

演 題 : **Photoinduced Organometallic Catalysis**

講 師 : **Professor Louis Fensterbank**
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日 時 : 2026 年 11 月 2 日 (月) 16:30~18:00

場 所 : 工学部フロンティア応用科学研究棟 2 階 セミナー室

共 催 : Institute for Chemical Reaction Design and Discovery (WPI-ICReDD)

要 旨 :

Over the last decade, we have been involved in the development of more sustainable radical chemistry and have explored diverse methodologies including plasma and mechano chemistry. We have also introduced silicates as versatile sources of alkyl radicals upon photocatalysis. Using metallic or organic photocatalysts, alkyl radicals, including non stabilized ones, can be engaged in intermolecular reactions. This process can be merged with Ni-catalyzed C-C cross-coupling reactions.

In parallel, and following our interest in gold catalysis, our recent efforts in photoredox/gold dual catalysis will also be presented. We have notably evidenced the first examples of photosensitized oxidation additive to an organogold(I) complex leading to C-C cross-couplings. This lecture will also unveil the crucial use of organosilicon derivatives as another thread running through our research in different contexts.

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