Flow Visualization of Acoustic Levitation Experiment

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Jet Propulsion Laboratory is currently involved in acoustic levitation experiment for space application. Holographic interferometry is being used to study the heat transfer rates on a heated rod enclosed in a 6-inch cubic chamber. Acoustic waves at levels up to 150 db increased the heating rates to the rod by factors of three to four. High speed real time holographic interferometry was used to measure the boundary layer on the heated rod. Data reduction and digitization of the interferograms are being implemented.
HOLOGRAPHIC INTERFEROMETER