



Univerzita Karlova v Praze, Přírodovědecká fakulta

Chemistry Section, Faculty of Science, Charles University in Prague
invites for a lecture from a lecture series

Quo Vadis Chemie

Combining inorganic and organic anticancer drugs for optimum activity



which will be delivered by

Profesor Paul J. Dyson

from École Polytechnique Fédérale de Lausanne

on November 11, 2013 at 14:00

in lecture hall CH2 at the Chemistry building of the Faculty of Science, Charles University in Prague, Hlavova 8, Praha 2

Abstract: The presentation will focus on our research on organometallic compounds that exhibit selective anticancer activity against highly invasive tumours, and potentially overcome certain limitations of present metal-based and organic anticancer drugs. In particular, drug resistance is a major problem and is known to be the consequence of a multitude of factors such as reduced drug uptake, increased efflux and drug inactivation by intracellular thiol-containing biomolecules. We show that inorganic-organic hybrid systems are able to overcome certain types of drug resistance mechanisms and therefore act in a targeted fashion. The study of these compounds in combination with clinically approved compounds is also described. The characterization and activity of these complexes and drug combinations will be discussed and their mechanism of action highlighted.

