

### Glycine Proton Transfer Enthalpies

Run	n (moles)	$\Delta T_1$ (mv)	$w_{el}$ (J)	$\Delta T_2'$ (mv)	$C_{sys}$ (J/mV)	$\Delta H=Q=C_{sys}\Delta T_1$
HCl 1						$Q_4=$ J
HCl 2						$Q_4=$ J
NaOH 1						$Q_6=$ J
NaOH 2						$Q_6=$ J
NaCl 1						$Q_5=$ J
NaCl 2						$Q_5=$ J

T (average starting temperature) \_\_\_\_\_ K (i.e. room temperature)

$K_1$  (from Eq. 14) \_\_\_\_\_

$\alpha$  (solve Eq. 13) \_\_\_\_\_

$\Delta H_{5,m}$  (average value) \_\_\_\_\_ kJ/mol

$\Delta H_{6,m}$  (average value) \_\_\_\_\_ kJ/mol

$\Delta H_{7,m}$  (in writeup) \_\_\_\_\_ kJ/mol

$\Delta H_{2,m}$  ( $=\Delta H_{6,m} - \Delta H_{5,m} - \Delta H_{7,m}$ ) \_\_\_\_\_ kJ/mol (at 0.3M ionic strength)

$\Delta H_{1,m}$  (solve Eq. 11) \_\_\_\_\_ kJ/mol (at 0.3M ionic strength)

$\Delta H_{1,m}(aq)$  (from tabulated values, see page 9) \_\_\_\_\_ kJ/mol (at infinite dilution)

$\Delta H_{2,m}(aq)$  (from tabulated values, see page 9) \_\_\_\_\_ kJ/mol (at infinite dilution)