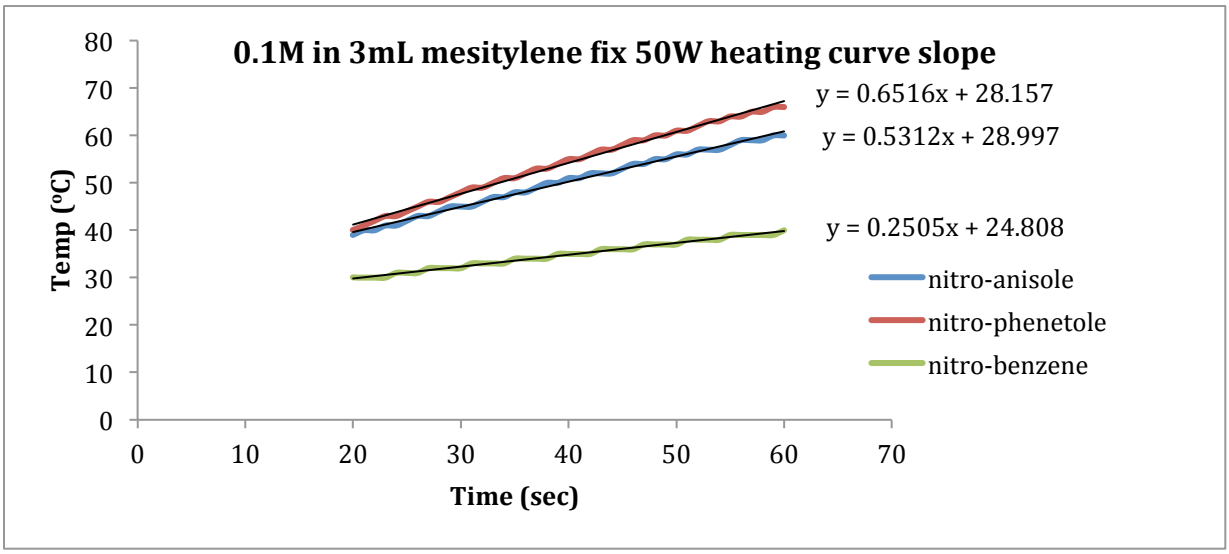
Supplementary Material



The

$$\text{moles of solute} = 3.00 \times 10^{-4}$$

$$\text{moles of mesitylene} = 2.165 \times 10^{-2}$$

C_p =213 J/mol K for mesitylene

$$\text{P(W/mole)} = \frac{\left(\frac{dT}{dt}\right)\left(C_p\right)\left(n_{\text{moles of solvent}}\right)}{n_{\text{moles of solute}}}$$