

Eight (8) positions in The Centre for Satellite Positioning and Navigation (SPAN), RMIT University, Australia

(six research scientists, one project manager and one project coordinator)

Dear Colleagues,

The main purpose of these appointments is to conduct research into an Australian Space Research Program (ASRP) project, awarded to a research consortium consisting of research groups at RMIT University (leading), Curtin University of Technology (CUT), Australian Bureau of Meteorology, the University of New South Wales (UNSW), Electro Optic Systems Space System Pty Ltd. (EOSSS), GPSat Systems Australia Pty Ltd. (GSA), the National Central University (NCU) Taiwan and NOAA's World Data Centre for Meteorology (WDCM) from the Department of Innovation, Industry, Science and Research (DIISR) of Australian Government. Boasted over \$7.5m in size, the title of the project is "Platform Technologies for Space, Atmosphere and Climate".

The ASRP project involves developing advanced platform technologies for space-related research, including in-space tracking and navigation, precise positioning, space weather, atmospheric modelling and climate monitoring. New algorithms will be developed in the context of new generation navigation and geo-environmental satellite programs to enhance Australia's capability in space research.

The primary aim of the project is to investigate innovative approaches covering a suite of advanced software and system platforms that incorporate space-borne, air-borne and ground-based technologies for the purposes of satellite positioning and navigation, real-time in-space tracking and navigation, precise orbit determination, debris surveillance, space weather and atmospheric modelling and climate monitoring. New space-borne and ground-based satellite positioning and remote sensing techniques, atmospheric sounding technology and their fusion to overcome the constraints of sparse atmospheric sensor distribution for weather forecasting, severe weather and climate monitoring, particularly in the southern hemisphere, will be studied.

Seven new positions are available for this project. The appointees are expected to contribute to the research activities of the research consortium in the specialist areas of GPS/GNSS, geodesy/surveying, data assimilation/numerical weather prediction modelling, precise orbit determination, debris tracking and surveillance, modelling space weather and forecasting space weather events, GNSS meteorology and atmosphere science. The successful applicants are expected to lead, undertake and participate in day-to-day operation of the research work, including management of the research projects (ASRP and other projects assigned), documentation and reporting, software and algorithm developments, and carrying out field experiments when appropriate. Excellent communication skills including inter-personal and English language (both in written and oral forms) are required. In addition, the successful applicants are also expected to

- Contribute to supporting an emerging, high-quality and productivity-driven research network in satellite positioning and geodesy, space tracking and in-space service, space weather and atmosphere, satellite remote sensing and climate with both national and global partners;
- Produce high quality and high impact research outputs;
- Carry out specific research projects and to assist in developing new projects in GNSS, GNSS climatology and geodesy, and ubiquitous positioning to meet stakeholder expectations, timelines and budget; and
- Have demonstrated high-level computer programming and GNSS data processing skills.

Areas of expertise sought for these positions (PDF-postdoctoral research fellow)

Position 1 (Lecturer): (Job ref: 54822)	GNSS and Surveying (GNSS positioning algorithms, ambiguity resolution / NRTK / PPP, geodesy, atmospheric modeling)	this is a permanent position
Position 2 (PDF): (job Ref: 544817)	Applied Mathematics (spatial analysis, modelling of debris environment, optimisation) (in conjunction with EOSSS)	Australian citizenship is required
Position 3 (PDF): (Job ref: 544820)	Space tracking, real-time POD, atmospheric density modelling, PPP and satellite laser ranging SLR	in conjunction with EOSSS
Position 4 (PDF): (Job ref: 544821)	GNSS atmospheric remote sensing (radio occultation and its quality control, ray tracing, ionospheric drift/gradient and atmospheric winds)	
Position 5 (PDF): (Job Ref: 544818)	Effects of space weather events (e.g. solar flares, sun spot activity and x-ray bursts etc.) on GNSS positioning and timing, SBAS and atmospheric remote sensing, GNSS radio occultation and interpretation, prediction and validation of space weather effects	in conjunction with GSA
Position 6 (PDF): (Job ref: 544813)	Weather and climate (GNSS meteorology, atmospheric science, multi-sensor satellite remote sensing / data assimilation, NWP)	in conjunction with BoM
Position 7 (PM): (Job ref: 544829)	Project Manager (PM) (support the implementation, coordination and management of the recently awarded ASRP project.)	
Position 8 (PC): (Job ref: 544597)	Project Coordinator (PC) (assist the director, coordinate, promote and manage SPAN activities, identify new opportunities, monitor progress and prepare for reports)	

Remuneration package: commensurate with qualification and experience

- Level B (Aus\$84,000-\$100,000 p.a.) (including 17% employer superannuation contribution), (an earned PhD degree and post-doctoral research experience is required for level B appointments)
- Level C (Aus\$101,000-\$118,000 p.a.) (including 17% employer superannuation contribution),

Duration: 3 years, available immediately, a further 2-3 years' extension is possible (subject to funding availability and performance). Position 1 is a continuing (permanent) position.

Application procedure: Detailed info about these positions and application procedure can be found at RMIT HR website (<http://www.rmit.edu.au/yourcareer>). A cover letter and detailed CV (with a full list of your journal publications, research projects conducted, key skills/experience, qualifications, detailed contacts of three referees) are required. Please also indicate the Job Ref number(s) you are applying for.

Deadline: 19 September 2010

Other opportunities: interest parties are invited to contact Prof Kefei Zhang

- **Visiting researcher** – we also offer a number of visiting researcher opportunities every year.
- **PhD scholarship** –RMIT international PhD scholarship are open for application. The value of the scholarships is upto \$45,000/p.a. (\$25k/p.a for tuition fee, \$20k/p.a for living allowance)

Further contact:

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