



The Cloud Chamber

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Cloud chamber was used to detect particles in 1900s. It is a chamber which filled up supersaturated alcohol vapor. Charged particles pass through in the chamber and makes alcohol vapor evaporated and ionized which makes tracks behind. All different particles make different trails because of their energy. Positron, muon and kaon were discovered by means of the cloud chamber.

When the subject matter is matter and atom in science classes, I as science teacher use this activity in my classroom. The pupils prepare the experiment setting according to experiment instructions sheet by helping of the teacher. They start to watch the chamber and take photos when the tracks of charged particles appeared. They compare the tracks and have a discussion why they are different. Therefore, they explore radiation and subatomic particles in the chamber.

In this experiment, the pupils get interested and curiosity on the sub-atomic particles which they don't see in daily life. They realize that cosmic particles rain down on us at any moment. They comprehend harmless and invisible radiation. They start to journey into atoms and outer space deeply.