

Research Role Profile

Job Title:	Research Fellow (1A)
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Responsible to:	Head of research group, or principal investigator
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Responsible for:	Not applicable
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Job Summary and Purpose:

To undertake research in accordance with the specified research project(s) under the supervision of the principal investigator.

Main Responsibilities/Activities

To undertake a range of research activities within a specified research area, assuming responsibility for specific areas of projects and making use of new research techniques and methods, in consultation with the research award holder or supervisor. This may include fieldwork, interviews, laboratory experimentation, critical evaluation and interpretation, computer-based data analysis and evaluation or library research.

Using initiative and creativity to identify areas for research develop new research methods and extend the research portfolio. Analysing and interpreting results of own research. Write up results and prepare papers for submission to appropriate journals and conferences, and other outputs as required and/or appropriate. Attend appropriate conferences for the purpose of disseminating research results of personal development. The post holder may also contribute to writing bids for research grants and will contribute to collaborative decision making with colleagues in areas of research.

Continually to update knowledge and develop skills, and translate knowledge of advances in the area into research activity.

To plan and manage own research activity in collaboration with others. To carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control.

To contribute to teaching in the Faculty by carrying out student supervision and/or demonstrating within the post holder's area of expertise and under the direct guidance of a member of departmental academic staff, as appropriate.

The post holder may occasionally be required to supervise more junior research staff.

Research Role Profile

Person Specification

The post holder must have:

A doctoral degree in a relevant discipline (although individuals who have almost completed a doctoral degree may be appointed). Consideration may also be given to individuals who do not hold a doctoral degree but have required skills based on a number of years experience in specified / relevant fields

The post holder will have authority over some aspects of project work and must be capable of providing academic judgement, offering original and creative thoughts and be able to interpret and analyse results.

Relationships and Contacts

Direct responsibility to the principal investigator or academic supervisor. The post holder may be asked to serve on a relevant Faculty committee. There may be additional reporting and liaison responsibilities to external funding bodies or sponsors. The post holder may work on original research tasks with colleagues in other institutions.

Special Requirements

To be available to participate in fieldwork as required by the specified research project

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
 - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
 - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.

Addendum to Role Profile

Job Title:	Research Fellow (1A)
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Job Summary and Purpose:

This information sheet should be read in conjunction with the accompanying generic Research RA1A Role Profile and will be used for shortlisting processes. More specifically the post holder will be expected to:

The post holder will be required to investigate the technical challenges involved in the production of triboelectric nanogenerators with the aim of transferring the knowledge gained to a manufacturable technology. They will be expected to attend project progress meetings, where they will present their results to the Principle Investigator and to the project collaborators, and will be expected to present those results to a wider audience through scientific articles and conference presentations where appropriate. They will be involved in the preparation and delivery of progress reports to the project coordinator, and will assist in the identification of complementary funding to extend the research. They are also expected to help support existing activities and PhD students working within the research group and in particular those associated with the project.

Main Responsibilities/Activities

The aim of the project is to develop TENG structures from both an experimental point of view and simulate the output to optimise the device aspects.

The post holder is expected to interact with other group members while maintaining responsibility for ensuring that the project deliverables and milestones are met. Specific activities/responsibilities are:

- The development of small area TENG devices and hybrid devices (<1 cm²) and larger area modules with high power conversion efficiencies on flexible polymer substrates.
- The incorporation of nanoparticles in the TENG electrodes using direct deposition and solution processing methods.
- Transfer of the knowledge gained at small scales to a manufacturable technology being developed.
- To write technical reports, proposals and paper publications and to make oral and poster presentations at conferences, technical meetings etc.
- To collate and deliver periodic project reports to the project coordinator as required.
- To support the training and development of the PhD students associated with the project.

Person Specification

The post holder must have:

Essential:

- A good honours degree
- A PhD in a relevant area of Physics, Electronic or Electrical Engineering.
- Established research experience in semiconductor device physics
- Experience in report and scientific publication writing
- Willingness to work proactively and independently

Desirable:

- Experience of working in a clean room environment
- Experience in electronic device fabrication.
- Experience of a range of electronic measurement techniques
- Excellent oral and written skills

Relationships and Contacts

- Work well in a multi-disciplinary team including personnel from the ATI and research collaborators external to the ATI.
- Confidently and competently liaise with, and present the research to, external societal, technical and commercial groups with an interest in the work
- Ensure that all research activities undertaken are in compliance with the 'Research Code of Conduct' operated by the University of Surrey.
- Ensure compliance with health and safety requirements in all aspects of work.

Special Requirements

- To collate and deliver periodic project reports to the project coordinator as required.