The discovery and elucidation of new electronic structures are important not only for pioneering frontier science but also for developing new functions. Since metal complexes have various electronic structures, coordination chemistry is promising for designing electronic properties. We aim to create novel functions of organic-inorganic hybrid compounds in terms of coordination chemistry, photochemistry, and spin chemistry.

**Chemistry of Photofunctional Molecules**

**Chemistry of Biofunctional Molecules**

**Mechanical Control of Chirality**

**Preparation of Chiral-Aggregates Using a Rotary evaporator**

**Molecular Magneto-Optical Materials**

**Electron absorption spectrum**

**PDT of Deeper Tumor Tissues**

**Spectroscopic Observations of Cytochrome c in Bacteria**

**Fluorescence Bioimaging of Vitamin C in a Mouse**

**Spectroscopic Molecular Detections in Bacteria**

**Photosynthesis (Chlorophyll)**

**Optical Memory**

**Photosynthesis (Chlorophyll)**

**Carbon Dioxide**

**Solar Energy Conversion**

**Organic Photoconductor (Photocopier)**

**Chemistry of Biofunctional Molecules**

**Homochirality of Life : A Magnetic Answer**

**Photocontrol of Radical Spins**

**Photocontrol of Magnetic Properties**

**Fluorescence Probes**

**Porphyrin**

**Phthalocyanine**

**Singlet**

**Triplet**

**Vitamin C injection**

**60 min after Vitamin C injection**

**Vitamin C injection**

**60 min after Vitamin C injection**