

国立大学法人 九州工業大学

応用化学ミニシンポジウム

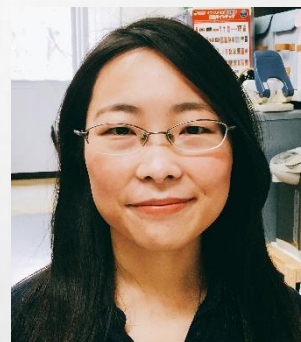
日時：2018年5月31日(木)
13:00-14:00

場所：九州工業大学戸畑キャンパス
教育研究8号棟8-1A講義室

CHEMICAL BIOLOGY APPROACHES FOR INVESTIGATING AND REGULATING GENOME DYNAMIC

特任助教 TINGTING ZOU

Genome contains all the genetic information of an organism, the regulation of genome dynamic has been widely explored in gene expression control and cell reprogramming. This research mainly focused on investigating the accessibility and reactivity of nucleosome (basic repeating unit of genome) for chemicals and proteins, then innovative chemicals (PIP conjugators, PIP-SAHA-L and PIP-CTB-L) were developed as artificial genetic switches to affect nucleosome dynamic, regulate the nervous development gene network of HDF cell, and improve iPSCs specifically differentiating into neuron progenitor.



DESIGN OF Bi_2MoO_6 -BASED NANOSTRUCTURES WITH EFFICIENT PHOTOCATALYTIC ACTIVITY

特任助教 YING MA

In our work, based on the controlled designing the multi-dimensional Bi_2MoO_6 -based nanostructures, the photocatalytic properties have been optimized and the relationship between the structures and activities has been investigated. More specifically, nanosheet-based Bi_2MoO_6 hierarchical architectures, porous $\text{Bi}/\text{Bi}_2\text{MoO}_6$ hybrid nanoparticles and ultrathin- C_3N_4 modified Bi_2MoO_6 nanosheet array have been rational fabricated, realizing the improvement of the corresponding photocatalytic activity for degradation of Rhodamine B and water splitting under visible-light irradiation.

