Colloquium # 243

Institute for Plasma Research

Title: Current Low-Temperature Plasma Related

Research Activities at Aerothermal & Plasma

Physics Laboratory

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Date: 1st December 2014 (Monday)

Time: 03.30 PM

Venue: Seminar Hall, IPR

Abstract:

In this talk, I will introduce the current research activities of lowtemperature non-equilibrium plasma in our group as well as possible future planning. The talk will be divided into two major parts including modeling and experiments. The former consists of fluid modeling and hybrid fluid-gas modeling for near-continuum gas discharge, particle-incell Monte Carlo simulation (PIC-MC) for highly rarefied gas discharge and direct simulation Monte Carlo (DSMC) method for rarefied gas dynamics. The latter includes design, diagnostics and applications of several atmospheric-pressure plasma jets in industrial and bio-medical disciplines.