

Study of gravity term in capillary phenomenon

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Surface tension, which is a force trying to reduce the surface area, acts on the liquid. Liquid in thin tubes is pulled up by surface tension and is well known as capillary phenomenon. The height of the liquid pulled up inside the tube is inversely proportional to the radius of the thin tube. Therefore, the height of the liquid is higher in the tube thinner than the thick tube. Also, gravity is also inversely proportional to the height of the liquid. Experimental verification was carried out to see whether the same phenomenon as when changing the radius of the tube could be obtained by changing gravity. From the theoretical formula, if the gravity is zero, the height of the liquid will be infinite. In the experiment, it will not be infinite height. We examined the experimental results with an eye on the limits of the experimental apparatus.

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