

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 Lam Chung Wah James, Assistant Professor (SES)
Publication Title/KT project: Occurrence and fate of chiral pharmaceuticals in sewage
treatment systems

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

In this study, we analyzed 4 important chiral pharmaceuticals from 3 therapeutic classes covering 10 different stereoisomers at 4 sewage treatment plants during a 2-year sampling campaign. We believe that this study has made a contribution to the field of environmental pollution and health and also attracted wide scientific interest because this first report on the enantiomeric determination of multiclass chiral pharmaceuticals in Chinese wastewater and the enantiomer-specific occurrence of environmental contaminants in chemically enhanced primary treatment plants have emphasized the importance of examining in depth the possible effects of different chiral pharmaceuticals for aquatic environment risk evaluation. These results have been published in "Water Research" which is a peer-reviewed scientific and is one of the world-leading environmental science journals. We believe that our study has made a contribution to the field of water pollution and health and also attracted wide scientific interest because this first report on the enantiomeric determination of multiclass chiral pharmaceuticals in wastewater systems from China and the occurrence of specific enantiomers of selected pharmaceuticals in chemically enhanced primary treatment plants have emphasized the importance of examining in depth the possible effects of different chiral pharmaceuticals for aquatic environment risk evaluation.

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

The funding will be used for further investigation of other environmental contaminants in the aquatic environment to understand and unravel the pertinent environmental health issues.

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

New finding on emerging contaminants in the aquatic environment and corresponding publication will be arising from the funding support.