



IPPS Lecture & Seminar No.38

- The 27th IROAST Seminar -

Title: Effect of surface roughness on the hypersonic nose-tip transition control

Lecturer: Prof. Viren Menezes (Indian Institute of Technology Bombay, India
IROAST Visiting Professor, Kumamoto Univ.)

Date & Time: Feb. 15, 2018 (Thu.) 11:00~12:00

Venue: Common Building 3, 5th Floor, 516 (Seminar room)

Abstract: Influence of large surface roughness on nose-tip transition delay was investigated on blunt hypersonic models, in a freestream of Mach 8. The model surface was loaded with sand grits, the height of which was of the order of boundary layer thickness on the surface. The test models results indicated a delay in the nose-tip transition, which was supported by flow visualizations. The research has relevance to ablative thermal protection systems used on hypersonic vehicles.

**Supported by Intentional Research Organization
for Advanced Science and Technology (IROAST)**