



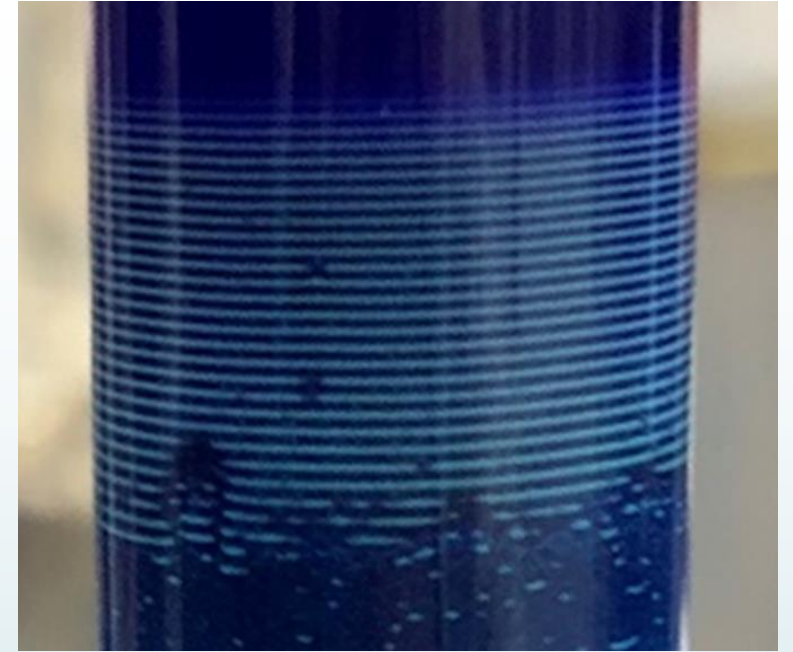
Lieseegang Phenomenon

Sendai Daisan Senior High School

Team 15

Introduction

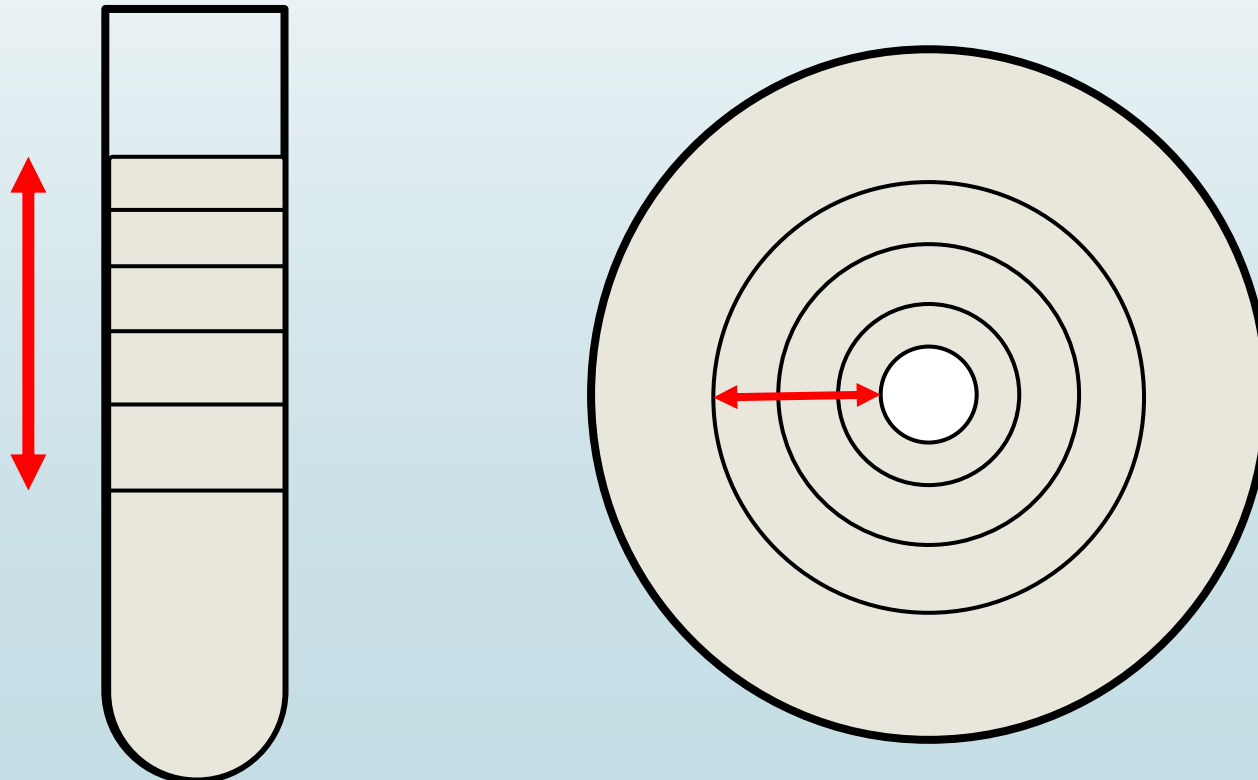
Liesegang phenomenon makes clear striped pattern. In general, this phenomenon uses a petri dish or test tube. Agate is example of liesegang phenomenon.



→ Agate (メノウ)

Purpose

- ▶ Compare distance of Liesegang layers formed in different containers



Experiment

- ▶ We want to research when concentration is changing, how change the Liesegang layers.
- ▶ Method : we use the materials in the table. We change the concentration of CaCl_2 aqueous solution

Components Chemical	Beaker	Petri Dish	Test Tube
Pure water	300 ml	60.0 ml	20.0 ml
Na_2HPO_4	2.25 g	0.45 g	0.15 g
CaCl_2	1.00 ml	0.500 ml \times 2	5.00 ml
Agar powder	3.00 g	0.600 g	0.200 g

Result and conclusion

Radius of liesegang rings become larger in all graph when the concentration of CaCl_2 is high.

⇒ When using petri dish, the layers spread laterally, but the layers spread as a whole when using beaker.
So, to expand layers when using beaker, it is necessary to increase the amount of solution.

