

Potential Applications of Self-assembled π-Systems

MA Special Semina

Chair: Dr. Katsuhiko Ariga, MANA Principal Investigator



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Self-assembly of functional molecules such as linear π -systems is important in the field of advanced materials for optoelectronic applications. During self-assembly the electronic interaction within the molecules induces significant changes in the properties such as absorption, fluorescence and electronic conductivity. Oligo(p-phenylenevinylene)s (OPVs) are a class of fluorescent linear π -systems that are being used for a variety of applications. For the past several years we have been investigating the self-assembly of OPVs, which form a variety of supramolecular structures leading to gelation of organic solvents. Through functional group modification and control of supramolecular interaction, we were able to tune the emission of a variety of molecular self-assemblies leading to organogels that emit at different wavelengths. These soft materials are excellent scaffolds as energy donors. Results of these studies will be presented.

NAMIKI Site Venue: 4F, Seminar room #431, MANA Bldg., Date: August 26th (Fri) Time: 15:30-16:15

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