



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY
Division of Life Science

LIFS Seminar Series

Relevance of polyunsaturated fatty acids and oxylipins generated in biochemical science

by

Dr. Jetty Chung-Yung LEE

The University of Hong Kong
School Biological Sciences

Abstract

Lipid peroxidation of polyunsaturated fatty acids (PUFA) occurs *ex vivo* and *in vivo*. It can be mediated by free radicals or by enzymes to produce metabolites, which can be robust biomarker of oxidative stress and prognostic compounds of chronic diseases. Previously it is known that oxidized metabolites from non-enzymatic free radical reaction of omega-6 PUFA, arachidonic acid such as 15-F_{2t}-isoprostanes is the best biomarker in determining oxidative stress status in all living systems. However, recently it is shown that other metabolites such as isoprostanoid and isofuranoid of omega-6 and omega-3 PUFAs have vital roles in the biological systems - these may be toxic or bioactive. To assess these metabolites, novel compounds synthesized by organic chemists and sensitive analytical approach using targeted lipidomics are required for evaluation. In this seminar, the method of measurement and relevance of these metabolites in human and other novel biological systems will be presented.

Date : 9 March 2018 (Friday)

Time : 4:00 pm

**Venue: Padma & Hari Harilela Lecture Theatre (LT-C)
HKUST, Clear Water Bay, Kowloon**

(Host faculty: Dr. Ho Yi MAK)

All are Welcome!