} (M s^{-1})
1.80×10^{-2}	5.42×10^{-6}
2.99×10^{-2}	6.72×10^{-6}
4.18×10^{-2}	7.70×10^{-6}
5.95×10^{-2}	8.28×10^{-6}
8.30×10^{-2}	9.57×10^{-6}
1.18×10^{-1}	1.02×10^{-5}
1.75×10^{-1}	1.06×10^{-5}

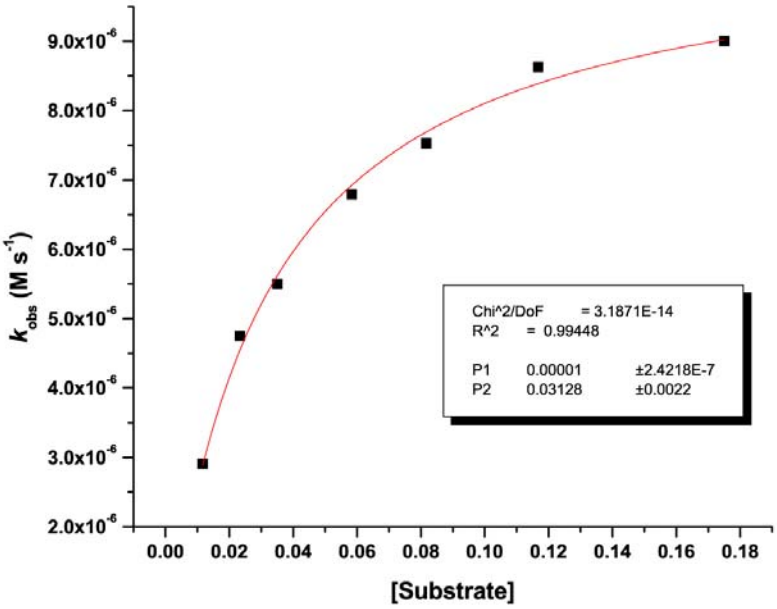

Figure S2 Kinetic data for the hydrolysis of 1,1-diethoxymethane (**4**) by **1** in H_2O.

Table S2 Concentrations of substrate (**4**) and associated initial rate constants for the hydrolysis of **4** by **1** in H_2O.

[3] (M)	k_{obs} (M s^{-1})
1.17 x 10^{-2}	2.91 x 10^{-6}
2.33 x 10^{-2}	4.75 x 10^{-6}
3.50 x 10^{-2}	5.50 x 10^{-6}
5.83 x 10^{-2}	6.79 x 10^{-6}
8.17 x 10^{-2}	7.53 x 10^{-6}
1.17 x 10^{-1}	8.63 x 10^{-6}
1.75 x 10^{-1}	9.00 x 10^{-6}

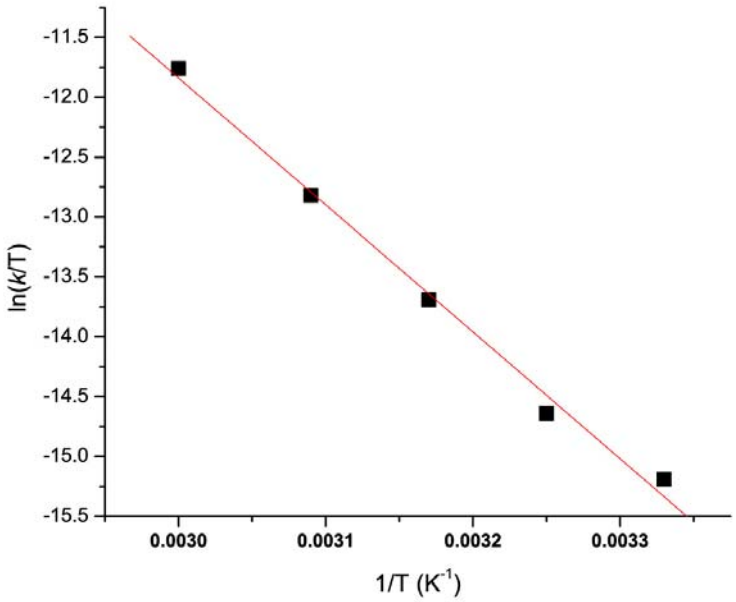

Figure S3 Eyring plot for the hydrolysis of 2,2-dimethoxypropane (**2**) by **1** in H_2O.

Table S3 Kinetic data for the temperature dependence of the hydrolysis of 2,2-dimethoxypropane (**2**) by **1** in H_2O.

T (K)	1/T (K^{-1})	k_{cat} ($M\ s^{-1}$)	ln(k/T)
300.1	3.33×10^{-3}	7.63×10^{-5}	-15.19
307.3	3.25×10^{-3}	1.35×10^{-4}	-14.64
315.4	3.17×10^{-3}	3.58×10^{-4}	-13.69
323.5	3.09×10^{-3}	8.72×10^{-4}	-12.82
333.7	3.00×10^{-3}	2.62×10^{-3}	-11.76