PhD Studentship

Professor Peter J Sadler FRS (Warwick) and Dr Paul Quinn (Diamond)

Warwick Collaborative Postgraduate Research Scholarship (WCPRS)
Collaboration between the University of Warwick and Diamond Light Source Ltd

**PhD project:** Organometallic anticancer complexes

**Supervisors:** Professor Peter J Sadler FRS (Warwick) and Dr Paul Quinn (Diamond)

**Start Date:** Available from Jan 2017; Duration: 3.25 years

**Deadline:** 17th January 2017

**Project description:** The project involves studies of the molecular mechanism of action of novel organometallic anticancer complexes.

The Sadler group at Warwick has discovered promising anticancer activity amongst precious-metal half-sandwich organometallic complexes. Some complexes are candidates for pre-clinical development. They synthesise and characterise complexes, study their chemistry and biochemistry, and investigate their cellular mechanisms of action, including the identification of specific target sites.

A key aspect of this project will be the opportunity to use state-of-the-art high resolution nanoscale imaging, spectroscopy and tomography. The student will spend 50% of their time based at the new hard x-ray nanoprobe beamline I14 at Diamond Light Source ([http://www.diamond.ac.uk](http://www.diamond.ac.uk)) exploiting this beamline and others to study interactions of these organometallic complexes within cells. All appropriate training will be provided both at the University of Warwick and at Diamond.

**Eligibility:** Applicants should hold a minimum of a UK Honours Degree at 2:1 level or equivalent in a relevant subject. Due to restrictions on the funding, this studentship is open to UK/EU students only.

**Funding:** The studentship provides UK/EU tuition fees and a stipend at the standard research council level as well as funds for consumables.
Applications: should be made as soon as possible using the online application system of the University of Warwick (PhD in Chemistry course code: P-F1P0):  
http://www2.warwick.ac.uk/fac/sci/chemistry/gstudy/application/

Closing Date: 15 January 2017. For further information please contact Professor Peter Sadler: P.J.Sadler@warwick.ac.uk or Dr Paul Quinn: paul.quinn@diamond.ac.uk

References
Designing organometallic compounds for catalysis and therapy
A.L. Noffke, A. Habtemariam, A.M. Pizarro, P.J. Sadler

Exploration of the medical periodic table: towards new targets
N.P.E. Barry, P.J. Sadler

Organoiridium Complexes: Anticancer Agents and Catalysts
Z. Liu, P.J. Sadler

Transfer hydrogenation catalysis in cells as a new approach to anticancer drug design
J.J. Soldevila-Barreda, I. Romero-Canelón, A. Habtemariam, P.J. Sadler