Postdoctoral Positions open in NFRI, Korea

The National Fusion Research Institute (NFRI) is currently recruiting for a Postdoctoral position.

NFRI, home of the Korea Superconducting Tokamak Advanced Research (KSTAR), was founded in 2005 as a government-funded research institute specialized in the field of fusion technology. Moreover, NFRI assumed the pivotal role as the Domestic Agency of the International Thermonuclear Experimental Reactor (ITER), ITER-Korea. As the DA has been decided to set up and being operated in NFRI, NFRI is meant to be the representative fusion research institute in Korea.

With the aim of transforming NFRI into a world-leading fusion research institute by contributing both to the academic and industrial development in fusion, NFRI has been providing excellent educational programs and a vibrant research and development (R&D) environment. Suitable areas include, but are not limited to Plasma Physics, Heating, Diagnostics, Control and other Fusion related areas.

Salary is competitive and benefits include medical and liability insurances. The initial appointment is for one year, which is renewable up to one additional year, depending on the research performance and the availability of resources for the program. The new position commences in earliest on May 1, 2009. Applicants should send an e-mail attached with a curriculum vitae with a list of publications, the title and a brief introduction of doctoral dissertation, a summary of research plans at NFRI, and two reference letters (contact number and e-mail address of referees should be included) to the International Cooperation Team (soseono99@nfri.re.kr) by April 18, 2009.

Any Inquiry should be made to : soseono99@nfri.re.kr

Postdoctoral Fellow / Research Fellow (A270-08CD) in Plasma Research, Research School of Physics and Engineering, ANU College of Physical Sciences

We seek a Research Fellow to co-develop forward models of selected equilibrium and fluctuation diagnostics in MAST and H-1, and integrate these models with a Bayesian inference software engine.
Location: Canberra/ACT
Term of Contract: Fixed Term of 2-2.5 Years Salary Package: Level A/B ($61,179 - $81,135) plus 17% superannuation Closing Date: 31 December 2008
Position Overview:
The project aims to develop Bayesian inference tools to extract and verify equilibrium models in the Mega Ampere Spherical Tokamak of UKAEA Fusion, and characterize plasma stability in the H-1 National Plasma Fusion Facility at the ANU.
We seek a Postdoctoral Fellow/Research Fellow to co-develop forward models of selected equilibrium and fluctuation diagnostics in MAST and H-1, and integrate these models with a Bayesian inference software engine. Working with the team, the successful applicant would then compare and contrast equilibrium models of MAST discharges, and compute Bayesian estimates of the mode structure in H-1 plasmas. We will also explore the utility of the Bayesian inversion tools for optimisation and evaluation of plasma diagnostics.
The successful candidate should have excellent numerical/computational skills (preferrably Java or C++), a good foundation in mathematical physics, and interests in working with experimental data, as well as the ability to clearly communicate research results and to work in a collaborative environment to tight timelines. A knowledge of plasma physics is desirable, but not essential. Up to 4 months (total) secondment to the UKAEA Fusion laboratory in Oxfordshire is supported ? ideally for project commencement, as is international conference travel to disseminate results. In order to attract outstanding applicants, the duration and timing of international deployment is open to negotiation.
Dr Matthew Hole, T: +61 2 6125 7606, E: matthew.hole@anu.edu.au
Further information and application procedure
http://jobs.anu.edu.au/PositionDetail.aspx?p=412

Postdoctoral Fellowship (A257-08CD), Research School of Physics and Engineering, ANU

This Fellowship aims to attract candidates of the highest ability irrespective of field. The physics program in the ANU College of Physical Sciences is seeking applicants for a prestigious fellowship funded by the Oliphant Endowment Fund.
Location: Canberra/ACT

Term of Contract: Fixed Term of 2 Years
Salary Package: Level A ($61,179 - $65,467) plus 17% superannuation
Closing Date: 12 December 2008
Further information and application procedure
http://jobs.anu.edu.au/PositionDetail.aspx?p=396

Job Opportunities: Leveraging Future Fellowships in Fusion

The Australian Government recently announced 1000 Future Fellowships to be phased in starting 2009 (and doubling of postgrad studentship numbers). The following is lifted from the website http://www.arc.gov.au/ncgp/futurefel/future_default.htm

The Australian Government announced the creation of a new scheme, Future Fellowships, to promote research in areas of critical national importance by giving world class researchers incentives to conduct their research in Australia. The aim of Future Fellowships is to attract and retain the best and brightest mid-career researchers. At present many highly qualified mid-career researchers choose to work overseas to further their careers due to lack of opportunities in Australia. The Future Fellowships scheme addresses this problem and will significantly boost Australia's research and innovation capacity in areas of national importance. Future Fellowships will aim to encourage outstanding Australian researchers currently based overseas to return to Australia.

Over a five-year period (2009 - 2013), Future Fellowships will offer four-year Fellowships of up to $140,000 a year to 1,000 Australian and international top researchers in the middle of their career. In addition, each researcher's administering organisation will receive funding of up to $50,000 per year to support related infrastructure, equipment, travel and relocation costs.

Future Fellowships will encourage proposals from researchers working in areas of national priority. Preference will be given to those researchers who can demonstrate a capacity to build collaboration across industry, research institutions or with other disciplines.
They are well paid (95 - 135k), come with up to $50k/year to the host for support / infrastructure, and have a mixture of "discovery" and "strategic" aims. The fellowship scheme will be open to applications from Australian and non-Australian citizens. They are very similar to the model proposed by the Australian ITER Forum, although the strategic emphasis relates mostly to research alignment with the host institution, not the field of research, as we had proposed.

The intent of the Future Fellowship scheme is for the host institute to plan a career pathway for the Fellow beyond the lifetime of the fellowship. For this reason, it is crucial that prospective Fellows complement the research profile of the institute, and that any fellowship application be prepared in partnership with the host institute.

The draft selection criteria are presently 50% applicant, 20% strategic alignment, 20% collaboration and 10% national priority. In consultation with the ARC and colleagues, we believe there is value in assisting interested applicantsin fusion science and engineering. Our fusion science and engineering strategic plan (available from http://www.ainse.edu.au/_data/assets/pdf_file/0003/16482/aust_fusion_strategy_2007.pdf) provides the overarching vision for research impact and international engagement, and is powerful leverage for cohorts of fellows working in fusion science and engineering. We offer to assis with institution placement, and application text, especially with regard to national coordination, collaboration, and possible cross-linkage between different fellowship proposals.

The ARC's draft guidelines and call for comment can be found at http://www.arc.gov.au/pdf/future_consultation.pdf

We hope that some of you or your colleagues would be able to take advantage of these fellowships, and help build Australia's profile in fusion science and engineering. We ask that anyone with interest in this scheme please email their contact details to matthew.hole@anu.edu.au ; they will be included on an email listing to advise of the next steps once the ARC has finalised it's application process