

Research Information



PI Name : Takashi MORII

Position : Professor

E-mail : t-morii@iae.kyoto-u.ac.jp

Staff: Associate Prof. Eiji NAKATA

Assistant Prof. Shun NAKANO

Junior Associate Prof. Arivazhagan RAJENDRAN

Research Field

The research interests in our group focus on the design and assembly of biomacromolecules for energy conversion and signal transduction in water, the solvent of life. We take organic chemical, biochemical and biophysical approaches to understand the biological molecular recognition and chemical reactions through researches on the spatially organized enzymes, RNA-protein complexes (RNP), protein assemblies and biosensors.

Research Facility



Hi-Speed AFM

(left) Hi-Speed AFM: observe enzymes and nucleic acids assembly

Other instruments for biophysical analyses including conventional AFM, Circular Dichroism Spectrometer, micro ITC calorimetry, Differential Scanning Calorimetry, MALDI-TOF-Massspectrometer, Fluorescence microscope, FPLC, HPLC, various types of microplate readers, and essential biochemical equipments.

Research Activities

- 1) On-going research (educational activities): Exploring chemistry of enzymes assembly on DNA nanostructures, RNP enzymes, and in vivo biosensors.
- 2) International collaboration: POSTECH, Ewha Womens University, Wayne State University, Seoul National University, Vanderbilt University School of Medicine, Milano University
- 3) Other appeal point: International atmosphere with students from Mongolia, Vietnam, China (present members)

Comments

Foreign student applicants to MS and PhD course are welcome. Please visit:
<http://www.iae.kyoto-u.ac.jp/material/index-En.html>