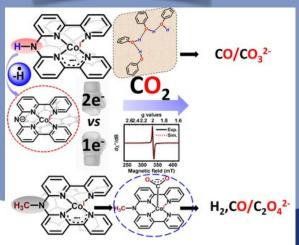
## 第91回有機元素化学セミナー / The 91st Organoelement Seminar Series

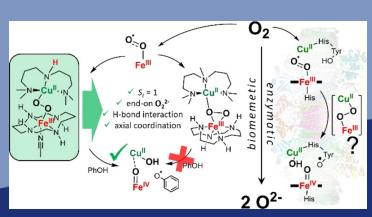


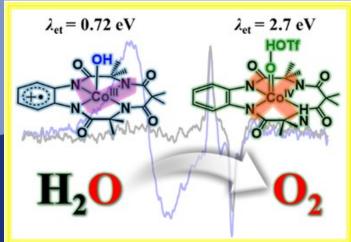
## Prof. Kallol Ray Humboldt-Universität zu Berlin, Germany

website URL: https://www.chemie.hu-berlin.de/en/forschung-en/ray/ray-en

"SMALL MOLECULE ACTIVATION AT TRANSITION METAL CENTERS:
STRUCTURE-FUNCTION CORRELATIONS"







We are delighted to welcome Professor Kallol Ray, who will deliver a lecture on recent advances in the homogeneous, bioinspired activation of small molecules. Their research focuses on elucidating the structure–reactivity relationships of biomimetic model complexes through a combination of organometallic chemistry, spectroscopy, synthesis, and mechanistic studies involving reactive intermediates. These efforts aim to uncover key principles for the rational design of efficient catalysts capable of selective C–H bond functionalization and the activation or reduction of small molecules such as O<sub>2</sub>, H<sub>2</sub>O<sub>3</sub>, CO<sub>3</sub>, and H<sup>+</sup>, using earth-abundant first-row transition metals under mild conditions.

17:00-18:00, Nov 12th (Wed), 2025@Room M-123 (Main Building, Oookayama Campus, Science Tokyo) Host: Yuma Morimoto (Sch. of Sci.) (yuma.morimoto@chem.sci.isct.ac.jp)