

CAMT Seminar

“Atmospheric pressure plasma for bio-coating and
fundamental introduction of plasma medicine”

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Date: 5 August, 2022 (Fri) 11:00-12:00

Location: Main Conference Room (1st floor), Bldg. A12
Center for Atomic and Molecular Technologies (CAMT)
(A12 棟 1 階會議室)
& Webex Link (hybrid)

Abstract

This talk includes a basic introduction to the plasma-related medical applications that are currently in use, including argon plasma coagulation (APC), sterilization, and surface modification. My work about plasma polymerized coating for biosensor fabrication will also be reported. The aerosol-assisted dielectric-barrier-discharge atmospheric-pressure plasma deposition (AAAPPD) involves depositing plasma-polymerized ethylene (ppE) with grafted hydroxyl functional groups and embedding the protein in the ppE in one step, making the protein entrapment faster than conventional methods and without using reagents. The immunostaining result of AAAPPD protein was close to that of covalent-bonded protein. This method is a rapid and reagent-free method to entrap proteins on different substrates for biosensor fabrication.

(Host: Satoshi Hamaguchi Ext: 7913)