

# **POSTDOCTORAL POSITION**

## **UNIVERSITY OF NEW SOUTH WALES, SYDNEY, AUSTRALIA**

**Senior Research Fellow**  
SCHOOL OF PHYSICS

**REF. 6493NET**

The Department of Condensed Matter Physics has an immediate postdoctoral opening at UNSW. This is one of Australia's strongest CMP departments, with outstanding experimental facilities and strong international links. The position is for a senior postdoctoral researcher in experimental condensed matter physics (CMP) to work on the ARC funded projects on quantum electronics using holes in GaAs "Hole nanoelectronics - new concepts for spintronic devices". The appointee will work in a team environment fabricating advanced GaAs devices, developing a high frequency measurement system using existing facilities, and performing detailed low temperature measurements at high frequencies to further the understanding of many-body effects in quantum electronic devices.

**Essential Criteria:**

PhD (or equivalent) in Experimental Physics, Electrical Engineering or Physical Chemistry; Experience of the operation of cryogenic measurement apparatus and knowledge of low noise electrical measurement techniques. Knowledge of equity and diversity principles.

**Desirable Criteria:**

Experience of radio-frequency electronics and/or development of cryogenic instrumentation. Experience of clean-room processing techniques (optical and e-beam lithography). Demonstrated ability to work in a collaborative research environment, especially with international links.

This is a fixed term position for 2 years.

The salary range is A\$75k - A\$88k per year (plus up to 17% employer superannuation plus leave loading), depending on qualifications and experience.

**Application procedure:**

Full details of the application procedure are on the web at <http://www.hr.unsw.edu.au/services/recruitment/jobs/03040906.html>

Two copies of the application should be submitted: one to the Human Resources department, and one to Prof. Alex. Hamilton.

Applicants should arrange for two letters of reference addressing the candidate's qualifications and experience relative to the selection criterion to be sent to Prof. Hamilton: Email: Alex.Hamilton@unsw.edu.au, Fax: (+61 2) 9385 6060

For specific questions related to this appointment please contact Prof Alex Hamilton on telephone (+61 2) 9385 5736 or email: Alex.Hamilton@unsw.edu.au

**Applications close 14 May 2006.**