

**DEPARTMENT OF MECHANICAL ENGINEERING****SEMINAR****Online**

Title: Rational design on spatial separation of charge carriers in heterojunction photocatalyst for effective hydrogen evolution

Speaker: Miss Xia Mingyu (PhD candidate)
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Date: 28 April, 2022 (Thursday)

Time: 4:00 p.m. (Hong Kong Time)

Zoom meeting: 1) Link to join the meeting:

<https://hku.zoom.us/j/97910360635?pwd=Qk1Vd0k4T3o0aE9GN1dCcm5adDZvUT09>

2) Meeting ID: 979 1036 0635

3) Password: 159356

Abstract:

Rational design of photocatalyst systems to enable spatially separated reaction sites have been extensively studied in photocatalytic hydrogen production. This approach of improving the photocatalytic activity can be applied to photocatalysts with different dimensions and architectures. The spatial separation of photoinduced electrons and holes, as well as the rapid migration of electrons from the bulk to the reaction surface result in suppressed charge recombination, prolonged the lifetime of photogenerated charges and block backward reaction. The basic concepts of photocatalytic hydrogen production with heterojunction systems are discussed and different rational designs of photocatalysts using spatial separation strategy are summarized.

ALL INTERESTED ARE WELCOME

For further information, please contact Prof. D.Y.C. Leung at 3917 7911.

Research area: Energy