



## Colloquium

Department of Engineering  
and System Science,  
Institute of Nuclear Engineering  
and Science,  
National Tsing Hua University

Computational design of  
organic materials in  
optoelectronic applications

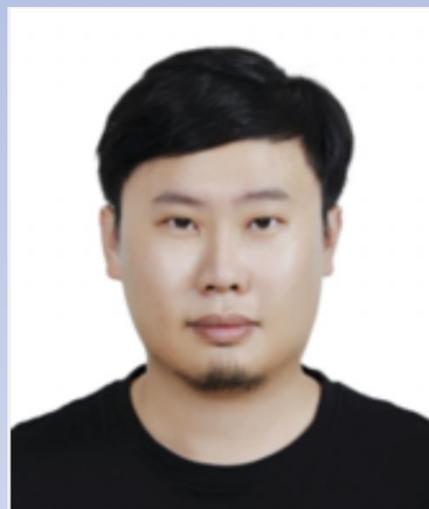
清大化工系 林昆翰助理教授  
**Prof. Kun-Han Lin**

**In this talk, the following content will be presented:**

In this context, computational modeling allows us to truly exploit the power of organic synthesis by providing us (i) low-cost and reliable prediction of target properties and (ii) better understanding of the structure-packing-property relationship (SPPR). In this talk, I will present how computations can help in accelerating the discovery pace of organic materials in three applications: (i) hole transport materials in perovskite solar cells, (ii) thermally activated delayed fluorescence (TADF) emitters for single-layer OLEDs, and (iii) non-fullerene acceptors for organic photovoltaics.

**15:30-17:20, Wednesday, Dec. 14<sup>th</sup>, 2022**  
**NE69 ESS Building, NTHU**  
**101, Sec.2, Kuang-Fu Rd., Hsinchu**  
**300044, Taiwan**

## Biography:



### Current Position

- Assistant Professor, Department of Chemical Engineering, NTHU

### Education

- Ph.D. in Chemistry and Chemical Engineering, EPFL, Lausanne, Switzerland
- M.Sc. in Materials Science and Engineering, NTU
- B.Sc. in Materials Science and Engineering, NTU

### Academic Employment

- Assistant Professor, NTHU
- Postdoctoral researcher in theory group, Max Planck Institute for Polymer Research

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