

# CAMT Seminar

## “Study of negative ion surface production in cesium-free H<sub>2</sub> and D<sub>2</sub> plasmas”

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Date: 11 October, 2019 (Fri) 14:00-15:00

Location: Main Conference Room (1st floor), Bldg. A12

Center for Atomic and Molecular Technologies (CAMT)

(A12 棟 1 階会議室)

### Abstract:

The objective of this work is to find solutions to produce high yields of H-/D- negative ions (NI) on surfaces in Cs-free H<sub>2</sub>/D<sub>2</sub> plasmas for thermonuclear fusion applications. This work was conducted using a low-pressure high-density radio-frequency plasma source PHISIS. Some of the positive ions attracted by the sample, capture electrons at the surface and produce NI detected by a mass spectrometer according to their energy. The shape of the measured negative-ion energy distribution functions (NIEDF) depends first on the surface production mechanism that will be discussed in the ions and plasma surface interaction.

(Host: Satoshi Hamaguchi Ext:7913)