各 位

外国人客員准教授特別講演会開催のご案内

下記のとおり外国人客員准教授特別講演会を開催いたしますので、万障繰り合わせの上ご参加下さいますようご案内申し上げます。

記

日 時: 平成21年12月10日(木)13:30~15:00

場 所: 流体科学研究所 会議室 (1号館2階)

題 目: Atmospheric-Pressure Gas Discharge Plasma Source-Research Work in the Plasma Health Science Lab

講師: 清華大学工学物理学部准教授・流体科学研究所客員准教授 李 和平 (Li He-Ping) 氏

+- $\neg \ F$: Atmospheric-pressure gas discharge; Arc plasma; Non-thermal plasma; Characteristics; Application

アブストラクト:

In the past few decades, atmospheric-pressure gas discharge (APGD) plasma sources, such as the dielectric barrier discharge plasma, the radio-frequency (RF) glow discharge, the direct-current (DC) arc discharge thermal plasma, etc, have been developed. Due to the unique features of the APGDs compared to low-pressure gas discharge plasmas (e.g., the lower capital costs, operation flexibility, non-limitations on the sizes of the treated materials, etc), different kinds of APGDs have been or would be employed in a variety of fields, including the plasma-aided etching, deposition, sterilization/disinfection, decontamination of chemical and biological warfare agents, plasma spraying, waste treatment, etc. In this presentation, the recent research work concerning the atmospheric-pressure DC arc thermal plasmas and the RF atmospheric- pressure glow discharge plasmas using bare-metallic electrodes conducted in the Plasma Health Science Lab (PHSL) are presented.

Further studies on the discharge mechanisms, characteristics, and applications of the APGD plasma sources are discussed.

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東北大学流体科学研究所

教授 西山 秀哉

電 話 217-5260

メール nishiyama@ifs. tohoku. ac. jp