

Einladung zum Kolloquium

Am Mittwoch, den 15. Oktober 2014, 17:00 Uhr, spricht

Herr Professor Dr. Munetaka AKITA

Chemical Resources Laboratory, Tokyo Institute of Technology, Japan

zum Thema:

Photoredox Catalysis: Inorganic-based Organic Synthesis Promoted by Visible Light

The sun provides huge and inexhaustible energy and has been regarded as a source of clean energy. While much effort has been devoted to development of transformations of small inorganic molecules (e.g. water splitting and CO₂ reduction) promoted by visible light (sunlight), little attention has been paid to application to organic transformations.

During the last decade several research groups including us have developed organic "photoredox catalysis" using the photo-harnessing [Ru(bipy)₃]²⁺ and related Ir species (denoted as **M**).

Visible light irradiation of **M** generates the excited species **M**^{*} with two SOMOs, which can promote oxidation and reduction of external substrates via SET processes in one catalytic cycle (reductive and oxidative quenching cycles) with no need of addition of any sacrificial reagent (redox-neutral) to generate two types of organic radical species, **D**[•] and **A**[•], regarded as versatile synthetic intermediates.

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Ort: Fakultät für Chemie und Mineralogie, Johannisallee 29, kl. HS 015, 04103 Leipzig

Alle Interessenten sind zu diesem Vortrag herzlich eingeladen.

Prof. Dr. B. Kersting
GDCh-Ortsverband

Prof. Dr. D. Belder
Dekan

Die Professoren des Institutes
für Anorganische Chemie

Nähere Informationen bei Frau Professor Dr. Dr. h.c. E. Hey-Hawkins, Tel.: 36151

