

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 2019/20

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

Awardee (Dept): Dr Tsang Yiu Fai, Associate Professor (SES)
Publication Title/KT project: Fabrication of carbon-slag composite via a pyrolytic platform and its environmental application for arsenic removal as a case study

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

For the valorization of biomass and steel slag, co-pyrolysis of rice straw and steel slag was carried out as a case study. CO₂ was employed as reactive medium to achieve the more sustainable pyrolytic platform. This study laid great emphasis on chasing the mechanistic roles of CO₂ in the thermolysis of the mixture at the fundamental level.

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

The prize will be used to support the necessary technical services to conduct follow-up experiments about this topic.

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

I expect that a GRF proposal will be developed for submission.