BETSI v2.0

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List of new features and fixes added:

1. Some bug fixes related to BETSI crashing.

2. Minor changes (i.e. providing extra information) in the GUI of the BETSI main window:
   - The valid range of each parameter is now given in brackets "[ ]".
   - A light blue box has been added with some general hints on how to run BETSI.
   - A drop-down box from which the user can choose the adsorbate of interest. If the adsorbate of interest is not within the list. The user can choose the "Custom" option from the list and here, the user must provide the two required parameters for that adsorbate.

3. Minor changes (i.e. providing extra information) in pop-up Figure 1:
   - The name of the adsorbate used for the calculation is given in the title of the figure.
   - In the "Linear Range" plot: The original data points will now be shown in red and the interpolated points (if added) will be in green.
   - In the "Linear Range" plot: The slope and intercept of the linear equation is given in scientific format.
   - In the "Distribution of Filtered BET Areas" plot: The optimal points range from which the BET area has been calculated is now shown on the plot.

4. Addition of interpolated points to the raw data for isotherms lacking sufficient number of points required to perform a BET area calculation.

5. BET area calculation with respect to different kinds of common gas adsorbates (e.g. N_2, Ar, Kr, and Xe) as well as user defined adsorbate is now possible.

6. Adsorption data files with ".txt", ".aif", ".xls" (Micromeritics output file) extensions are now readable with BETSI in addition to ".csv" extension.

7. Some general warning/comments/notes related to the input data quality will pop up at the end of the calculation, if necessary. These warnings include:
   - If the input file is not valid or something is wrong with the data and cannot be read with BETSI.
   - If the adsorption data is not monotonically increasing: in this case, the problematic pressure points will be removed.
   - If the adsorption data contains negative pressure points: in this case, the negative pressure points will be removed.
   - If no valid BET area is found due to insufficient number of data points in the adsorption file, interpolated points will be added to the raw data.