



The University of Sydney

Postdoctoral Research Associate in Biomimetics
School of Physics
Reference No. 581/1009

The School of Physics within the Faculty of science is one of the oldest and most prestigious research schools in [Australia](#). Located on the University of Sydney's Camperdown campus, in the heart of one of the world's most liveable cities, the School hosts world-class facilities and is renowned for excellence in the areas of teaching and research.

Applications are invited for a Postdoctoral Research Associate to join a newly launched multidisciplinary collaborative project across the Schools of Physics and Biology. Working in the School of Physics, the appointee will work with researchers from both Schools on developing novel bio-optical sensors using periodic structures found in nature, so-called diatoms.

This appointment presents a unique opportunity to contribute to cutting-edge multidisciplinary research that will explore a new form of optical technology engineered by nature. The outcomes will add significantly to biological and optical knowledge but will also have potential commercial applications to anticounterfeiting devices, active components of iridescent paints/inks, bio-optical sensors, and "artificial chloroplasts".

This is an opportunity to become a member of CUDOS, the Centre for Ultrahigh-bandwidth Devices for Optical Systems that undertakes world-class fundamental research in photonic sciences. For more information about the Centre please visit: www.physics.usyd.edu.au/cudos You will be working along with Dr. Christian Grillet who has been involved in projects combining integrated microphotronics, nonlinear optics, slow light and microfluidics.

Essential criteria for this position are a doctorate in a relevant discipline, with demonstrated experimental skills in and strong physical understanding of guided wave and free space optics and expertise in electromagnetic modelling. You must be able to demonstrate the capacity to work in a multi-skilled and inter-disciplinary team comprising both theoretical and experimental optical scientists and biologists. You must have excellent oral and written communication skills. Experience with modelling and characterisation of periodic structures such as photonic crystals would be desirable. Ideally you will also have a publication record suitable to an early career researcher.

The position is full-time fixed term for two years, subject to the completion of a satisfactory probation period for new appointees. Membership of a University approved superannuation scheme is a condition of employment for new appointees.

Remuneration package: \$79,854 – 85,717 p.a. (which includes a base salary Level A, leave loading and up to 17% employer's contribution to superannuation).

Level of appointment and responsibility will be commensurate with skills and experience. Some relocation cost support will be provided and visa sponsorship will be available for the successful appointee if required.

For more information and to apply, please use Reference No. 581/1009 and visit the following web link: <http://usyd.edu.au/positions>

Closing date: 19 Nov 2009

The University is an Equal Opportunity employer committed to equity, diversity and social inclusion. Applications from equity target groups and women are encouraged. The University reserves the right not to proceed with any appointment.