2018 Rutherford Strategic Fellowship in Energy Research

ERF4: Enhanced performance Organic Photovoltaics using Non-Fullerene Acceptors

**The Role:** Durham University is seeking an Energy Research Fellow (ERF) to carry out research in the Department of Engineering under the supervision of Dr Chris Groves (Associate Professor in Organic Electronics). Their responsibilities will include fabrication of organic photovoltaic devices (OPVs) incorporating non-fullerene acceptors, and the characterisation of their performance and degradation. These data will be used to develop optimised blend ratios and understand charge separation processes in this class of devices.

**Fellowship Tenure:** 6 months  **Start Date:** 1 June 2018 or earlier

**The Institution:** Durham University is one of the world's top universities with strengths across the Arts and Humanities, Sciences and Social Sciences. We are home to some of the most talented scholars and researchers from around the world who are tackling global issues and making a difference to people's lives. The University sits in a beautiful historic city where it shares ownership of a UNESCO World Heritage Site with Durham Cathedral, the greatest Romanesque building in Western Europe. A collegiate University, Durham recruits outstanding students and early career researchers from across the world, offering an unmatched wider student and staff experience. The University has an internationally leading role in Energy Research, which it has developed by investing in the Durham Energy Institute (DEI) as one if its eight strategic interdisciplinary research institutes. Through the Rutherford ERF programme, the University aims to enhance its international reach and reputation by partnering with the best institutions in countries that have (i) identified energy as a high national priority, (ii) are building scientific expertise in energy research, and (iii) that are themselves devoting funding and resources to establishing energy partnerships.

**Context:** The Rutherford Energy Research Fellowship Programme at Durham University, managed via the Durham Energy Institute (DEI), draws high-quality early career postdoctoral researchers from partner countries and institutions recognised by the DAC as ODA recipients to the United Kingdom to push the boundaries of organic energy materials for storage, generation, and transmission alongside experts in Chemistry, Physics and Engineering. The 2018 Programme will recruit Fellows from India, Mexico and Malaysia for Fellowships in the Areas of (1) synthetic redox-active molecular materials, (2) synthetic redox-active assemblies and macromolecular systems, (3) advanced physical spectroscopy and microscopy of organic energy materials, and (4) organic photovoltaic devices.

**Requirements:** Applicants must hold a PhD in a relevant subject and be fluent in English. They are expected to have experience in conducting high quality academic research, evidenced by a strong publication track record. Experience in the making and testing electronic devices in a clean room environment is essential, and experience in solution processed materials and/or organic photovoltaic devices is desirable. ERFs will keep comprehensive, accessible, secure records of experimental work, data and analyses and assist PhD students and other colleagues in the delivery of project objectives and problem-solving. Professional development, career services, and pastoral support will be provided through the Host Department, DEI, Researcher Development Programme (via CAROD), Immigration Office and Ustinov College at Durham University. ERFs will be expected to deliver research excellence in the form of high-impact publication outputs, intellectual property, conference dissemination and engagement.
**Stipend:** £2000 per month, for 6 months

**Benefits include, but are not limited to:** Expenses to cover visa fees and round-trip airfare from/to home country; £5,000 research funding to cover consumables, small equipment, and research-related conference, travel, accommodation and subsistence costs; Membership to Ustinov College; Access to University accommodation (at standard rooming fees); Membership to the Durham Energy Institute; Free access to resources within the Research Development Programme at Durham University.

**How to Apply:** Interested applicants should send a cover letter, curriculum vitae, and PDFs of two of their most relevant publications to chris.groves@durham.ac.uk. The message should be sent with ‘Rutherford ERF Application’ as the subject line. All enquiries will be treated in the strictest confidence.

**Application Deadline:** Wednesday, February 28, 2018.

**Indicative Timeline:** Shortlisted candidates will be informed by March 7 and should be available for a conference call interview during the week commencing March 12. The selection process will be completed by March 20.

**Position Reference:** Durham–Rutherford Energy Research Fellowship

**Appointment:** ERF Area 4, Department of Engineering, Durham University