Figure S1. Elution profile of H_2O injected on silica gel (0.136 g) and the linear regression for determining ΔH_{ads} (inset).
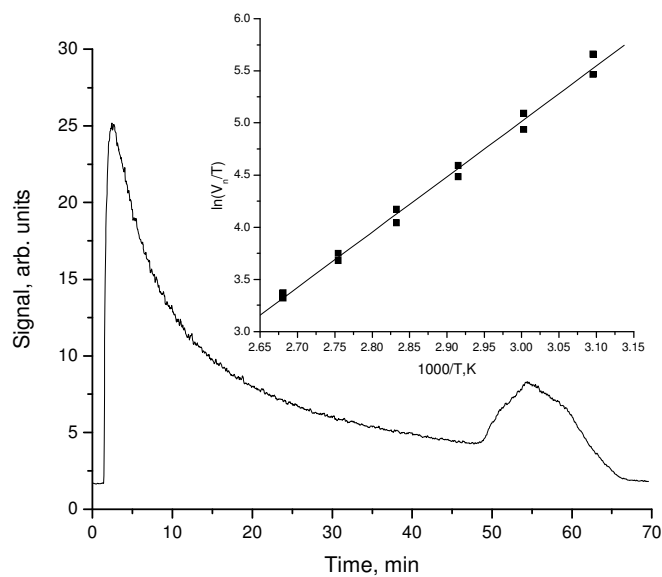

Figure S2. Elution profile of NH_3 injected on silica gel (5.8 mg) at 92 °C and the linear regression for determining ΔH_{ads} (inset). The oven temperature was ramped to 100 °C at 48 min to condition the column prior to the next injection.
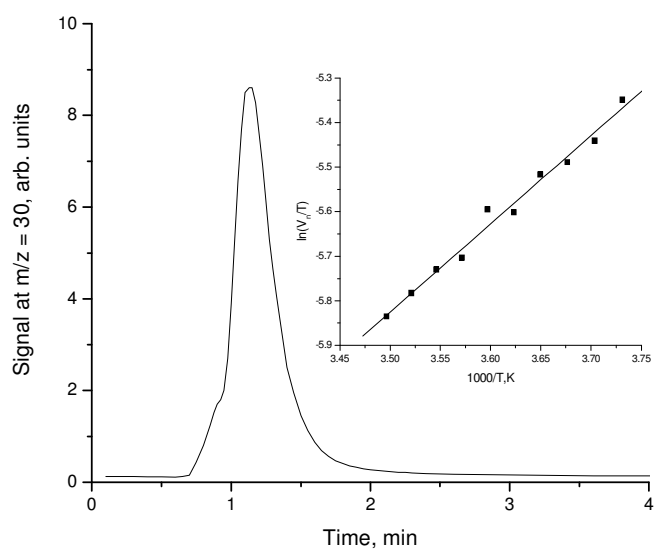
Figure S3. Elution profile of NO injected onto a silica gel column (2.54 g) at -30°C. The dead time for NO injections ranged from 0.75 to 0.80 min and was determined for each injection by monitoring N_2 elution (m/z = 28). The inset shows the linear regression for the data according to Equation 3.
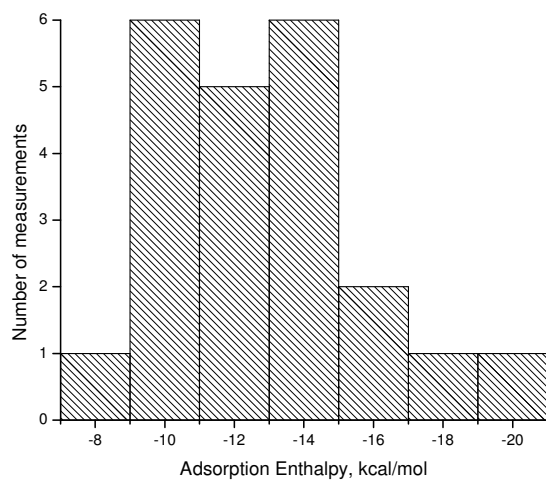

Figure S4. Histogram of enthalpy measurements for NH_3 on silica gel.