

Recruitment

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PLEASE CONTACT US FOR INFORMATION ABOUT RATES, COLOUR OPTIONS, PUBLICATION DATES AND DEADLINES.



**Science & Technology
Facilities Council**

www.stfc.ac.uk

The Science and Technology Facilities Council brings strategic leadership to UK investments in large national and international research facilities, together with delivering world-class science and technology. The Council is involved in some of the world's most advanced facilities, such as ISIS.

ISIS is a world-leading source of pulsed neutrons and muons located at the Rutherford Appleton Laboratory, near Oxford. We currently have an opportunity for a Mechanical Engineer to join the ISIS Design Division and work closely with fellow engineers and scientists, providing high level designs for one off items, then contributing to managing the manufacture, installation and commissioning of the equipment you have produced.

Mechanical Engineer (£36,000 - £40,000 pa) Accelerator Design Engineering Group

Working for the ISIS Design Division, you will be responsible for the high level engineering designs of complex mechanical components for various parts of our particle accelerator, such as normal conducting magnets, RF structures, diagnostics and UHV vacuum systems. This work includes the conceptual phase of design, performing stress, thermal and other engineering calculations, through to the procurement, testing and installation phases.

We are looking for an engineer with a thorough understanding of fundamental engineering principles (thermal, stress, fluid dynamics), and the ability to apply this understanding to the design and operation of broad range of bespoke equipment on our operational particle accelerator. An appetite for learning and an ability to cross boundaries into physics, electrical engineering, controls and plant are key attributes.

An excellent index linked pension scheme and generous leave allowance is included. Review of applications will commence on the 9th August. For further information or to apply, please send your CV and a covering letter to: engineers-ral@stfc.ac.uk

www.stfc.ac.uk www.isis.stfc.ac.uk

**MICHIGAN STATE
UNIVERSITY**

**National Superconducting
Cyclotron Laboratory**



FACULTY POSITION IN EXPERIMENTAL NUCLEAR SCIENCE

Michigan State University (MSU) invites applications for a faculty position in experimental nuclear science at the National Superconducting Cyclotron Laboratory (NSCL). NSCL faculty members typically have joint appointments in an academic department, such as Physics and Astronomy, Chemistry, or Engineering, where they are expected to teach and supervise graduate students. Applications are particularly encouraged in emerging areas of research and technology complementing NSCL's existing research portfolio. These areas broadly include nuclear astrophysics, the study of fundamental symmetries and neutrinos, nuclear structure and reactions, and applications of nuclear techniques to other fields.

The successful candidate is expected to add new research directions to the laboratory, conduct worldleading research and innovative technological developments, and contribute to the strong graduate and undergraduate science programs in one of the broad areas indicated above. Depending upon qualifications, the position can be filled at the assistant, associate, or full professor level.

NSCL is a world-leading laboratory for nuclear science and is operated as a national user facility for research with rare isotope beams funded by the U.S. National Science Foundation (NSF). It is home to forefront research programs in nuclear physics, nuclear astrophysics, nuclear chemistry and accelerator science with more than 50 Ph.D. students at any time. NSCL is a Core Institution of the Joint Institute for Nuclear Astrophysics (JINA), an NSF Physics Frontier Center. An Applied Isotope Science Program has recently been started. MSU is also funded by the U.S. Department of Energy to establish the Facility for Rare Isotope Beams (FRIB) as a national user facility. Research at FRIB promises major new advances in many fields. Information about NSCL, JINA and FRIB can be found at nscl.msu.edu, jinaweb.org and frib.msu.edu; details about NSCL faculty appointments are provided at <http://www.hr.msu.edu/documents/facacadhandbooks/NSCLFacPos.htm>.

The successful applicant must have a Ph.D. and normally is expected to have postdoctoral experience. Applications will be reviewed starting October 15, 2013. For immediate consideration, please go to www.jobs.msu.edu and apply for posting number 7953. Applicants should also email a cover letter with a CV, a list of publications, a research plan (no more than two pages), and the names and email addresses of at least three references to fac_search2013@nscl.msu.edu. MSU is committed to achieving excellence through cultural diversity. The university actively encourages applications and/or nominations of women, persons of color, veterans and persons with disabilities.



MSU is an Affirmative Action, Equal Opportunity Employer.

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**EUROPEAN
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European Spallation Source AB is preparing to construct a world-leading European materials research centre in Lund, Sweden. ESS is partnered by a large number of European countries.



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Accelerators | Photon Science | Particle Physics

Deutsches Elektronen-Synchrotron
A Research Centre of the Helmholtz Association

ACCELERATOR RESEARCH.

**DESY, Hamburg location, is seeking:
Senior Scientist (f/m)
Accelerator Research**

DESY

DESY is one of the world's leading centres for the investigation of the structure of matter. DESY develops, runs and uses accelerators and detectors for photon science and particle physics.

Accelerator research at DESY in Hamburg, Germany, is being extended into new research fields and strengthened with additional resources. DESY accelerator research is part of the Helmholtz ARD program that aims at reinforcing a coordinated, world-class accelerator R&D program in Germany that includes all Helmholtz centres and institutes and has close collaborations with universities. The DESY focus is on conventional and plasma-based accelerators with applications in photon science, particle physics and atto-second science. The position of a senior scientist in accelerator research is open. This is a tenured position.

The position

- Take part in accelerator research planning at DESY and take a responsible role in coordinating its setup, testing and application in existing DESY accelerators (for example, lead the planning and construction of a dedicated accelerator research facility in the DORIS ring, implement experiments on ultra-high gradient plasma acceleration and atto-second electron pulses, perform research on FEL optimization at FLASH and XFEL)
- Study realistic applications of new accelerator technologies for photon science and particle physics. Present results to the national and international community. Help in international research coordination
- Co-supervision of master and PhD students

Requirements

- Studies of physics or engineering with a PhD degree
- Long-term experience in accelerator physics
- Expert knowledge of experimental techniques and data analysis in accelerator science
- Experience in computer simulations and numerical methods

For further questions contact Dr. Ralph Aßmann, phone +49 40 8998-3187, ralph.assmann@desy.de.

Salary and benefits are commensurate with those of public service organisations in Germany. Classification is based upon qualifications and assigned duties. DESY operates flexible work schemes. People with disabilities will be given preference to other equally qualified applicants. DESY is an equal opportunity, affirmative action employer and encourages applications from women. There is a bilingual kindergarten on the DESY site.

Please send your application quoting the reference code, also by email, to:

Deutsches Elektronen-Synchrotron DESY
Human Resources Department | Code: EM066/2013
Notkestraße 85 | 22607 Hamburg | Germany
Phone: +49 40 8998-3392 | Email: recruitment@desy.de
Deadline for applications: 25th July 2013
www.desy.de

The Helmholtz Association is Germany's
largest scientific organisation.
www.helmholtz.de



Accelerators | Photon Science | Particle Physics

Deutsches Elektronen-Synchrotron
A Research Centre of the Helmholtz Association

ACCELERATOR RESEARCH.

**DESY, Hamburg location, is seeking:
Scientist (f/m) Tenure Track**

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The position

- Conduct experimental and conceptual studies in accelerator research and development. Participate in one or several of the following research themes: Design and construction of a dedicated accelerator research area in the DORIS beam facility, experiments on ultra-high gradient plasma acceleration, research on electron pulses in the atto-second regime, studies with free-electron lasers at FLASH and XFEL
- Study realistic applications of new accelerator technologies for photon science and particle physics, prepare new project proposals and present them in various committees in- and outside of DESY
- Help in the supervision of master and PhD students

Requirements

- Studies of physics or engineering with a PhD degree
- Several years of experience in accelerator, nuclear or particle physics
- Knowledge of experimental techniques and data analysis in accelerator or particle detector physics
- Experience in computer simulations and numerical methods

For further questions contact Dr. Ralph Aßmann, phone +49 40 8998-3187, ralph.assmann@desy.de.

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Human Resources Department | Code: EM067/2013
Notkestraße 85 | 22607 Hamburg | Germany
Phone: +49 40 8998-3392 | E-mail: recruitment@desy.de
Deadline for applications: 25th July 2013
www.desy.de

The Helmholtz Association is Germany's
largest scientific organisation.
www.helmholtz.de



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cancer sufferers each year

Elekta is a human care company pioneering significant innovations and clinical solutions for treating cancer and brain disorders. The company develops sophisticated state of the art tools and treatment planning systems for radiation therapy and radiosurgery, as well as workflow enhancing software systems across the spectrum of cancer care.

We have a number of vacancies for Physicists to join our R&D Physics group in Crawley. The Physics group is responsible for providing support to the business and contribute with designs and measurements in the following areas: Physics of Radiotherapy Systems, including beam generation and dosimetry (electron beams, MV and kV photon beams), general Radiation Physics, Monte Carlo simulations and other computational modelling methods, Control Systems for experiments, Radio-Frequency components and theory, Optics, Detector Physics, Physics of X-ray sources and Imaging Systems.

Successful applicants will take a leading role in supporting the development of new products and will be involved on a number of projects including both computational and experimental activities. Ideally candidates will have experience of image-guided medical accelerator systems and the ability to contribute in several of the areas that the Physics group is responsible for. Knowledge of clinical workflows in radiation oncology and demonstrable experience of technical innovation will generally be an advantage. Projects will often offer interaction with Research Hospitals and other Institutions, therefore exceptional written and spoken communication skills will be required.



Our preference is for candidates to be educated to MSc or PhD level or equivalent. The ability to work to tight deadlines and within a successful team is also essential for these roles.

Current vacancies include, but are not limited to:

R&D Physicist (Delivery Systems)

The position will involve the evaluation of measurements techniques and tools for the Quality Assurance and performance assessment of image-guided radiotherapy Linac systems, in particular with regard to more advanced techniques, such as Volumetric Modulated Arc Therapy and stereotactic treatments with high-dose rate beams. In this role, the candidate will also be expected to provide technical advice to the business regarding the interpretation of international compliance standards. Candidates should have at least a degree in Physics, Medical Physics, Radiation Physics or closely related discipline, with significant experience of radiotherapy, acquired either in an industrial or clinical environment. Familiarity with radiotherapy physics QA programmes and tools is required.

*To apply for this and other vacancies please visit our website **www.elekta.com** and apply via the careers section.*

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