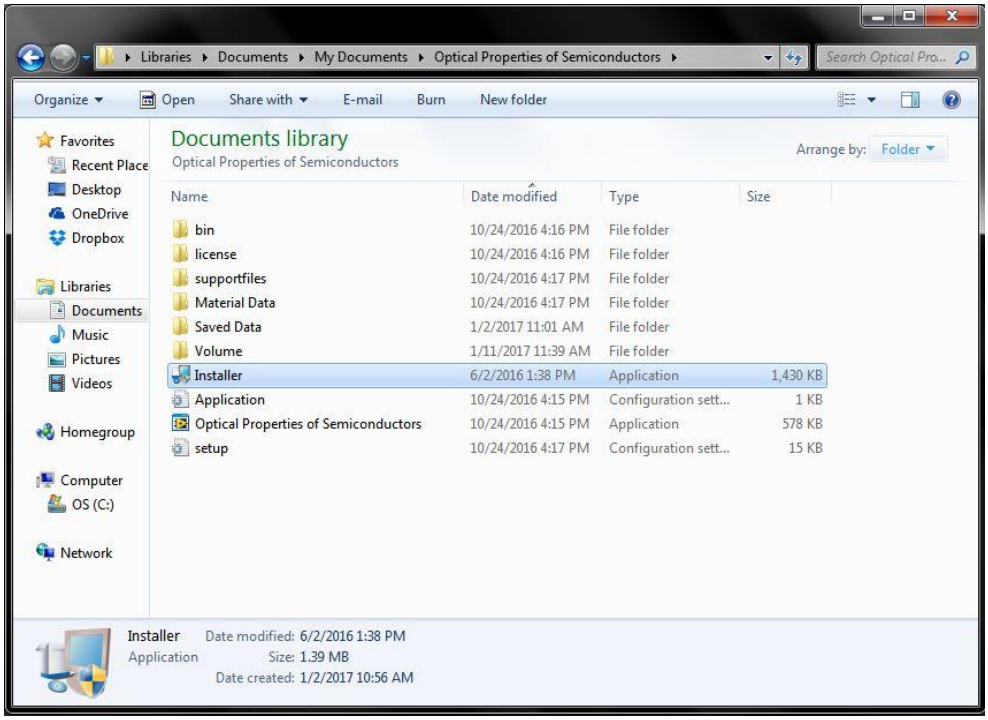
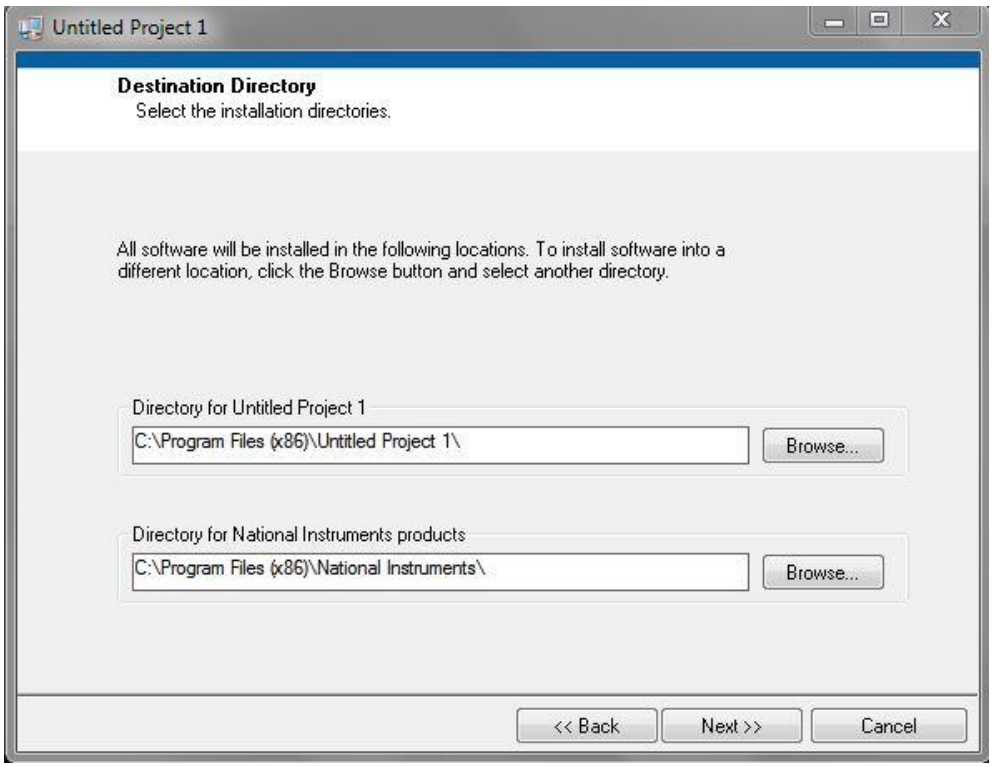
User Manual

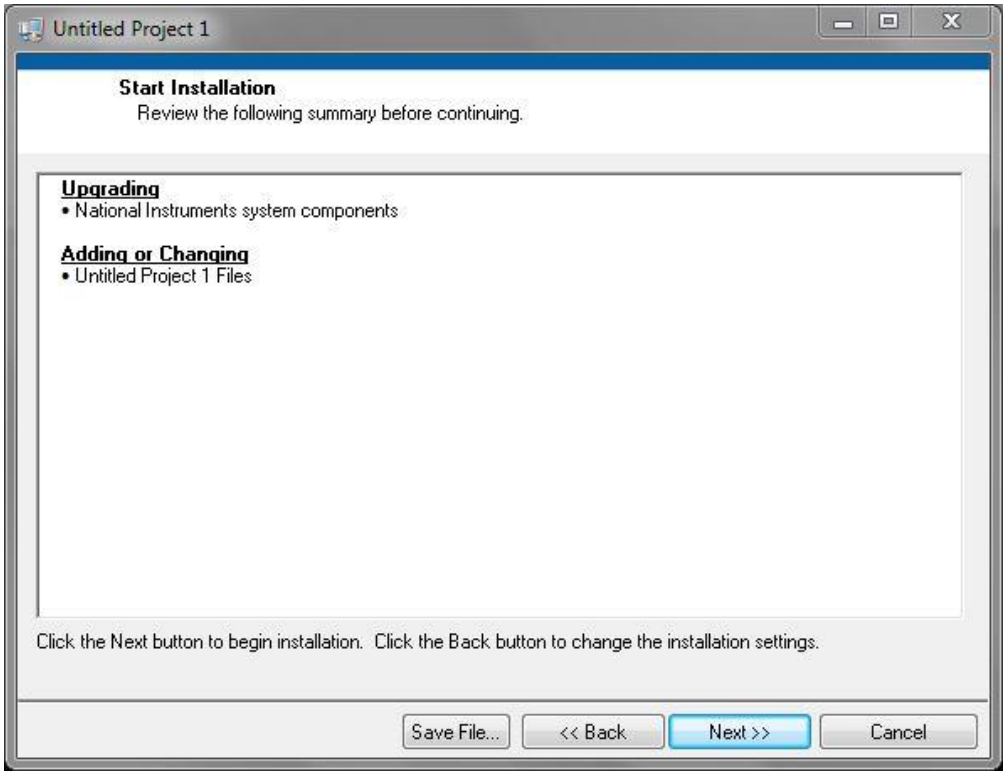
1.1 Locate unzipped file and double click Installer application to install required runtime engine.



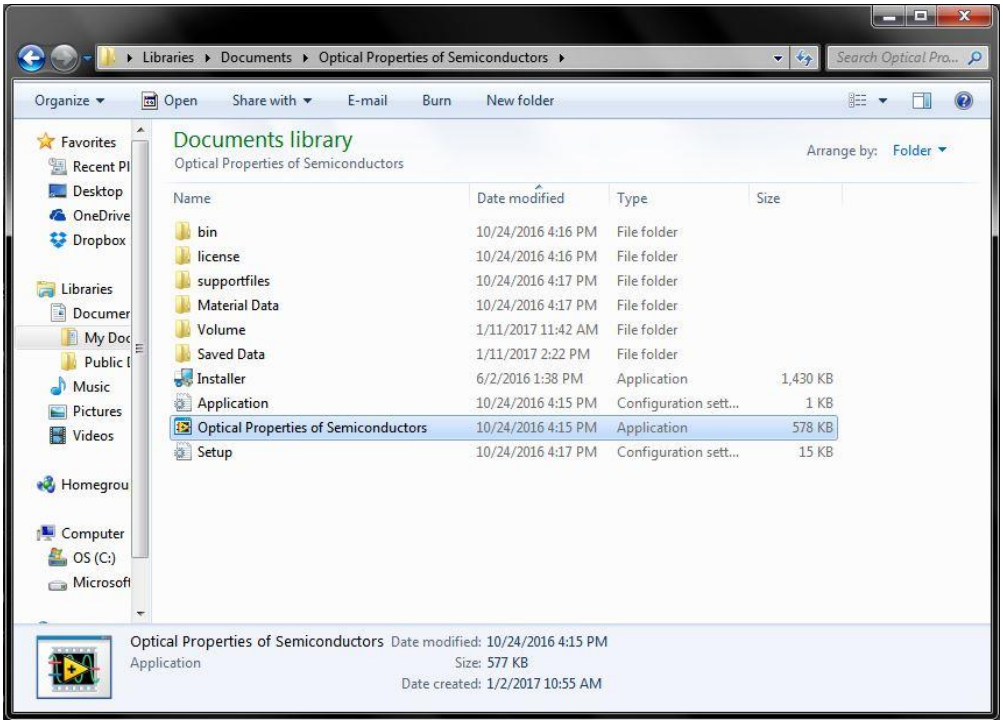
1.2 Choose location for Labview runtime engine software, and then click next.



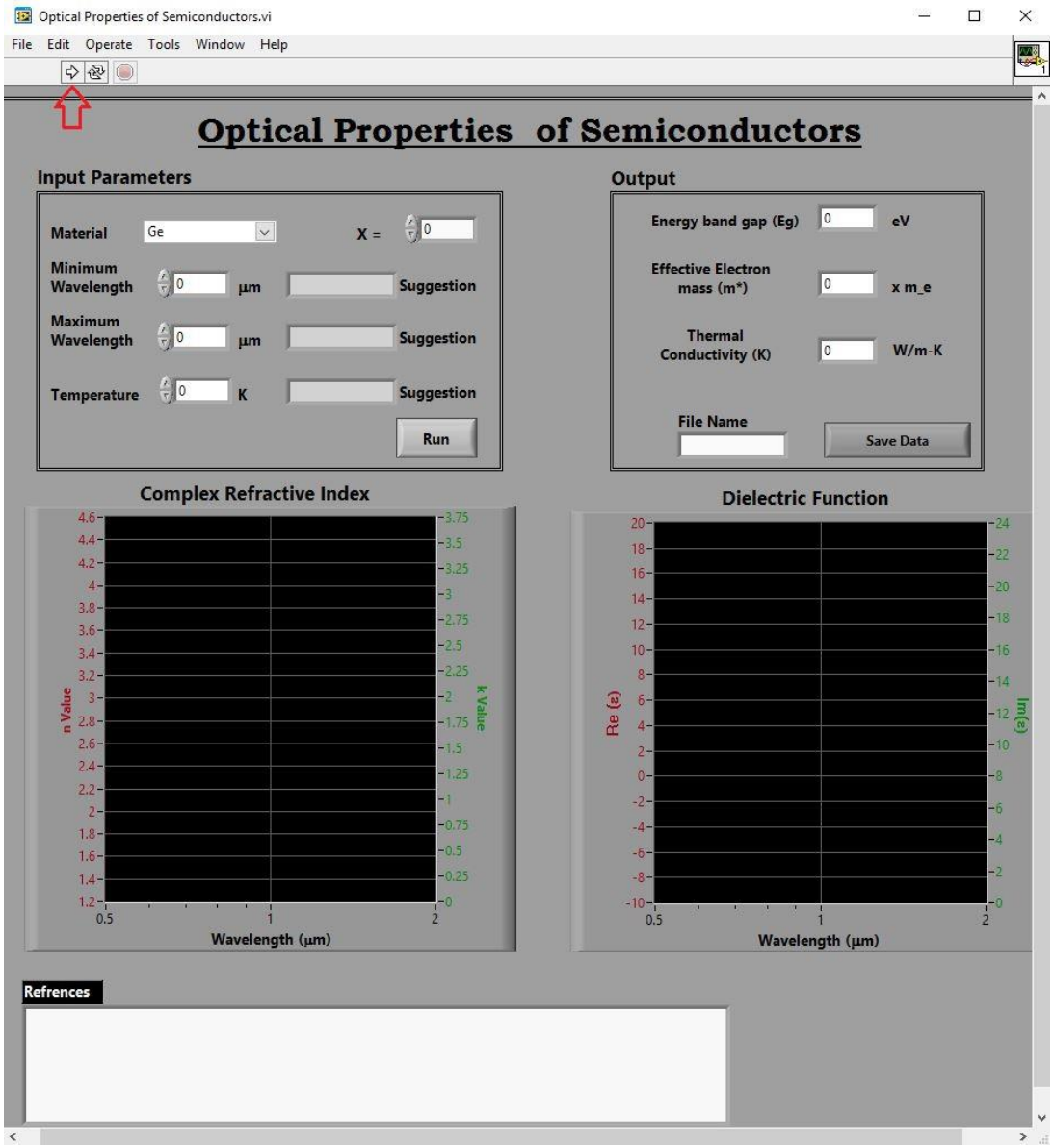
1.3 Just click next and wait for the installation of the components to be over. This may take a few minutes, and then click finish.



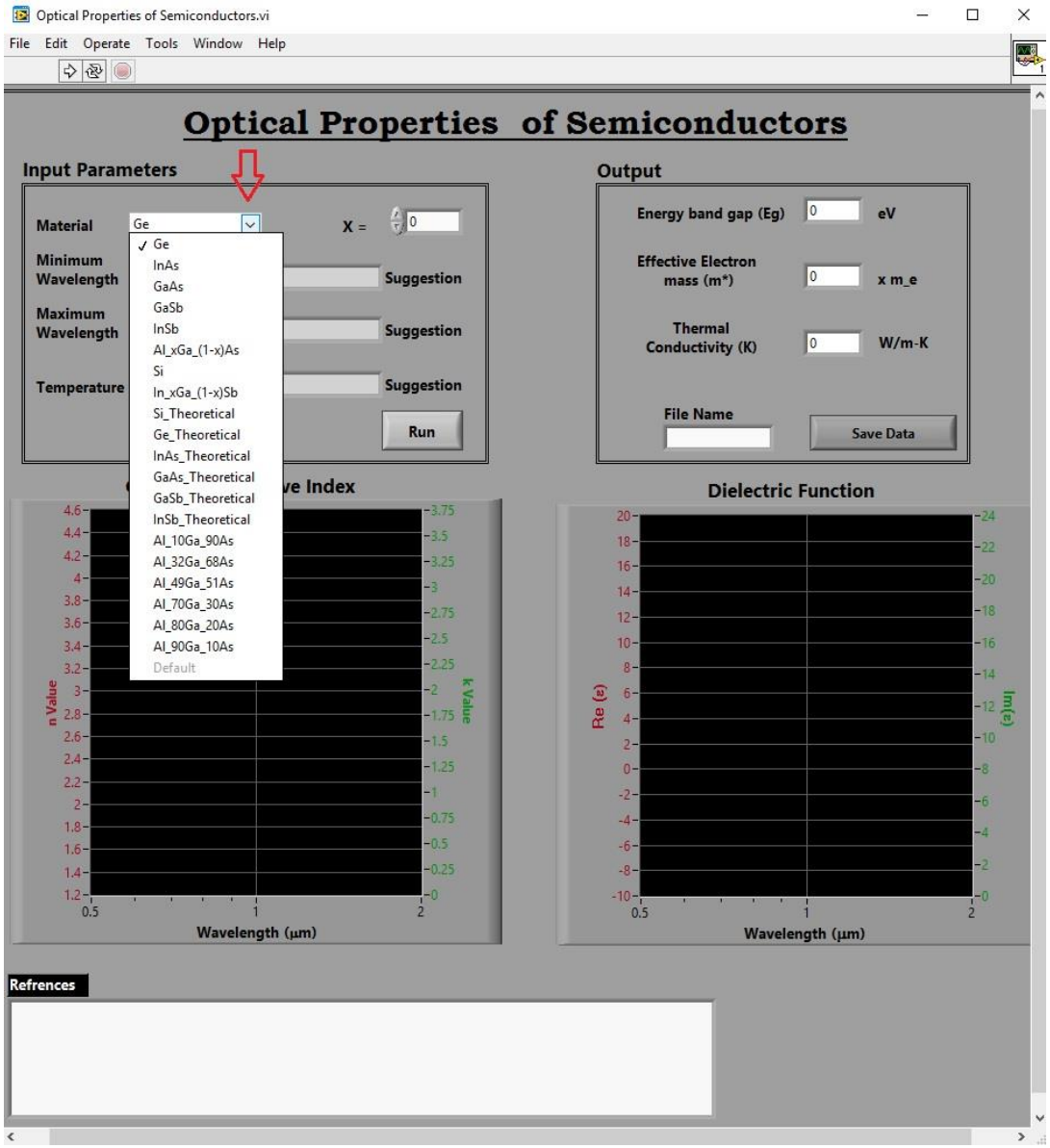
2. Double click Optical Properties of Semiconductors to launch program.



3.1 Once program has launched, press run button as indicated to initiate program.

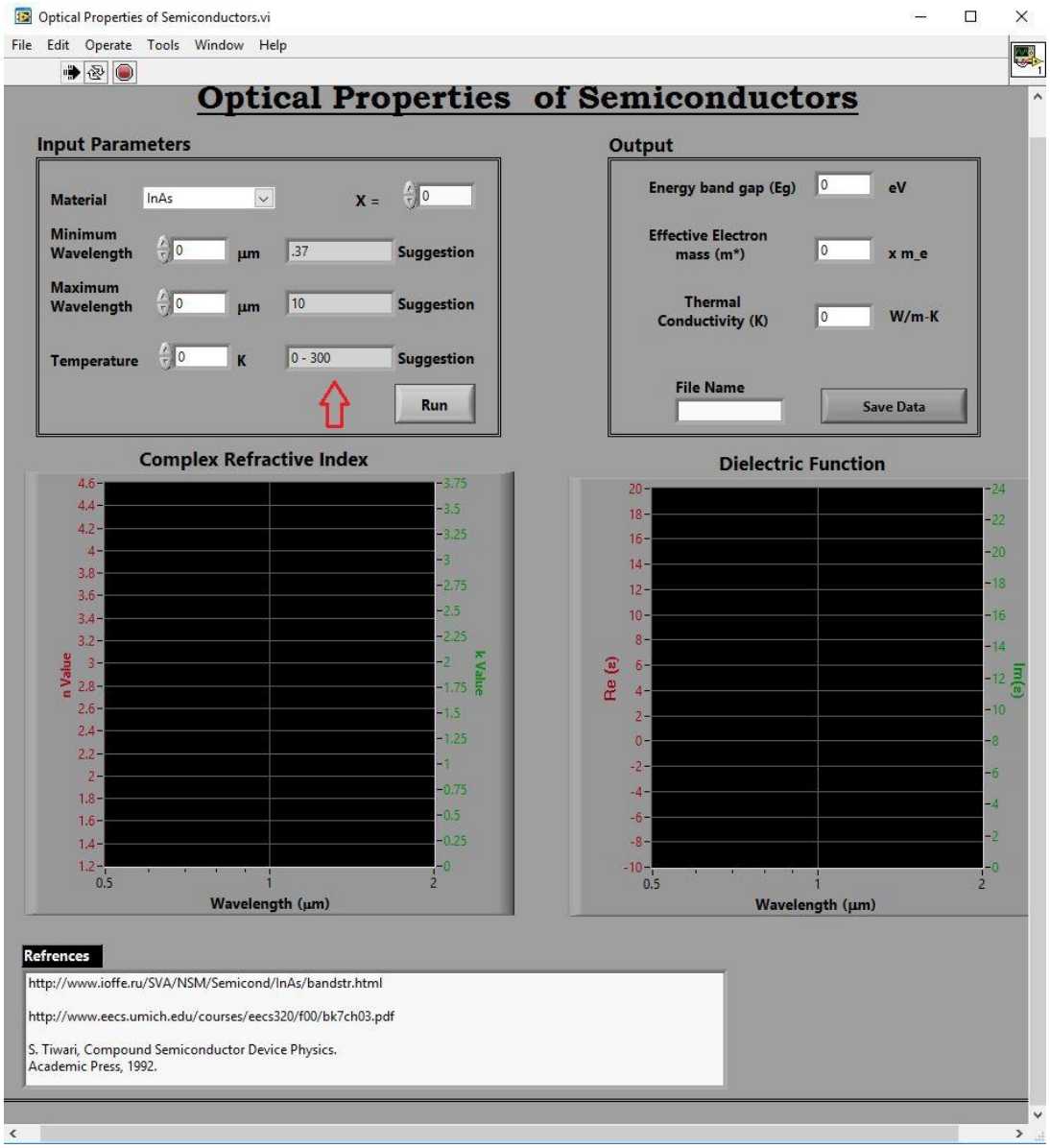


3.2 First, you should choose the material using the drop down menu.

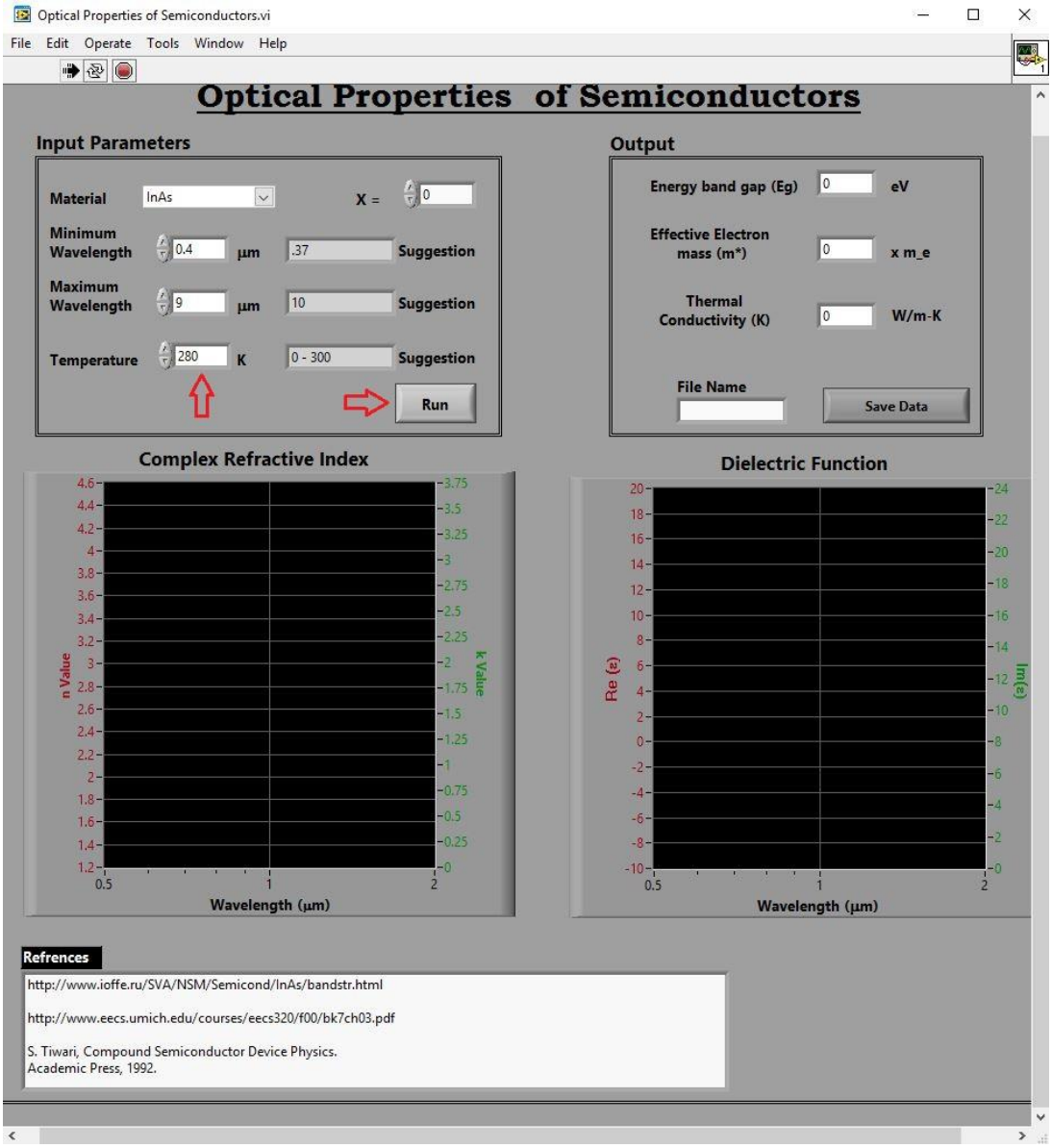


3.3 After selecting the material, you can see the suggested ranges for wavelength and temperature along with references at the bottom.

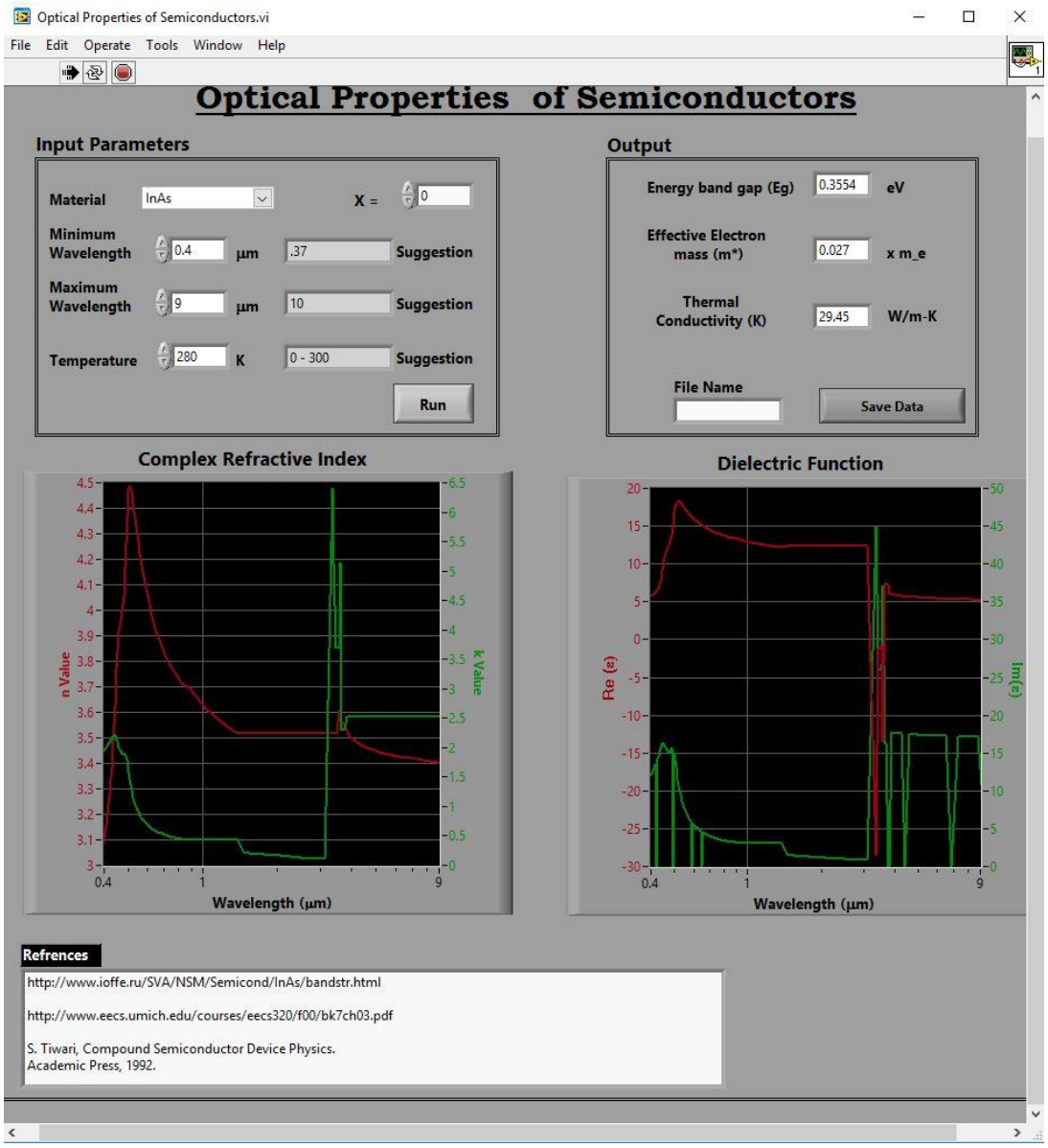
* This suggested range is due to the availability of the data in our database.



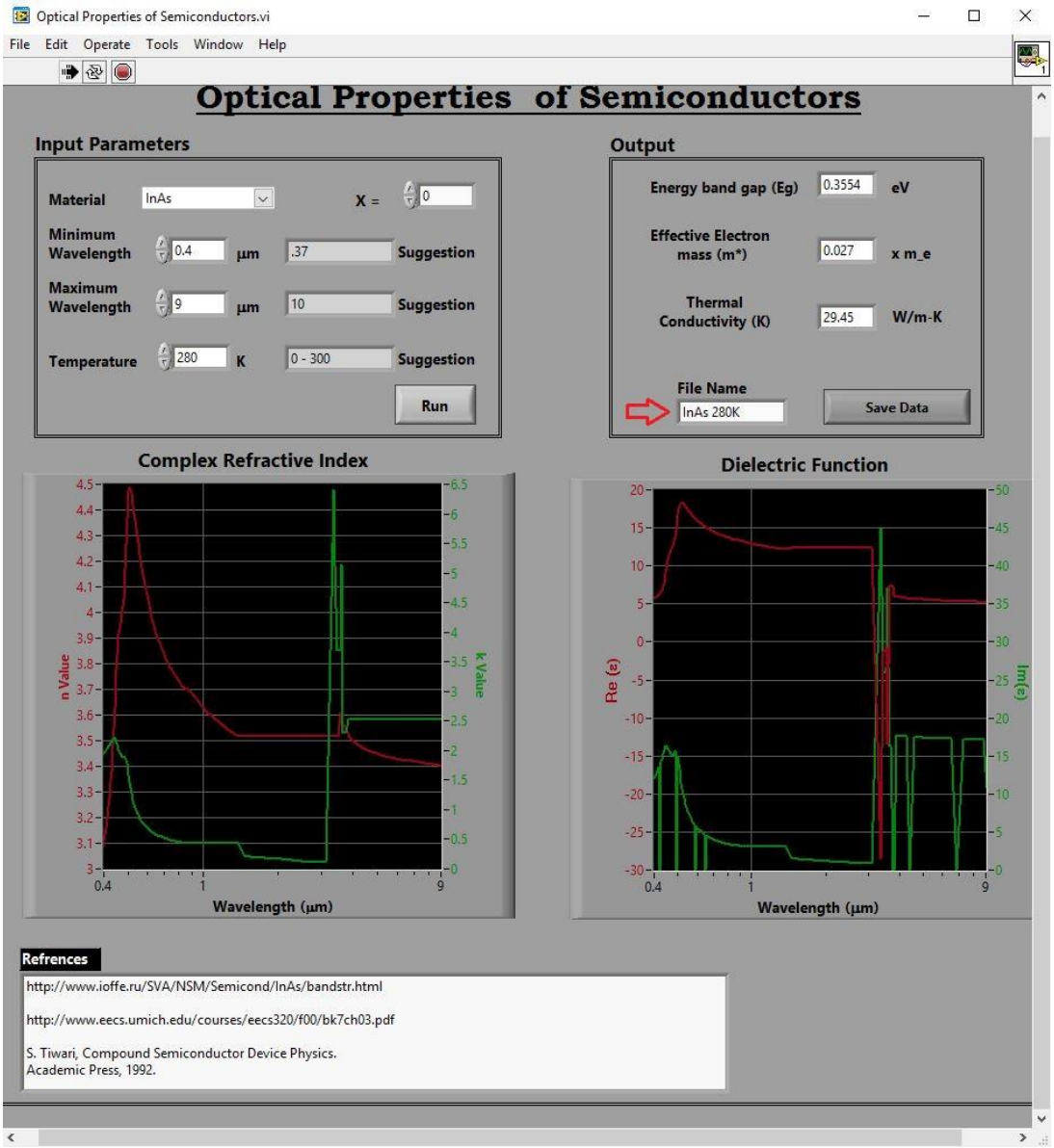
3.4 Input values of interest within applicable suggested range and press “Run.”



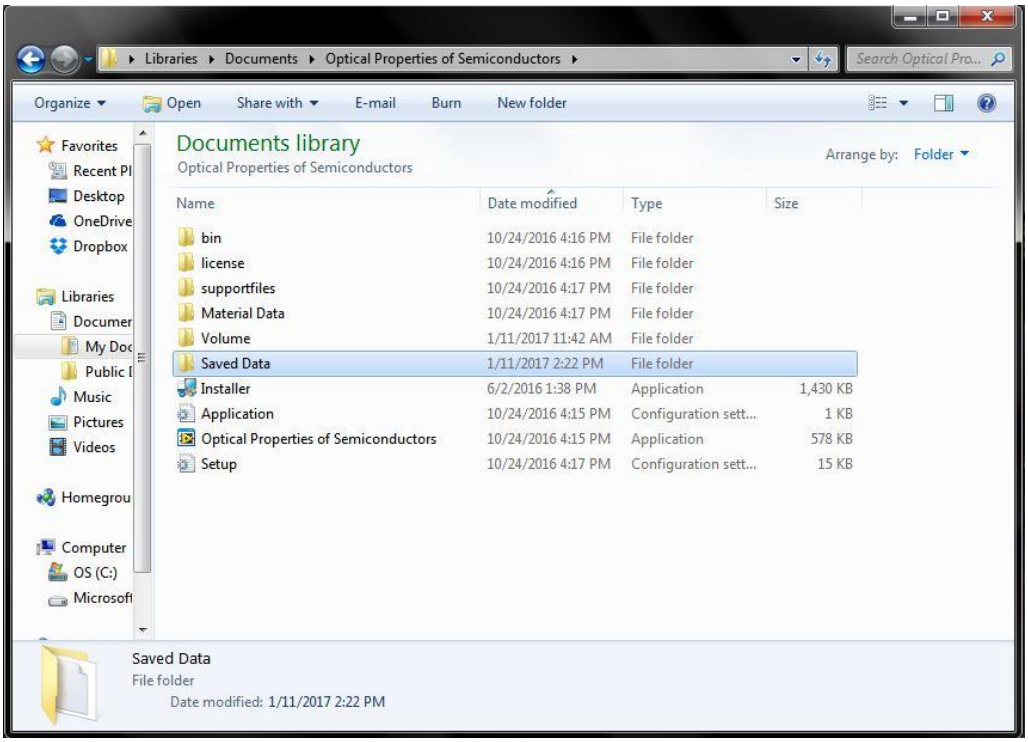
3.5 The left graph plots the real refractive index (red) and the extinction coefficient (green) vs. wavelength. The right graphs plots the real (red) and imaginary (green) part of the dielectric function vs. wavelength. The energy band gap (Eg), effective electron mass (m*), and thermal conductivity (K) in the output parameters box are material specific and calculated as a function of temperature.



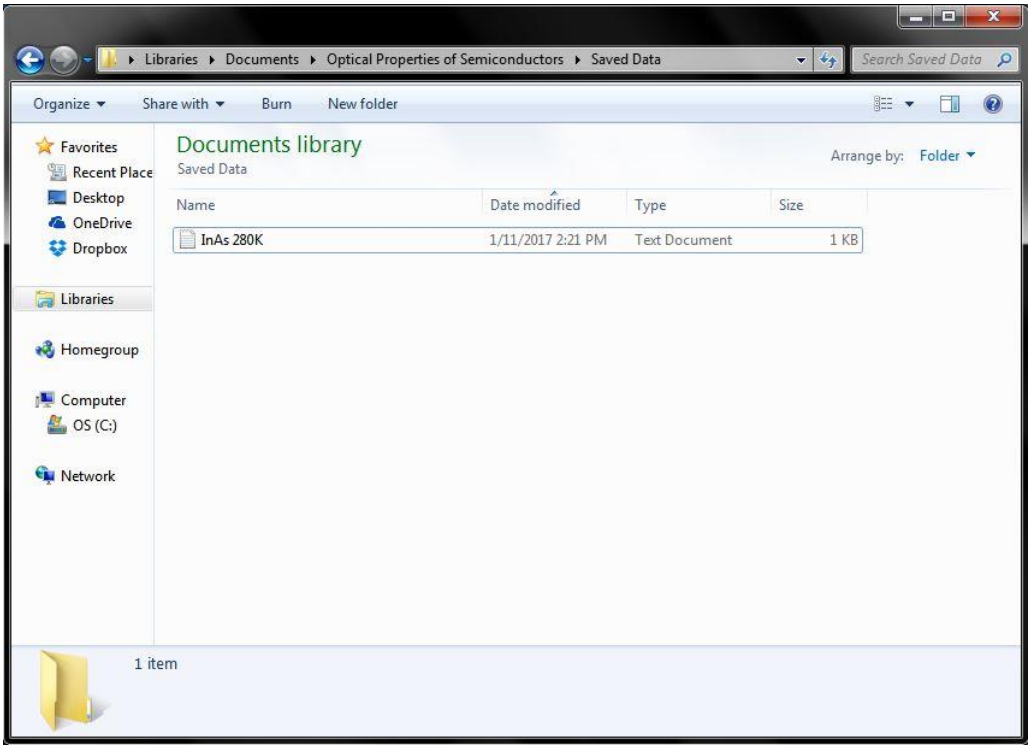
4.1 To save output parameters and plotted data, input file name and press “Save Data.” File will be saved to “Saved Data” folder with chosen file name in .txt format.



4.2 Double click Saved Data folder to access saved file.



4.3 Saved file



*Shortcut of “Optical Properties of Semiconductors” can be created and will work properly if original file remains in the same folder with the “Material Data” and “Saved Data” folders.