

The 269th MANA Special Seminar



Stability and Reversibility Control of Micropillar Assembly by Surface Chemistry: Expanding Application of Intramolecular Interactions at Solid/Liquid Interface Chair: Dr. Yusuke Yamauchi
(MANA Independent Scientist)

Prof. Mariko Matsunaga

*(Department of Electrical, Electronic and Communication Engineering,
Chuo University, Japan)*

Modification of surface chemistry by monolayers has been applied to many applications including our study for the development of a chiral sensor. In the presentation, the content of our paper published in JACS in 2011 will be introduced as a new type of application. For many natural and synthetic self-assembled materials, adaptive behavior is central to their function, yet the design of such systems has mainly focused on the static form rather than the dynamic potential of the final structure. We demonstrate straightforward patterning of microstructured surfaces with clusters that can be erased and regenerated at will by the addition of appropriate solvents. Subtle modifications to surface and solvent chemistry provide a simple way to tune the balance between adhesion and elasticity in real time, enabling structures to be designed for dynamic, responsive behavior.

Venue: Seminar Room #431, 4F, MANA Bldg.

Date: June 12th, Tuesday Time: 15:30-16:15

Contact: International Center for Materials Nanoarchitectonics (MANA), Nakata (ex. 8806)

**Namiki
site**