



## Prof. Volodymyr I. Chegel

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Molecular plasmonics — current state and future trends
Chair: Dr. Katsuhiko Ariga (MANA PI)

The interactions between molecules in the vicinity of plasmonic (Au, Ag etc.) materials (i.e. molecular plasmonics) represents an interdisciplinary research field based on photonics, chemistry and biology. Rapidly growing interest in molecular plasmonics lies in its potential applications for highly miniaturized and sensitive photonic devices by controlling, manipulating, and amplifying light on the nanoscale materials / bionanostructures. Furthermore, our rapidly improving understanding of the interactions between adsorbed molecules and plasmonic nanostructures is having a significant impact on a broad spectrum of other applications, including bio- and chemical sensing, materials study, metamaterials, tunability of plasmon resonance, surface enhanced spectroscopies (SEIRA, SPLS, SERS). The current state and future trends of molecular plasmonics will be discussed.

Venue: Seminar Room #431, MANA Bldg.

Date: September 10<sup>th</sup> (Fri) Time: 15:30-16:15

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