

THE EDUCATION UNIVERSITY OF HONG KONG  
FACULTY OF LIBERAL ARTS AND SOCIAL SCIENCES

**Research Output/Impact/Knowledge Transfer Prize**  
**for the Dean's Research Fund 2018-19**

**Brief Introduction of Awardee's**  
**Research/KT Publication/Study/Output and Future Research/KT Development**

**Awardee (Dept):** Dr. Leung Chi Fai, Assistant Professor (SES)  
**Publication Title/KT project:** Molecular functional materials for energy and electronic application

A. *Briefly introduce your research/KT publication/study/output for which you have received the prize.*

**The project concerns the design and applications of functional molecular materials with novel magnetic, luminescence and photocatalytic properties. These materials are useful in the areas of molecular electronics (display and computing) and solar energy conversion (production of fuels and other valuable compounds).**

B. *How you used/will use your prize and perhaps its usefulness to your research/KT development?*

**The prize will be important in extending my current studies on the above materials and will lead to further publications and funding opportunities such as GRF and ITF.**

C. *Expected research/KT outcomes/outputs/impacts arising from this prize.*

**Two journal publications are expected with the following titles:**  
**1) Photocatalytic reduction of CO<sub>2</sub> with a carbocation photosensitizer and 3d transition-metal catalysts.**  
**2) Greenish-yellow emitting binuclear ruthenium isocyano complexes.**