

Photochemical modification and functionalization of carbon surfaces

Dr. T. Nakamura, AIST, Tsukuba, Japan

Abstract:

Carbon materials such as diamond, carbon nanotubes and related materials have attracted much attention for use in a wide range applications because of their unique electronic, optical and mechanical properties. The surface modification of carbon materials is expected to lead to the improvement of its performance, making it possible to introduce novel functionalities onto the surfaces. The presentation will show a useful method for surface modification and functionalization of carbon materials such as diamond and diamond-like carbon (DLC) and single-walled carbon nanotubes (SWNTs) with organic functionalities by using photochemical processes.