

Gas-Liq-Solids

Three-laws-Thermo

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Outline

- 1 States of Matter
 - Gas, Liquid, and Solid
- 2 Practical Functions
 - Blocks
 - Figures and Tables
 - Graphs
- 3 Conclusions
 - As for States of Matter

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General Notice

- unit: Kelvin(K) & $\text{J}\cdot\text{K}^{-1}\cdot\text{mol}^{-1}$

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- formula transformation: molarity & density

Gas

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Why do we study kinetic molecular theory?

- Graham's law of effusion?

Understanding from A New Point of View

Here we will discuss the **ideal gas equation** from a new point of view, *i.e.*, **kinetic molecular theory**(KMT).

Understanding from A New Point of View

First we should get aware of the **prerequisite** of KMT.

¹Sun, Ting, *CHEM2100J-FA21-Ch5-6*, pp. 35.

Understanding from A New Point of View

First we should get aware of the **prerequisite** of KMT.
Recall what has been taught in lectures.

1. A gas is in continuous random motion
2. Gas molecules are infinitesimally small
3. They move in straight lines until collision
4. Gas molecules do not influence one another except during collisions
5. The collisions are elastic

Prerequisites of KMT shown in slides¹

¹Sun, Ting, *CHEM2100J-FA21-Ch5-6*, pp. 35.

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Liquid

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An example of blocks

example

This is an example of block.

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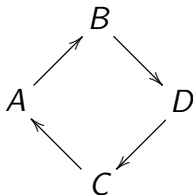
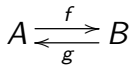
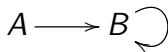
This is another block.

Examples of figures and tables



Figure: An example of figure

Examples of Graphs



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- Smoot Salute!
<http://web.mit.edu/spotlight/smoot-salute>.