

The 832nd

MANA Seminar



Helical Molecular Structure for the Luminescence of Rare Earths



Speaker

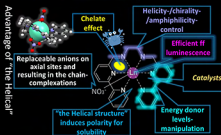
**Prof.
Miki HASEGAWA**

Department of Chemistry and Biological Science,
College of Science and Engineering,
Aoyama Gakuin University, Japan

Wednesday, July 8th 15:00 – 16:00

Auditorium

WPI-MANA Bldg., Namiki-site



Rare earth (RE) luminescence, though derived from 4f electrons, is strongly influenced by organic ligands. This work shows that designing organic chromophores enables precise tuning of emission in helical complexes. Hexadentate bipyridine ligands provide stable, highly emissive structures.

Ligand modifications allow predictable control of color, intensity, and responsiveness while preserving excitation properties. Structural variations are systematically governed by ligand design and lanthanide contraction, highlighting molecular design as a powerful strategy for tailoring RE luminescence.

Chair: Dr. Takashi Nakanishi (MANA Group Leader)
Inquiry: mana-seminar@ml.nims.go.jp

