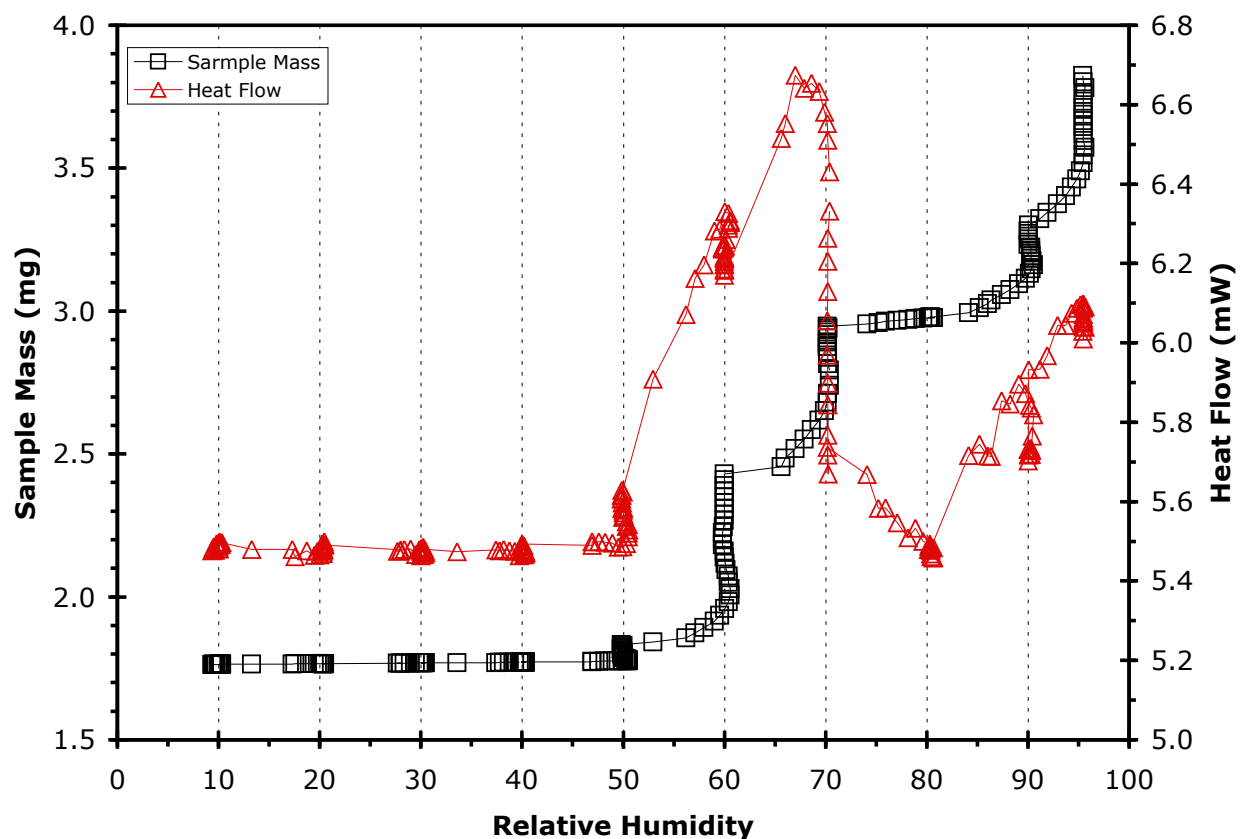# DRH and Reversible Non-Deliquescent Water Uptake in the Sodium Salts of Succinic Acid

Keith D. Beyer[*]
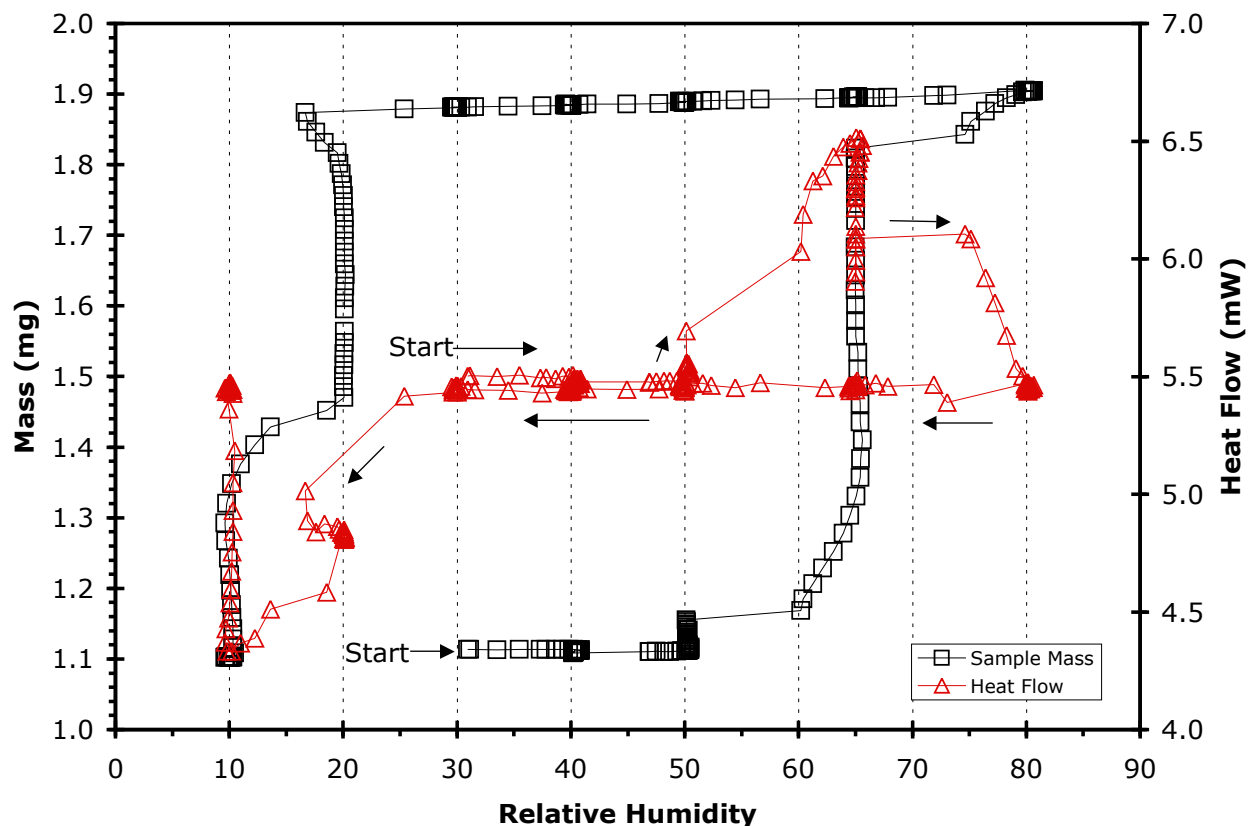
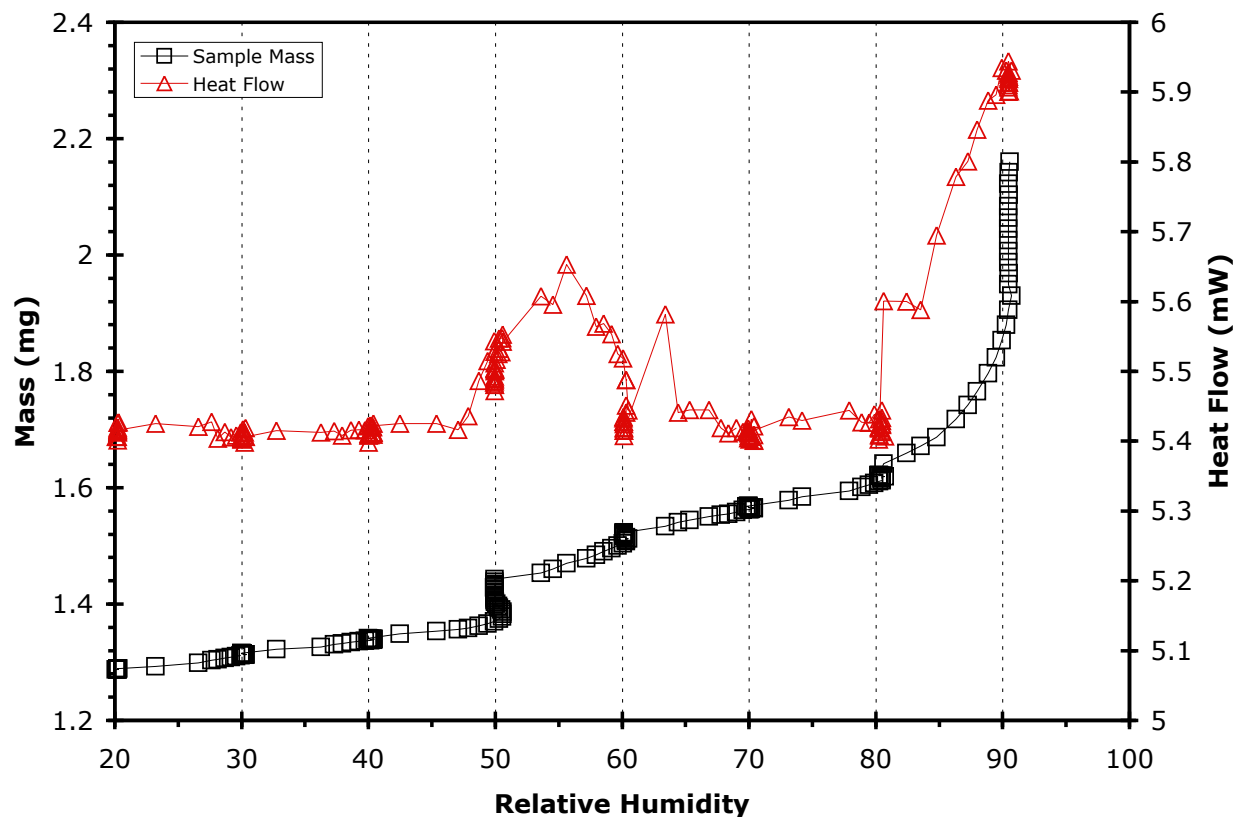Department of Chemistry and Biochemistry, University of Wisconsin-La Crosse, La Crosse, WI 54601

Figure S1. Alternate plot of mass and heat flow for a dry $Na_2C_4H_4O_4$ sample as a function of

Relative Humidity (RH) at 298.1 K from 10 to 95% RH (same data as Figure 2). An increase in

sample mass accompanied by heat from the sample (increase in heat flow) indicates water uptake

by the sample.

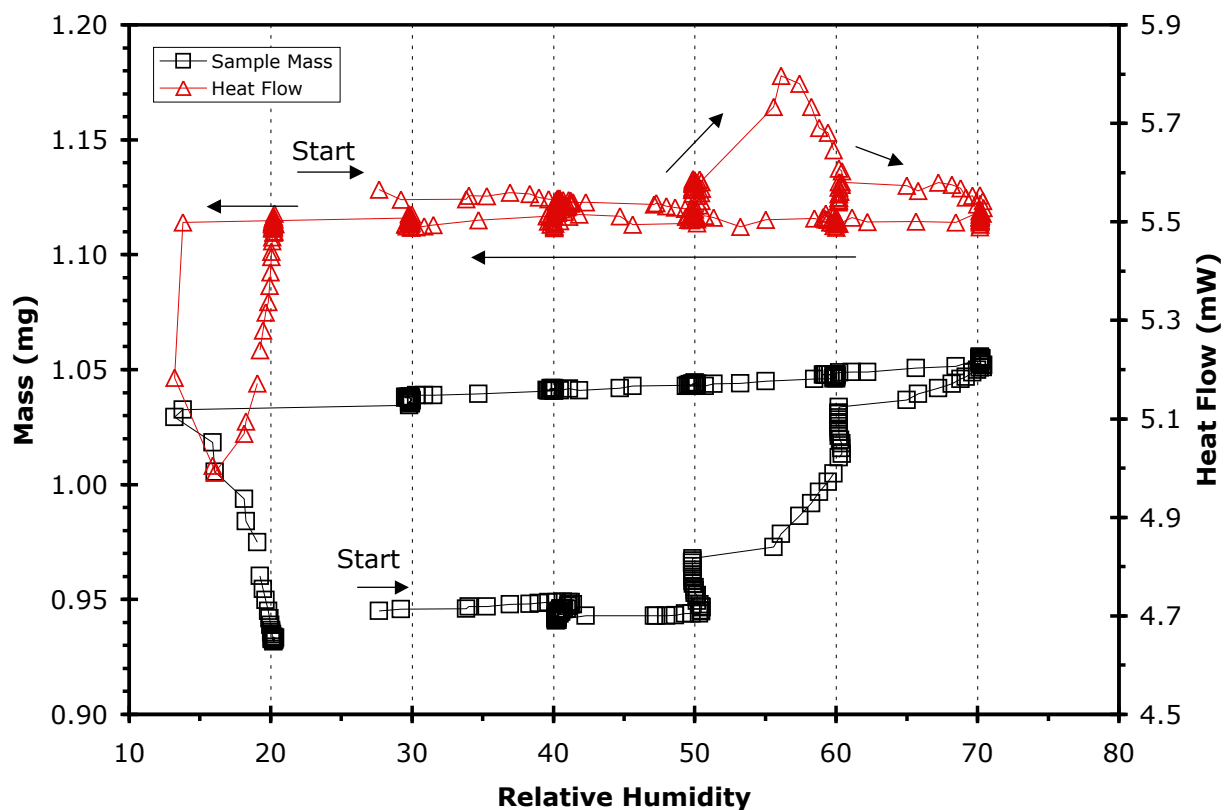**Figure S2.** Alternate plot of mass and heat flow for a dry $Na_2C_4H_4O_4$ sample as a function of Relative Humidity (RH) at 298.3 K (same data as Figure 3). Arrows indicate the start of the experiment at 30% RH and subsequent increase in RH in steps up to 80% RH, then decrease in steps to 10% RH. Connecting lines show the path of the experiment. Arrows also indicate the experiment path for the Heat Flow signal since many data points are coincident.

Figure S3. Alternate plot of mass and heat flow for a dry $NaHC_4H_4O_4$ sample as a function of Relative Humidity (RH) at 298.1 K from 10 to 90% RH (same data as in Figure 5). An increase in sample mass accompanied by heat from the sample (increase in heat flow) indicates water uptake by the sample.

Figure S4. Alternate plot of mass and heat flow for a dry NaHC₄H₄O₄ sample as a function of

Relative Humidity (RH) at 298.2 K (same data as in Figure 6).   Arrows indicate the start of the

experiment at 27% RH and subsequent increase in RH in steps up to 70% RH, then decrease in

steps to 20% RH. Connecting lines show the path of the experiment. Arrows also indicate the

experiment path for the Heat Flow signal since many data points are coincident.