A First Course on Kinetics and Reaction Engineering

How To Use FitLinmbSR.m

1. Verify that FitLinmbSR.m is the appropriate script to use

   a. The data points must be of the form $(x, \hat{y})$

   b. The model being fit to those data must be of the form $y = mx + b$

2. Make sure that FitLinmbSR.m is stored in the current MATLAB working directory or in a directory that is in the MATLAB search path

3. Create a column vector named x in the MATLAB workspace; it should contain the values of x for each of the data points, one per row

4. Create a column vector named y_hat in the MATLAB workspace; it should contain the values of $\hat{y}$ for each of the data points, one per row

5. Execute the script by typing the following at the MATLAB command prompt: `FitLinmbSR`

6. The following quantities will be listed in the MATLAB command window

   a. `r_squared` - the correlation coefficient for the fit

   b. `m` - the fitted value of the parameter, m

   c. `m_u` - the ± 95% confidence limits for the parameter, m

   d. `b` - the fitted value of the parameter, b

   e. `b_u` - the ± 95% confidence limits for the parameter, b

7. A model plot will be displayed