

GLOBAL RESEARCH AWARDS

Global Research Awards provide an opportunity for engineers currently engaged in research and development to undertake projects in centres of excellence overseas. Projects should focus on activities which could help stimulate wealth creation and improvements in the quality of life, supporting the international development of research networks and encouraging the uptake of globally competitive technology in the UK.

The Scheme

The scheme enables engineers to work with overseas organisations that are leading the development of new or enhanced technology. Its purpose is to:

- ▶ provide opportunities that jointly benefit the seconded engineer, his/her employer and the overseas host, normally for periods between three and twelve months;
- ▶ enable an engineer to gain experience of alternative approaches to research projects in a different cultural environment;
- ▶ disseminate the benefits gained to the UK engineering, scientific and business community by means of seminars, public lectures, published papers in journals and through new or existing research networks.

Programme of work

Clear benefits need to be shown both for the candidate and for the UK engineering research base, such as:

- ▶ involvement with advanced engineering facilities not readily available in the UK in which new technology is being developed or applied;
- ▶ involvement with multi-disciplinary teams at the leading edge of engineering research and development.

The candidate, the employer and the host organisation will agree a proposed programme of work, which should achieve mutually beneficial objectives.

Eligibility

The scheme is open to engineers from all engineering disciplines who have several years of post-graduate experience in R&D and its application in either industry or academia. Applicants should be confident of achieving the objectives of their proposed research programme during their secondment and of contributing to the UK engineering research community as a whole on their return. Applicants should be employed in industry, higher education institutes, local government, research associations or other approved R&D organisations, based in the UK. The host organisation may be chosen from the overseas equivalent of any one of these categories (though not a parent or subsidiary company of the employer) provided that it is a recognised centre of excellence in the chosen field.

Duration of secondment

Although awards will normally be made to support secondments lasting for three months to one year, shorter or longer periods may be approved in special cases. If justified, a secondment may be taken in a modular form composed of a number of visits of two to three months duration, within a three year period.

Support for seconded engineer

The engineer will remain an employee of the sponsoring body and will continue to receive salary, salary awards and pension rights as apply under his or her contract of employment. The seconded engineer will continue to be paid by the employer but The Royal Academy of Engineering will provide a grant of 50% of the total agreed costs of the secondment, up to a ceiling of £35,000. Allowable costs include salary, employer's National Insurance and superannuation contributions, travel, accommodation and language training. A contribution towards the support of an accompanying family will be considered.





Dr James Shippen was seconded from his post as a Senior Lecturer in dynamics and the Director of Biomedical Engineering at the University of Birmingham to the Motion Analysis Laboratory, San Diego Children's Hospital, California

"It was an ideal opportunity for me to broaden my knowledge of analysis procedures and gain experience within a clinical environment."



Whilst in San Diego, Dr Shippen developed an approach for calculating an individual mass model that can be fully automated and requires no more instrumentation than typically found in a modern motion analysis laboratory.



Richard Darton FEng Professor of Engineering Science, University of Oxford, was seconded to the University of Sydney

"The question I went to Australia to address was how should an engineer, faced with a design problem, take account of the requirements of Sustainable Development?"

"Studying sustainability in a totally different environment made me conscious of the key role of stakeholders in defining indicators, and the importance of structured thinking about the future. My work on assessing sustainability is now being applied to chemical projects and operations."



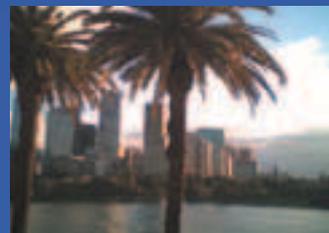
Dr Ruth Graham Research Assistant at the University of Hull, was seconded to the Engineering Mechanics and Design Laboratory (EMDL) at the University of Toronto for 3 months



"The research tackled a key issue facing fatigue analysts within aircraft design, which concerns the prediction of stress concentration values around geometric features placed in proximity."



A joint research project between BAE SYSTEMS and the University of Hull was established to develop an evaluation method by which a designer could analyse a series of alternative design configurations involving features in proximity, in order to identify the optimal geometry for fatigue prevention. It was agreed that the project would be advanced by a period of secondment at the University of Toronto.



What to do next?...

For details of how to apply, or for further information, please contact:

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