UKRI ESRC Innovation Fellowship (Grade 8)

Summary:
An exceptional opportunity has arisen at the University of Sussex with additional funding from the Economic and Social Research Council as part of their National Productivity Investment Fund for a high-performing researcher to contribute to work on a project “Bringing Environmental Radio Frequency Identification (RFID) Tags to Market.” This post will contribute to the Digital Futures at Work ESRC Research Centre (Digit) – an ambitious and dynamic £8m investment examining the digital transformation of work at the University of Sussex Business School in collaboration with the Sussex Programme on Quantum Research (SPQR) and the company Advanced Material Development (AMD). The Fellow will be line-managed by Professor Jacqueline O’Reilly and Professor Alan Dalton and will work in collaboration with AMD to deliver substantial elements of the project. This will include two three-month periods of research with a major retailer in Arkansas, USA. The Innovation Fellowship is for two years full time, with a possibility for extension or a lectureship; requests for part-time arrangements will also be supported.

Criteria:
The fellowships are targeted at ECRs, and individuals applying for a fellowship should have a maximum of four years’ academic research experience following the submission of their PhD or be of equivalent professional standing. This period is measured between the initial submission date of the PhD thesis and the submission date of the fellowship proposal. Career breaks will be excluded from the four-year period, and periods of part-time academic employment can be calculated on a pro-rata basis. The scheme is open to applicants with or without a permanent academic post, subject to the above restriction. The Fellowships are open to applicants of any nationality, including those currently based at non-UK ROs, although all fellowship proposals must be submitted through and held at an eligible UK RO and fellows must be resident at this UK RO for the duration of the grant. An intention of this programme is to attract global talent to the UK, so applications from non-UK nationals are encouraged.
The Innovation Fellowships are expected to be two years in duration. Fellowships may be held on a full or part-time basis. We welcome proposals for part time fellowships from candidates who wish to work on a part-time/flexible basis in order to combine domestic responsibilities with their career. All fellows must spend 100% of their working time (whether full-time or part-time) on the fellowship and cannot take any secondary paid employment during the course of the award.

A limited amount of teaching will contribute to the professional development of the fellow. Therefore, grant holders can set aside up to six hours per week (pro rata) to other duties during the fellowship, including preparation time.
1 Advertisement

Post Title: UKRI ESRC Innovation Fellowship (Grade 8)
School/department: University of Sussex Business School, Digital Futures at Work ESRC Research Centre (Digit) and the Materials Physics Group and Sussex Programme for Quantum Research (SPQR)
Hours: Full time or part time hours considered up to a maximum of 1.0 FTE. Requests for flexible working options will be considered (subject to business need).
Contract: fixed term for 2 years with the possibility of extension/lectureship
Reference: 2933
Salary: Grade 8 starting at £40,792 to £48,677 per annum (pro-rata for p-t working)
Placed on: 16 December 2019
Closing date: 17 January 2020. Applications must be received by midnight of the closing date.
Expected Interview date: 29 January 2020
Expected start date: 1 April 2020 (at the latest).

For further information or to discuss the role please contact the Centre Director Professor Jacqueline O'Reilly: j.o-reilly@sussex.ac.uk

For full details and how to apply see our vacancies page

The University of Sussex values the diversity of its staff and students and we welcome applicants from all backgrounds.

2 The University of Sussex Business School

The Innovation Fellow will work closely with the ESRC Digital Futures at Work Research Centre (Digit), based in the University of Sussex Business School, the Department of Material Physics and AMD on the University of Sussex campus. They will examine the development and commercialisation of Environmentally Friendly Radio Frequency Tags and the employment consequences of the adoptions of this technology by major retailers.

The University of Sussex Business School

The Business School was formed in 2009 and comprises five departments: Management, Accounting & Finance, Strategy & Marketing, Economics, and SPRU (Science Policy Research Unit). With its home in the Jubilee Building, a state-of-the-art academic building at the heart of the campus, the Business School is a vibrant, ambitious and dynamic School with a strong research focus.

Our work draws on management, economics, science, technology and innovation studies, to make an impact on the future of people and institutions the world over. We study the issues that matter, in order to transform our world and your future.
Our School draws on many of Sussex's intellectual traditions, including a critical perspective on contemporary business, political, economic and social issues and a belief that major societal challenges need expertise across many academic disciplines.

Our **vision** is to be a School that collaborates across disciplines to shape global issues in business, management, and society, making an impact on policy, practice, and people.

Our **mission** to achieve this vision is to:

- carry out high-quality research and develop innovative policy
- develop current and aspiring leaders who will champion critical and original thinking
- work internationally with businesses, governments, and others to deliver innovative approaches to management.

**Digital Futures at Work Research Centre (Digit)**

The Digital Futures at Work Research Centre (Digit) will be established in January 2020. The aim of the Centre is to establish an interdisciplinary, international collaboration to advance our understanding of how digital technologies are reshaping work, impacting on employers, employees, job seekers and governments.

The University of Sussex Business School jointly leads the Centre with Leeds University Business School. Additional partners include the Universities of Aberdeen, Cambridge and Manchester in the UK and Monash in Australia.

The objectives of Digit are to:

1. **Generate new knowledge** to inform the development of an analytical framework around the concept of the 'connected worker' and the 'connected economy' by maximising knowledge exchange and co-produced research with relevant communities.

2. **Establish a new Data Observatory** as a one-platform library of national and international resources for decision-makers connecting with UK Industrial Strategy and welfare policy.

3. **Initiate an Innovation Fund** providing financial support for new research initiatives and methodological approaches, enabling international exchanges and extensive dissemination.

4. **Provide a strong career development programme** for mid and early career researchers through mentoring and staff development, internships and summer schools.

5. **Ensure the long-term sustainability of the centre** by developing an **MSc in People Analytics** informed by Digit research.

Sussex will become a clearly identifiable global research hub fostering strategic international partnerships and become a source of advice to governments, funders, industry and non-governmental organisations. The centre will be a flagship initiative promoting Sussex strengths in policy-engaged, academically rigorous, interdisciplinary research.
Digit will:
- Establish Sussex firmly as ‘the go-to place’ for interdisciplinary research to understand complex challenges associated with the digital transformation of work.
- Develop a collective ‘Digital’ identity across the Sussex campus.
- Substantially increase research and ‘soft’ income, and consolidate and maximise the return on recent investments.
- Deliver research output of the highest international quality.
- Enhance the impact of Sussex research for future Research Excellence Framework submissions.
- Provide a focus and drive for the University strategy of embedding digital transitions at work in teaching.

Materials Physics and the Sussex Programme in Quantum Research at the University of Sussex

Materials Physics is a recently-established stream of research at Sussex, led by Professor Alan Dalton, Dr Alice King and Dr Conor Boland, which focuses on understanding structure-property relationships in nanomaterials, particularly two-dimensional nanomaterials such as graphene and molybdenum disulfide. Our research seeks to use low-cost, scalable solution processing techniques to develop these materials towards applications including printed electronics, strain sensors, energy storage devices, and bio-interface materials.

Quantum science is at the heart of many emerging technologies that transform our everyday lives. The Sussex Programme for Quantum Research (SPQR) has been set up to exploit opportunities that enable and are made possible by quantum technologies by building collaborations. This embraces interests across multiple fields such as physics, engineering, medical sciences, psychology and industry.

Advanced Material Development

Advanced Material Development (AMD) is an SME which funds and commercialises cutting-edge Materials Science currently being researched and developed in Universities that are judged to offer viable and effective routes to licensed technologies that in turn can be taken profitably to market through a variety of commercial arrangements.

We are currently working with science departments of nanotechnology researchers led by world-renowned professors supported by large teams in world-class facilities. Furthermore, we have identified and are already working with commercial partners to explore the use of these technologies in real-world applications.

AMD’s work is based on an essential “platform technology” of liquid processing of 2D (nano) materials which leads to applications in key areas such as Advanced Sensors, Electronics & Devices, Composites, Photonics, Functional Coatings and Nano-barcoding (anti-counterfeiting).
3 Job Description

Job Description for the post of: UKRI ESRC Innovation Fellowship (Grade 8)

Department: Digital Futures at Work ESRC Research Centre, Department of Management

School: University of Sussex Business School, Digital Futures at Work ESRC Research Centre (Digit) and the Materials Physics Group and Sussex Programme for Quantum Research (SPQR)

Location: Jubilee Building and AMD offices at the Sussex Innovation Centre

Grade: 8

Responsible to: Principal Investigator through to Head of School

Role Description: Research Fellow II is a career-grade research position. Post-holders will be expected to take a senior role within a research team, be able to demonstrate an established research portfolio, and a growing reputation in their field of study. They will also be expected to provide support and guidance to less experienced members of staff as required.

Purpose of the post:

This is an exceptional opportunity for early career researchers (ECRs) to undertake new innovation-oriented research.

In 2017 the ESRC was allocated funding from the National Productivity Investment Fund to support Early Career Innovation Fellowships. The fellowships were intended to enable some of the most talented researchers working in the UK to undertake new innovation-oriented research. Through its focus on ECRs, this programme will be instrumental in developing the pipeline of talent in academia and promoting greater collaboration, mobility and partnership-working between industry and the research community.

Further funding for 2020, has enabled the ESRC to support up to a further 4 ECR Innovation Fellowships, of which this is one. This two-year fellowship will enable the fellow to undertake both a substantive piece of research and a programme of personal skills development to support a successful career in innovation orientated research either within or beyond academia.

The Innovation Fellow at Sussex will be expected to take responsibility for coordinating a series of working papers over two years following through the process from product development, commercialisation, adoption and implementation of Environmentally Friendly RFID tags, and understanding the employment consequences of these decisions by large scale retail companies.
The Fellow will be expected to produce four working papers over the life of the project:

1. Market Intelligence Report on the development of RFID tags
2. Product Development and Commercialisation examining the relationship between researchers in Material Physics and the firm AMD.
3. Product Adoption examining the demand for and adoption of more environmentally friendly tags in retail.
4. The Employment Consequences of the use of RFID tags in the retail sector.

These reports will be published as working papers on the Digit website and we would expect they would subsequently become journal articles in high status academic journals that could be submitted to the Research Excellence Framework (REF). In addition, the evidence from this research would be used to provide a REF Impact case study. Part of the Innovation Fellowship time would be spent on two research visits of 3 months in the US with a large-scale retailer. The Fellow will also conduct qualitative case study interviews with other retail organisations interested in these technological developments and collect quantitative secondary data related to market intelligence about the development of RFIDs.

The fellowship includes a programme of research and broader skills development to ensure the applicant’s progression towards being an independent researcher who is skilled in business led innovation research. This programme of activities coordinated by the Digit Centre will be tailored to the individual needs of the applicant and developed in consultation between the applicant and their mentors. This will include aspects of project management, knowledge exchange and user engagement, impact, national and international networking and research development.

A limited amount of teaching will contribute to the professional development of the fellow. Therefore, grant holders can set aside up to six hours per week (pro rata) to other duties during the fellowship, including preparation time.

Key Responsibilities:

1. Research, Scholarship & Enterprise

1.1 Conduct research individually and in collaboration with other partners on the project.

1.2 Assess, interpret and evaluate outcomes of research, and develop ideas for their application.

1.3 Produce high-quality research outputs that have impact in the field, for publication in monographs or recognised high-quality journals, or performance/exhibition, as appropriate, and contribute to the REF submission at acceptable levels of volume and academic excellence.

1.4 Make presentations at conferences, or exhibit work in other appropriate events of a similar standing and identify ways to disseminate research outputs informally via the internet, the media and other forms of public engagement.
1.5 Identify and secure opportunities for enterprise activity, knowledge exchange income, and/or consultancy where permissible.

1.6 Actively build internal and external contacts, and play a key role in internal networks and relevant external networks in order to, for example, identify sources of funding, secure student placements, and build relationships for future activities.

1.7 Contribute to a relevant national professional body or recognised events.

1.8 Continually update knowledge and understanding in the field, and engage in continuous professional development.

1.9 Conduct risk assessments, and take responsibility for the health and safety of others, if required.

1.10 Undertake additional duties, as required by the Principal Investigator and/or Co-Investigators.

2. Role-specific duties

2.1 To coordinate and produce ‘intelligence reports’ on the development of RFID tags, as outlined above.

2.2 To establish contact with relevant firms and negotiate, in collaboration with line managers Profs O’Reilly and Dalton and AMD.

2.3 To develop collaboratively appropriate research tools for interviews with employers, line managers, employees and their representatives.

2.4 To provide systematic and accessible documentation of these research activities.

2.5 To use this information to write high quality academic publications.

2.6 To disseminate these findings to a wider public audience in an accessible form.

2.7 To work with the line managers on internal and external communications and engagement activities, and to play a central role in developing and implementing Impact, Communications, Engagement and External Affairs strategies.

2.8 To work to the highest ethical standards.

2.9 The researcher will be expected to travel within the UK and abroad to conduct and present this research. Two periods of three months will be spent in the USA with a major retailer.

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.

Indicative Performance Criteria
• Contributing to the regular published output of original research at international level (referred journal papers, monographs, book chapters, text-books).

• Other evidence of original research contribution to the field, such as through invited conference contributions, membership of editorial panels etc.

• Involvement in the creation, transfer and use of the results of research through a range of knowledge exchange activities.

• Success in transferring research results to commercial, professional, public sector or other practical use.

3 Person Specification

Innovation Fellow (Grade 8)

Essential qualifications, knowledge, skills and experience for the post:

1. Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).

2. Evidence of significant independent contribution to the design and execution of research.

3. An emerging track record of publications in reputable journals and other appropriate media of similar standing.

4. Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences from the business and policy community at varying levels of seniority.

5. Ability to work individually on own initiative and without close supervision, and as part of a team.

6. Good ICT skills, including competence with Microsoft software packages such as Word, Excel and Outlook as well as project management tools.

7. Ability to work well under pressure.

8. Proactive, highly motivated and positive ‘can do’ attitude.

9. Attention to detail.

10. Creative thinker.

Essential role-specific criteria
1. An understanding of some of the issues affecting employers, employees, their representatives and policy makers around the changing use of technological change at work.

2. Experience of conducting firm/sector based qualitative case study research.

3. Ability to work with interdisciplinary teams.

4. Ability to coordinate research activities across different geographical locations.

5. Ability to work with a diverse range of researchers and business partners.

**Desirable criteria**

1. Experience of generating research or knowledge exchange income and publications.

**Personal Attributes and Circumstances:**

Flexible and responsive, including a willingness to work flexible hours as necessary to meet deadlines and to travel to project meetings or workshops on occasion.