



Contribution ID: 33

Type: **Poster**

## **Imaging of cellular localization of nanoparticles using STED technology**

Visualization of subcellular levels is always difficult to be achieved by conventional fluorescence microscopy due to the diffraction limit of light. Stimulated Emission Depletion (STED) is a super-resolution microscopy that can improve the spatial resolution to below 70 nm. Herein, we demonstrated cellular localization of nanoparticles in A549, human lung epithelial cell line by using a STED super-resolution microscope. This Imaging technique will be useful for toxicological studies on cell-nanoparticles interaction, as well as pharmacological studies on effects of nano-drug carrier at the target tissues.

**Primary author:** Dr CHETPRAYOON, Paninee (Nano Safety and Risk Assessment Laboratory, National Nanotechnology Center)

**Presenter:** Dr CHETPRAYOON, Paninee (Nano Safety and Risk Assessment Laboratory, National Nanotechnology Center)

**Track Classification:** Nano-safety