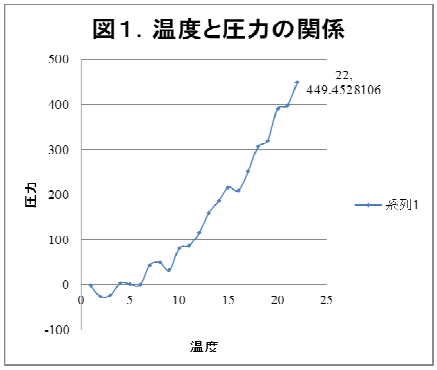
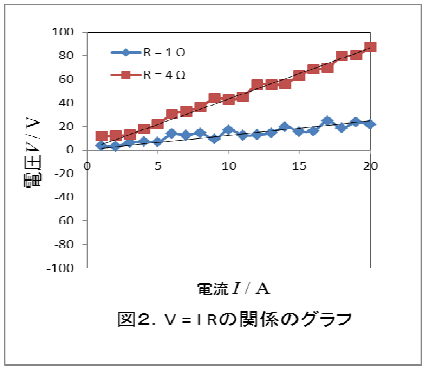
How to make a graph

- Be sure to put a specific title in the graph. The title is written below the graph with the graph number. A description of the graph may be added after the title if necessary.
- Be sure to specify the vertical axis and horizontal axis caption and the unit. Please refer to the graphs in the next pages for how to put units. In this experiment, we will use unit notation based on the idea of plotting “numerical values” divided by the dimensions of the measured data on a graph. For example, if the horizontal axis is frequency, the unit is “ f / Hz" or "frequency / Hz", and if it is temperature, "T / K" or "temperature / K". The unit should be written in Roman style.
- If there is no unit in the data, add symbols and explanations that make sense.
- If you plot multiple data points in one graph, put a legend (see the examples).
- Be sure to put a scale on the graph. Put numbers on the scale at appropriate intervals.
- Never put the horizontal axis and the vertical axis at a halfway point such as the center of the graph (common when using EXCEL).
- Be careful not to make the size of the plotted points too small.
- Do not connect the plotted points meaninglessly unless there is a theoretical background connecting the data with lines.
- Do not show values at plotted points.
- Add error bars to the data points as needed.

Bad…





Good...

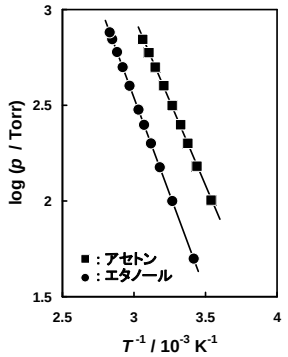


Fig. 1 Temperature dependence of vapor pressures of acetone and ethanol.

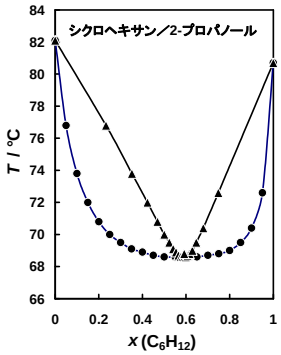


Fig. 2 Vapor-liquid phase equilibrium diagram of cyclohexane/2-propanol system.