

# Shigeo Tanuma

## Overview of Nanotechnology Platform Japan

*The presentation will provide an overview of the Nanotechnology Platform Japan. Nanotechnology Platform Project started in July, 2012 to create a nationwide advanced user facilities network on nanotechnology as a ten years' project (2012 - 2021) sponsored by MEXT. The platform comprises the platform center coordinating overall activities of the platform and three platforms covering technology fields of advanced characterization, nanofabrication, and molecule & materials synthesis. The implementing institutions of the project are 25 institutes and 37 laboratories throughout Japan.*

*The objectives of the project are construct a system for shared use of advanced facilities to provide opportunities to all researchers in academia and industry, and to contribute to technological innovations in industries as well as producing academic values.*

*In the field of advanced characterization led by NIMS, where 11 institutions joined, cutting-multi-beam high voltage TEM, positron probe micro analyzer, ultra-high resolution STEM, Spring-8 synchrotron beam line, high magnetic field NMR etc. are provided to users. Sixteen institutions of the nanofabrication field which is led by Kyoto university, supports to prepare nanoelectronics, photonics, and nano/micro machine devices using EB lithography, stepper, RIE, sputter deposition, CVD, FIB, laser processing, and so on. The molecule & materials synthesis group of 10 institutions led by Institute for Molecular Science, covers designing and simulation, synthesis and characterization especially for organic and bio materials.*

*The Nanotechnology Platform Center, which is operated by NIMS, is coordinating and supporting programs of all three technological platforms. Especially, the center is promoting collaboration between platforms and industries. Programs for young researchers by making the platforms accessible to them, students and technical staffs by giving opportunities of training and upskilling.*



**Dr. Shigeo Tanuma** is Managing Director of Center for Nanotechnology Platform, National Institute for Materials Science (NIMS). He received his Ph.D. in Science from Tsukuba University, Japan in 1982. He joined NIMS in 2001 where he was Deputy Group Leader of Material Engineering Laboratory. He became Division Director of Research Network and Facilities. In 2017, he became Managing Director of Center for Nanotechnology Platform. He published more than 150 papers in scientific journals and conference proceedings. His main research is in the area of surface electron spectroscopy, especially for electron inelastic scattering phenomena in solids. He received the

Sakaki Award from the 141<sup>st</sup> Committee, JSPS in 1995. He also received the Surface Science Society Award from Surface Science Society in Japan in 2008 and the NIMS Presidents Prize for Research Achievement from NIMS in 2017.