

Science Frontier Seminar (Chemistry Seminar 4)

Prof. Masaki Horie

National Tsing Hua University

Title : Photo- and Thermally-Responsive
Crystalline Molecular Machines

Time & Date : 16:00, January 15, 2025

Venue : G101 Science Hall



Abstract: Stimulus-responsive molecular machines have recently attracted significant interest. This seminar presents functional inclusion complexes comprising ferrocene and azobenzene, their molecular motions observed by X-ray crystallography, and photoresponsive soft-polymer actuators. Chromophore-doped films demonstrate photoinduced bending, reversible electrical circuit switching, and recovery from mechanical damage. These materials could lead to new types of optical, switching, and mechanical devices.



School of Science /
Graduate School of Science

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Science Frontier Lecture (Chemistry Lecture 4)

Prof. Masaki Horie National Tsing Hua University

Title : Conjugated Molecules and
Molecular Machines for use
in Organic Electronics

Time & Date : 13:15 -14:45,
January 16 and 17, 2025



Venue : G310 Meeting Room

Lecture Contents: Great attention has been paid to conjugated molecules due to their rigid structures and optical and electronic properties, thus leading to the development of organic electronic devices. This course covers the fundamental and applied aspects of organic electronic materials and devices, including our recent studies.



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