

RESOURCING/

JOB DESCRIPTION:



Reader in Forensic Science (Education and Research)

Ref Number:	STM-099-19
Salary Scale:	Grade 10: £60,905 - £64,604 <i>per annum</i>
Contract:	Ongoing AND Full-time
School/Department:	School of Physical Sciences
Location:	University of Kent, Canterbury Campus
Responsible to:	Head of School or nominee
Closing Date for applications:	2 February 2020
Interviews are expected to be held on:	March 2020
Expected start date:	April 1 2020 or as soon thereafter

The School of Physical Sciences (SPS) at the University of Kent is looking to appoint an outstanding Reader in Forensic Science who can provide inspirational leadership, innovative research, high quality teaching and a strategic outlook as the head of the newly formed Forensic Research Group. The Forensic Science programme at Kent currently has more than 250 UGs and was ranked 4th overall in the 2019 Complete University Guide. The degree programme places special emphasis on interaction with the professional community leading to high employability. SPS has recently undergone a full strategic review of all of its operations and the Forensic Science provision has been outlined as an area for significant investment. In addition to this role, it is hoped that several other forensic positions will be appointed in the next year and this post therefore represents an exciting opportunity for an ambitious individual to join a growing team of staff in a vibrant and dynamic school.

The School is an expanding and aspirational department which has enjoyed extensive investment over the past five years which has seen a doubling of academic staff as well as around £15 million spent on laboratory refurbishment, equipment, and general upgrade. In the latest REF 98% of our research in Chemistry was judged to be of international quality, of which 78% was world-leading or internationally excellent. The Forensic Research Group has strong links to defence and forensic research labs, alongside well established industrial links in the biological and analytical sciences.

Located in the historic City of Canterbury in Kent – close to London as well as the beautiful Kent coastline - the University has an international reach, a reputation for world-class research and an outstanding student experience, reflected in the University being awarded gold, the highest rating, in the UK Government's Teaching Excellence Framework.

The Role

The successful applicant is expected to have internationally recognised research agenda, high quality publications that will enhance the reputation and impact of the school, and a demonstrated ability to produce competitive bids for research and enterprise funding. They will be passionate about inspiring our students, becoming an active an integral member of the Forensic Science teaching staff at undergraduate and postgraduate levels, as well as supervising postgraduate research degrees.

As part of our 10-year strategy, the School of Physical Sciences and University of Kent is investing in the expansion of the Forensic Research Group (FRG), to complement its outstanding taught courses and ongoing research. The group already has an impressive research profile across a broad range of research, currently focussed around four three main themes: Interfacial Technologies – Developing sensors and engineering technologies for the interrogation of biological systems. Forensic Imaging – the design of instrumentation and analysis software for human identification alongside cultural and biological analysis; and Soft Functional Materials Chemistry – the synthesis, characterisation and application of organic and macromolecular materials for forensic and defence applications. As part of the strategy review performed in 2019, the FRG is also currently developing its new research theme in “Biological and Cultural Security”.

The successful candidate will lead the FRG and play a pivotal role in establishing the research strategy and direction of the new group. They will undertake innovative new avenues of internationally competitive research within the group, whilst complementing and focussing the direction of the current and future research activities, and making use of its extensive analytical and/or materials equipment characterisation suite including a Bruker Neo NMR - the most up to date instrument on the market (which has only currently been installed in three UK universities) and purchase of an ion mobility spectrometer for forensic studies. The School has also invested in a ‘Crime scene’ house where students can examine and conduct ‘major incident’ exercises and react in real time to an unfolding event.

There will also be the opportunity to interact with the other new SPS research groups, including:

- Applied Optics Group (AOG)
- Astrophysics and Planetary Science (APS)
- Materials for Energy and Electronics (MEE)
- Physics of Quantum Materials (PQM)
- Supramolecular Interfacial and Synthetic Chemistry (SISC)

Beyond SPS, there are already close links between the FRG and the Centre for Heritage at the University and with researchers in the Schools of Anthropology, Engineering, Biosciences and Sports Sciences. These offer a broad range of ‘spoke’ interactions that can be developed with the core ‘hub’ of Forensic Science researchers.



Living and working in Kent:

The School of Physical Sciences is situated in the modern science laboratories on the Canterbury Campus. This green garden campus overlooks the historic city – which is the cultural and intellectual capital of the county.

Canterbury is a bustling city full with shops, restaurants and plenty of history and heritage. The University has close links with the City and our students have their graduation ceremony in the world-famous cathedral.

The city is close to the coast but also just an hour by high-speed train to London. Ashford International is about 30 minutes away, with direct trains to Paris and Brussels in less than two hours.

In the heart of the Garden of England, the University is close to a number of other bustling cities as well as picturesque rural villages and beautiful coastal towns. These provide a range of accommodation from smart city flats, to family homes on new estates and character properties – to suit all lifestyles and budgets. The county also has a large number of outstanding primary and secondary schools.

Key Accountabilities / Primary Responsibilities

- Conduct original research of the highest quality, leading to publications at an internationally leading level in forensic-related areas.
- Seek opportunities to ensure the research has impact, whether through knowledge transfer, policy advice, public engagement or other means.
- Raise grant income sufficient to support their research and that of the wider group.
- Contribute to the development and implementation of research, innovation and teaching strategies within the school, particularly in the area of functional materials.
- Provide vision, leadership and mentorship in Forensic Science and its related research.
- Contribute to internal and external networks to foster collaboration and share information and ideas, and to promote the school, and the institution.
- Promote and market the work of the School in the subject area both nationally and internationally.
- Contribute to the teaching, training and assessment of students at both undergraduate and postgraduate levels.
- Provide academic administrative support to the school where appropriate.

Key Duties

Research



- Lead new directions of forensic research in the School of Physical Sciences, ensuring that it makes a strong contribution to its research, innovation and public engagement profile.
- Provide strategic advice to the Head of School, and leadership and mentoring to colleagues.
- Take on appropriate administrative and management roles within the school and the wider university.
- To contribute significantly to the research profile of the school by producing research of an international standard in the area related to forensic science or complementary areas.
- To secure external research funding through research grants or contracts to support a well-defined research agenda.
- To publish research articles in high quality peer-reviewed journals.
- To supervise research assistants and research students.
- Develop research-based links with colleagues nationally and internationally to enhance research opportunities.
- To attend and present research findings and papers at academic and professional conferences, and to contribute to the external visibility of the research within the school.

Teaching

- Develop, deliver and assess excellent teaching and learning materials in a variety of settings across a range of modules.
- To undertake academic duties such as the setting of examination papers, marking, invigilation and pastoral support of students, so as to sustain the delivery of high quality teaching.
- Supervise undergraduate and postgraduate students undertaking project work.
- Contribute to the planning of teaching programmes that achieve the highest standards, including where appropriate gaining accreditation from professional bodies.
- Collaborate with academic colleagues on course delivery, development, curriculum changes and on the assessment of students' work to enhance the SPS student experience.
- Provide pastoral support to students.
- Such other duties, commensurate with the grading of the post that may be assigned by the Head of Department or their nominee.

Administration



- To undertake specific school roles and management functions as may be reasonably required by the Head of School. It is expected that the successful applicant will act as leader of Forensic Research Group (FRG) for an initial period of three years.
- To attend School meetings and to participate in other committees and working groups within the school, the faculty, and the wider University to which the post holder is appointed or elected.
- To undertake, subject to the agreement of the Head of School and the University as appropriate, external commitments which reflect well upon, and enhance the reputation of the University.

Health, Safety & Wellbeing Considerations

This role involves undertaking duties which include the Health, Safety and wellbeing issues outlined below. Please be aware of these, when considering your suitability for the role.

- Regular use of Screen Display Equipment
- Working with chemicals (incl. requirement to wear latex gloves and incl. work with CO₂ or N₂ gasses)
- Working with radiation

Internal & External Relationships

Internal: School of Physical Sciences and wider university staff and students.

External: Funding bodies, potential research and enterprise partners, research colleagues, professional bodies, media and prospective students and their families.

Person Specification

The Person Specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications are assessed against each of the criteria either at application or interview stage. Applications will be deemed unsuccessful if an essential criterion is not met. This may also help you self-select if you are suitable for the role.

Qualifications / Training	Essential	Desirable	Assess via*
A PhD (or equivalent experience) in Forensic Science, Chemistry, Biochemistry, Materials or a related discipline.	✓		A
PGCHE or similar teaching qualification.		✓*	A

- * If not in possession of a PGCHE it is expected that the successful Candidate will seek HEA Fellowship after appointment

Experience / Knowledge	Essential	Desirable	Assess via*
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A consistent record of international excellence in forensic research or complementary area.	✓		A
A consistent track record of publications in leading international journals or equivalent professional literature.	✓		A
Clear and ambitious goals for future research objectives as outlined in the research plan.	✓		A, I
Evidence of earning external recognition of research work.	✓		A, I
A successful track record of obtaining research funding.	✓		A
Experience of teaching Forensic Science, Chemistry or a related subject at an undergraduate level.	✓		A
A record of research leadership as evidenced by supervision of research students, invited talks at major events, and service on editorial boards, panels of grant awarding bodies, committees of leading conferences, etc.	✓		A
Experience of administrative responsibilities in a higher education setting.		✓	A, I

Skills / Abilities	Essential	Desirable	Assess via*
Ability to make a strong contribution to the research undertaken in the School.	✓		I
Ability to lead a research group.	✓		I
Contribution to knowledge transfer and the impact agenda		✓	I
Excellent interpersonal, presentation and communication skills.		✓	I
Ability to communicate freely with and relate to undergraduate and postgraduate students.		✓	I

Additional Attributes	Essential	Desirable	Assess via*
Potential for academic leadership.	✓		I

Willingness to take on their share of the responsibility in the School of Physical Sciences.	✓		I
Willingness to transition research to a commercial setting through enterprise activities.	✓		I

In order to be appointed at the rank of Reader, candidates must be able to demonstrate:

(i) the ability of the individual to make a contribution to the University of strategic importance; this might, for example, include significant leadership responsibilities at a senior level through the encouragement of research and/or pedagogy, the organisation and development of teaching, and/or the promotion of an innovation and enterprise activity;

and

(ii) an outstanding and consistent national (and in the case of research, international) contribution to the advancement of their subject, bringing distinction to themselves and the University.