

## Chemical Vapor Deposition Required Data

Due one week after experiment (individually to section TA, "representative example" for inter-group exchange). Include as a heading: your name, assigned group number, names of group members, and dates experiment was performed

*Provide statistical analyses when appropriate (e.g. 95% confidence interval, standard deviation, error bars, etc.). Briefly justify your chosen method of analysis for each application.*

1. **Tabulate** rate, temperatures, flow rates, time, number of cycles
2. **Plot** natural log of reaction rate versus  $1/[\text{chiller (substrate) temperature}]$
3. **Plot** natural log of reaction rate versus  $1/[\text{filament temperature}]$  for provided data
4. **Determine** effects of adjusted variables
5. **Calculate** the apparent activation energies for polymerization reaction and compare to literature values.