Experimental 4: Heat of Neutralization

A. Heat Capacity of Calorimeter

Assuming: heat capacity of calorimeter is zero !!!

B. Heat of Neutralization of HCl+ NaOH

	1.0 M NaOH, 50 mL	1.0 M HCl, 50 mL
Temperature before mixing	22ºC	22ºC
Average (T_i)	22ºC	
Temperature after reaction (T_f)	32 ºC	
Calculate Heat of Neutralization		

C. Heat of Neutralization of CH_3COOH+NaOH

	1.0 M NaOH, 50 mL	1.0 M CH$_3$COOH, 50 mL
Temperature before mixing	22 ºC	21.5 ºC
Average (T_i)	22 ºC	
Temperature after reaction (T_f)	27 ºC	
Calculate Heat of Neutralization		

D. Compare part B and C, discuss the results

Group members: Instructor: