

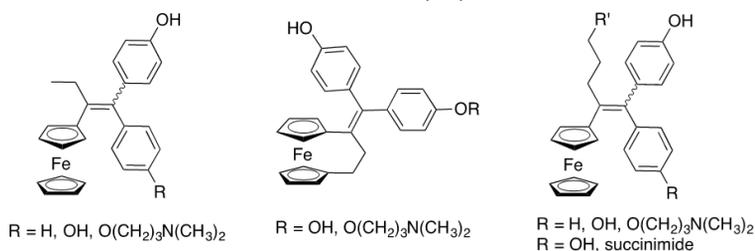
CBC SEMINAR ANNOUNCEMENT



Organometallic anticancer drugs: example of the ferrocifen family

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Owing to the poor outcomes seen in several types of cancers (e.g. epithelial ovarian cancer, EOC) the search for new active principles outside the established avenues is a burning current concern. In our search for innovative organometallics species able to overcome drug resistance to proapoptotic stimuli we have discovered that the remarkable ferrocifen family bearing a redox motif [ferrocenyl-ene-phenol] selectively activated on cancer cells, and therefore revealing their redox environment. Biologically these species can operate via mechanisms related to both apoptosis and senescence depending on several parameters. This multitargeting property can inhibit resistance. Among the usable organometallic complexes, iron derivatives occupy a privileged position associated with the particular nature of ferrocene, which is a non-toxic, compact and stable aromatic metallocene with redox properties and a bioisostere of benzene.



It is important to elucidate the chemical behavior of the key metabolites generated oxidatively from the metallocifens in relation to their antiproliferative effects. This study produced multiple surprises and will be discussed in depth. Interestingly metallocifen mechanisms depend on several parameters such as the nature of the metal, the shape of the carbon skeleton and the kind of substituents. All these effects will be shown and related to antiproliferative behaviors.

Gérard Jaouen graduated from the University of Rennes (France) in 1973. He spent the year 1973-1974 at Cambridge working with the Professor Lord (Jack) Lewis. He was appointed Director of Research in 1976 and became Professor of the University of Paris (ENSCP) in 1982, where in 1984 he set up a CNRS Associated Laboratory. In 1979 Dr. Jaouen decided to focus on bioorganometallic chemistry. This initially embryonic field has now flourished and entered into the undergraduate curriculum through its incorporation into recent textbooks. Professor Jaouen is the editor of 3 books, the author of 440 papers including 19 chapters and reviews, and has filed 16 patents. His achievements in bioorganometallic chemistry have been recognized by several international awards such as the von Humboldt Gay-Lussac Prize, the RSC Centenary Medal, the AIC Pioneer Award (USA), the Bioorganometallic Award, and several named lectures. He is a knight of the "Légion d'Honneur" (2006), was elected as a fellow of the European Academy of Sciences, and a member of the Academia Europaea (2012). He set up at PSL a start-up company named Feroscan in 2014.

Date: 25th January 2017 (Wednesday)
Time: 1:30 pm – 3:00 pm
Venue: SPMS Research & Graduate
Studies Office Conference Room
Host: Assoc Professor Leong Weng Kee