Prof. Michael KC Tam
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Michael Tam obtained his B.Eng. and Ph.D. degrees in Chemical Engineering from Monash University, Australia in 1982 and 1991 respectively. He spent 18 months on a postdoctoral fellowship at the Department of Chemical Engineering, McMaster University Canada, and subsequently taught at Nanyang Technological University, Singapore for 15 years. In June 2007 he joined the Department of Chemical Engineering, University of Waterloo as a tenured full professor, and holds the position of University Research Chair in the field of functional colloids and sustainable nanomaterials. He is an active member of the Waterloo Institute for Nanotechnology. His research interests are in colloids, self-assembly systems, polymer-surfactant interactions, and drug delivery systems. He has published more than 400 journal articles in various fields of polymer science and engineering. His total citation exceeds 26,463 and his H-index is 79. He is also an associate editor of ACS Sustainable Chemistry & Engineering.

Seminar 1: How to Write a Research Journal Article: Tips and General Advice

Date : 13 February, 2023
Time : 2 to 4pm
Venue : BT306, G08, School of Biological Sciences, USM

Seminar 2: Innovation in Sustainable Nanomaterials for Advanced Engineering Applications

Date : 14 February, 2023
Time : 9am to 12pm
Venue : Room 107, G08, School of Biological Sciences, USM

University of Waterloo
Chemical Engineering
Faculty of Engineering

Seminar 1: How to Write a Research Journal Article: Tips and General Advice

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ABSTRACT

Writing and publishing research papers to disseminate new results and findings is an important task for researchers and professors. In today's era of university ranking, citation and impact factor of journals are becoming more relevant as our performance in the university is judged by these indicators. Hence, there is enormous pressure on young faculty to submit their research papers to journals with high impact factor, and this is when these enthusiastic faculty encounter road blocks and obstacles.

In this talk, I will discuss some of the pertinent issues on writing and publishing research papers. Topics such as: (a) why it is important to publish in high impact factor journals? (b) deciding on which journal to publish; (c) peer review process; (d) major reasons for rejection of papers; (e) general plans in preparing a research paper and many more related topics. I will share my experience from both end of the spectrum: as an author, reviewer and associate editor of an ACS journal.

It is my hope that my talk will promote discussion that will help all of us to be more successful in publishing our good work in the right journals, and with impact factor that is correlated to the quality of our research output.

Seminar 2: Innovation in Sustainable Nanomaterials for Advanced Engineering Applications

ABSTRACT

Nanotechnology is anticipated to be the next technological wave that will drive many of the innovations in science and engineering. In this discipline, there is a renewed impetus to develop nanomaterials from renewable sources due to the negative impact of using raw materials from traditional carbon sources, such as crude oil. New opportunities in the use of sustainable and renewable materials for various advanced engineering applications exist, and cellulose nanocrystals (CNC) offer a new route to product development and formulations in many industrial sectors. Various functionalization strategies on the surface of CNC, such as with amphiphilic polymers, inorganic and metallic nanoparticles are being developed and exploited. The talk will focus on the strategies of CNC functionalization in imparting attractive properties critical for their applications. I will illustrate several innovations derived from the transformation of sustainable nanomaterials into platforms that address some of the market requirements and challenges. Some examples of the applications include wastewater treatment, anti-microbial system, conductive inks & fillers, agriculture, and water harvesting.

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