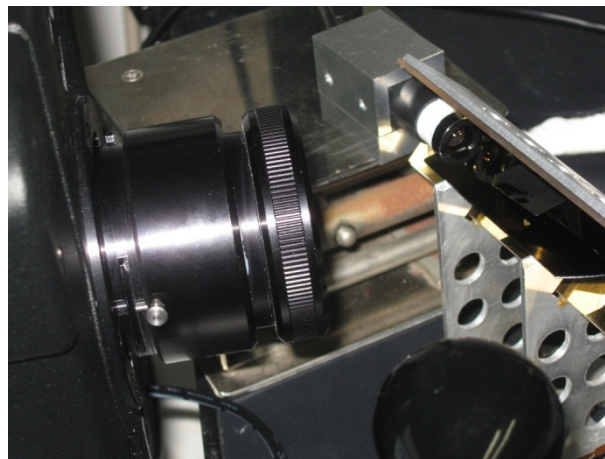


Study on evaporation and heat transfer of a small droplet

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Droplet evaporation is a basic phenomenon which is relevant to many wide range areas such as heat transfer and surface science. Despite this, there are still many open questions because this phenomenon is complex involving heat transfer, convection, mass transfer and wetting and so on. In this study, an infrared (IR) thermometry and a charge-coupled device (CCD) camera are used to clarify the mechanism of evaporation of small droplet. Analyzing of IR camera and CCD camera measurements, local information including heat transfer coefficient, heat flux and behavior of evaporating droplet can be obtained.



Experimental apparatus

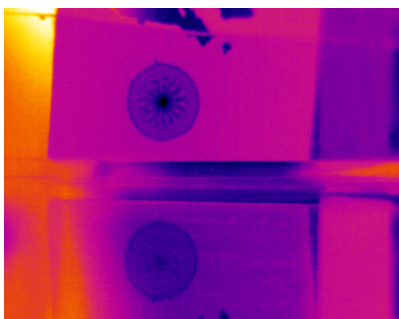


Image from IR camera

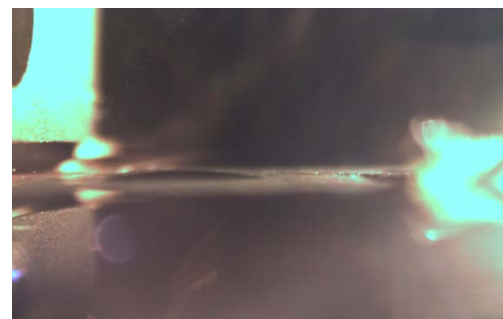


Image from CCD camera