The 3rd Optical Manipulation Conference（OMC’16）

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The 3rd Optical Manipulation Conference 2016 (OMC'16) aims to present and discuss up-to-date scientific subjects, new technologies, and applications related to the fields of optical manipulations and their surroundings. In particular, it also focuses on nano-optical technologies including nano-manipulation, nano-fabrication, and nano-imaging system by utilizing enhanced optical radiation forces in combination with structured materials.

Conventional optical tweezers based on optical radiation forces (scattering, absorption and gradient forces) produced by a tightly focused laser beam have been mostly adopted to particles with a dimension range from hundreds of nanometers to tens of micrometers. However, they do not always enable us to efficiently trap and manipulate particles on a nanoscale. A key issues for the above related nano-optical technologies will be how to manage structured lights, near-field optics and plasmonic fields, so as to reinforce significantly the optical radiation forces on a nanoscale.

This conference has been organized and sponsored by the Optical Society of Japan since 2014. The OMC’14 and OMC’15 were very successful to collect over 80 attendees. We hope that this conference will also facilitate scientific and professional networking as well as scientific inspiration through discussions.