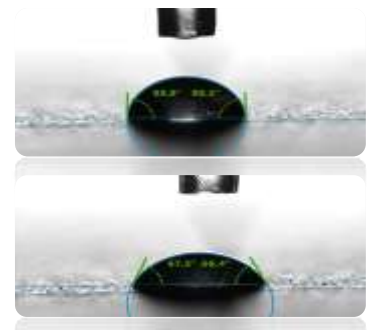


Micro and Nano Heat Transfer Laboratory

Micro and Nano fabrication techniques have revolutionized the cooling industries as the micro and nano structures enhances boiling heat transfer of cooling devices in many folds. Also micro structures used as a wick structures which are critical for the smooth operation of passive heat transfer devices such as heat pipes and thermosyphons. Development of such micro and nanostructure with good capillarity lead to the possibilities of miniaturization by improving the performance. The Micro and nano heat transfer Lab of the Department of Mechanical Engineering is a flat form to develop such micro and nano structures, characterize and test the same by applying in to the cooling devices such as heat pipes. This laboratory consists modern facilities to test various kinds of heat pipes, Anodizing, Electro plating and many others. Highly accurate measurement devices such as Drop Shape Analyzer (Surface Energy Measurement), SITA dyno Tester (Surface tension Measurements), HP Agilent data loggers and DC supply from Key sight technologies are available which are actively used by the research students.



Contact angle measurements

Currently two research scholars, two masters and eight under graduates are working in this laboratory. One DST sponsored research project and various consultancy projects are ongoing and through these activities more than 50 referred research papers are published.