Academic Staff

Job description

**Post Title:** Associate Professor in: 3) Novel Print Processes and Materials for Physical and Tactile Surfaces

**Grade:** Grade I

**Faculty/Service:** Centre for Fine Print Research

**Accountable to:** Director and Deputy Director

**Accountable for:** Senior and Early Career Researchers, technicians and PhD students

**Post no:** R00200

**Job context**

The Centre for Fine Print Research (CFPR) at UWE Bristol is a small and distinctive centre of research excellence described in REF 2014 feedback as “world-leading”. With a unique knowledge of 19th century, traditional and digital 2D, 2.5D and 3D print technologies, colour and colour printing and artists’ publishing in traditional and digital formats, it boasts a strong reputation that attracts world class collaborators across a wide range of sectors, including fine art, design, material science and engineering.

The CFPR has been awarded funding from the Research England Expanding Excellence in England scheme to develop into a major globally-recognised research centre for new printing methods, a contemporary and truly inter-disciplinary centre for the future, where external partners co-create research with academics in state-of-the-art facilities. The funding will enable a step-change in the scale and scope of CFPR activities, to capitalise on current strengths and capacity to develop new and innovative ways of working. These will include innovative surface print, design and fabrication in 2 and 3 dimensions combining a multi-technology approach to novel materials and processes. This will more than double the scale of current activities, expand the scale and reach of leading-edge research, and extend the scope of collaborative R&D with multiple industry partners.

We are looking for thinkers, writers, practitioners and leaders at a range of levels. The funding supports a range of posts including associate professors, technicians, PDRAs in our key areas, and which includes fine art, print, product design, robotics, electronics, software, manufacturing, materials science and nanotechnology. We will also need new support staff who can work professionally and flexibly in teams, collaborate and communicate with the existing CFPR team.

As a result of the Research England application, we already have a significant number of companies who have pledged their support in our future through studentships and fellowships, funding in kind through materials and expertise, as well as cash. It will be up to you to ensure that we are able to deliver on these new collaborations.
Job purpose

The Associate Professor posts are an innovative and exciting opportunity for exceptional individuals to focus on building research capacity and develop one of the three themes highlighted below, we anticipate that there may be some cross-over between the themes. Funded in the first instance by Research England for three years these are permanent positions. We expect the post-holders to further develop research trajectory securing internally-funded research support and capitalising on opportunities for external funding. You must have a portfolio of internationally important outputs ready for submission to REF2021.

You will lead a team on collaborative research projects aimed at enabling world-leading research. You will collaborate with companies and colleagues in our state-of-the-art laboratories, using and developing equipment to develop novel ideas and projects. You will also build and develop new academic networks, forging industrial partnerships and nurturing new talent. You will be working alongside the CFPR director and business development manager, to shape the direction of the Centre contributing on long-term strategic goals and you will be actively planning and writing to secure future grants. from a portfolio of funders including research councils, Innovate UK, charities and contract research. It is expected that by year 2 you will attract further partners to invest into research in the CFPR. You will also lead the design, delivery and assessment of research-informed teaching and learning in the form of CPD and modules development and delivery to achieve outstanding learning outcomes for our students.

CFPR has an interdisciplinary vision, critical for spearheading new insights into the digital artefact through material creation, alternatives to halftoning, and colour printing for physical surface reproduction. CFPR will build on its collaborative expertise to develop vital knowledge in materials science, inks, electronics and engineering for deposition and printing platforms including 3D robotics.

The vision is to solve real world problems and transform digital information into physical artefacts centred around three themes:

1. Industry and Transformative Technologies for Practice-Led Design
2. Cultural Heritage, Reconstruction and Reproduction

UWE Associate Professors are defined by their growing distinction, standing and leadership in their subject, discipline and/or practice. You are expected to make a significant contribution and demonstrate excellence in at least one of three core domains and to make an effective contribution in one other. The three core domains are:

1. Research with Impact (core domain)
2. Learning and Teaching
3. Knowledge Exchange, Business and Public Engagement and Innovation

In addition to the above, all Associate Professors are expected to make a significant and sustained contribution to:

- Leadership and Citizenship in the broadest sense in support of colleagues, their core domain and subject area and university as a whole
- Personal contribution to learning and teaching with emphasis on contribution to and delivery of learning and teaching to our doctoral and CPD students.
Theme 3
Physical Surface, Novel Materials and Tactile Printing

Through active collaboration in European and other international and scientific networks, the Centre has established prominence in accurate colour measurement and high-quality reproduction of printed images. The Centre is now moving into 2.5D printing and is at the forefront in identifying new opportunities for physical and tactile surfaces. This has included low relief deposition of pigments and paints, and the development of software to convert images from pixels into lines, and that uses G-code to drive specially constructed painting and drawing machines. The Centre is exploring how we can ensure our cities are more welcoming and navigable, engaging and informative for people with visual impairments and disabilities, as well as the very young and elderly. Research in this area has potential to convert intangible places and objects, for example, city or museum maps, buildings that are too large to apprehend, or fragile objects in museums that cannot be touched, into tactile pictures and printed objects. 2.5D printed maps will incorporate smart technology, communicate on different levels with its audience.

Principal accountabilities

Research with Impact

- To achieve an established and growing record of high quality, peer-reviewed published outputs or other outputs appropriate to and recognised within the discipline in regional, national and internationally regarded sources.

- To achieve an established and growing record of securing externally funded research projects, individually or as part of a team, acting as Principal Investigator or Co-investigator, ensuring achievement of project objectives.

- To demonstrate the capacity to secure research with impact beyond academia including potential for input to prospective impact case studies of the form required for the REF.

- To take a significant role in the development and implementation of research strategy in the research centre, with growing capacity to lead at university level.

- To lead a team in collaborative partnership including with other HEIs and other external organisations on significant regional, national and international research projects.

- To undertake influential engagement and promotional work which stimulates interest in the subject area and enhances the university's reputation, including contribution (often by invitation) to significant regional, national and/or international conferences, public facing events, exhibitions, broadcasting media or other fora appropriate to field.

- To demonstrate growing evidence of esteem and peer recognition in subject or field at national and/or international levels.

Learning and Teaching

- To attract, recruit and source alternative funding for PhD studentships. Be able to direct or co-supervise to successful completion.

- To achieve an established and growing record of leading, developing, innovating and influencing in your field of learning and teaching which is recognised at regional and national (and growing
potential for international level.

- In your field of learning and teaching, to achieve an established and growing record of enquiry, reflection, scholarship and dissemination through esteem activities that demonstrates subject expertise and influence within the HE sector and other communities of practice.

Knowledge Exchange, Business and Public Engagement and Innovation

- To achieve an established and growing record of securing external funding for knowledge exchange, innovation or engagement (typically on a local scale, but with the early indications of ability to do so on a wider scale).

- To achieve an established and growing portfolio of consultancy advice and income generation (other than research) to business/industrial or other collaboration partners.

- To lead knowledge exchange, engagement or innovation projects and initiatives as PI or Co-I on successful bids for external funded projects.

- To participate (with increasing capacity to lead) knowledge exchange, engagement or innovation activity with impact beyond academia including change in stakeholder practice or ways of working.

- To lead the development and implementation of knowledge exchange, engagement or innovation strategy at departmental, centre and faculty level, with growing capacity at university level.

- To lead collaborative partnership with other HEIs/external organisations on significant knowledge exchange, engagement or innovation projects at regional and national level, and with growing capacity at international level.

- To demonstrate a growing evidence of esteem and peer recognition for knowledge exchange, engagement or innovation activities at regional, national and/or international levels.

- To participate individually or as part of a team, on the commercialisation and exploitation of new knowledge, products or processes.

- To lead and co-ordinate activities to identify opportunities with external partners, organisations or stakeholders of demonstrable relevance and benefit to the university.

Leadership and Citizenship

- To provide effective leadership of projects, programmes, groups and teams within the centre that have significant impact on direction, priorities and/or performance.

- To provide effective leadership of projects, programmes, groups and teams with external collaborators at regional and national scales, ensuring successful achievement of overall objectives.

- To take formal management of staff teams, ensuring effective deployment of resources and budgets, with support from senior staff.

- To contribute to the wider objective setting and strategic direction, development, implementation and communication of strategy and policy at department and faculty level, with growing contribution at university level.

- To take an active role in developing capability in departmental teams, including mentoring and coaching colleagues enabling potential to be maximised.
• To contribute to building high performance teams, developing effective collaboration and managing performance to achieve desired outcomes, and undertaking performance and development reviews.

Personal Contribution to Learning and Teaching
• To make a significant personal contribution to and delivery of learning and teaching to undergraduate, postgraduate and CPD students and to reflect the importance of research, knowledge exchange and engagement activity in underpinning learning and teaching, employability and student experience.

Person specification

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<th>Qualifications / Professional membership / Knowledge</th>
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<td>• Qualified to doctoral level in a subject relevant to this post Or • If from a professional background, a recognised professional qualification equivalent to postgraduate level in a subject relevant to this post, together with professional / industry experience • Professional membership/registration (as applicable) • PG Certificate in Learning and Teaching in HE, academic professional apprenticeship, or equivalent qualification • Fellowship of the HEA aligned to appropriate descriptor of the UKPSF • A leading authority in their subject area with a substantial record for outstanding academic or industrial work and leadership externally recognised at regional, national and/or international level</td>
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<th>Research with impact</th>
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<td>• Established and growing publication record and research outputs of a quality that is nationally and/or internationally excellent, including lead authorship in high quality peer reviewed articles and journals, reports and public events • Established and growing track record of securing funding from a range of sources as demonstrated by current portfolio</td>
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<td>• Demonstrate supervision of PhD studentship to successful completion • Established and growing record of leading, developing, innovating and influencing in the field of learning and teaching which is recognised regionally and nationally • Established and growing record of enquiry and scholarship e.g. production of published outputs and/or other indicators of esteem such as authorship of text-books, articles, chapters and reports, external conference presentations, and other activities which have influence within HE sector and wider communities of practice</td>
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<th>Knowledge Exchange, external engagement and Innovation</th>
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<td>• Established and growing record of knowledge exchange, external engagement and innovation activities impact communities beyond academia • Established and growing track record of securing funding from a range of sources for knowledge exchange, innovation or engagement as demonstrated by current portfolio</td>
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<tr>
<td>• A track record of successful and innovative practice in the development, design and delivery of research • Successful development of networks, partnerships and collaborations of demonstrable importance to the centre and/or university</td>
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<td>Substantial contribution to strategic development and planning</td>
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<td>Application of strategic thinking, understanding and responding to context, timely decision making and follow through</td>
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<td>Successful leadership and management of projects, teams and people, including developing and mentoring others to fulfil their potential</td>
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<td>Excellent interpersonal and communication skills, including the ability to develop positive and effective working relationships, and to use advocacy, influencing and negotiation skills.</td>
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<td>Expertise in budgeting, forecasting and the management of financial and other resources</td>
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**UWE Leadership Behaviours**

1. **Leads authentically**
   Demonstrates and articulates high expectations of self and others to improve and sustain performance. Seeks to give feedback that is credible and challenging, as well as supportive and encouraging to improve performance where needed. Inspires and actively empowers individuals and teams to deliver on task, to maximise their performance and potential.

2. **Leads change**
   Shapes and articulates the overall vision, setting a clear direction that engages and connects people in the delivery of change plans. Learns from experience and has confidence to try new ideas, drawing from internal and external sources. Willing to take on new challenges and maximises future opportunities and possibilities.

3. **Builds trust**
   Builds a shared purpose and trusts team members to achieve objectives. Uses clear unambiguous language, actively listens, encourages feedback and can be trusted to deliver. Influences with integrity, actively builds working relationships and challenges inappropriate behaviour. Values equality and diversity and personally demonstrates an inclusive approach.

4. **Think and acts strategically**
   Understands the context and environment in which the university operates and how performance compares to its competitors. Seeks and assimilates different types of information to make informed decisions that are consistent, clearly communicated and followed through. Demonstrates sound judgement based on a clear set of values.

5. **Personally effective**
   Has the ability and confidence to interact effectively with people in a range of contexts. Demonstrates emotional self-awareness and reflects on the potential impact of their behaviour on others. Exhibits an engaging, energetic and enthusiastic leadership style, role modelling expected behaviours and encouraging feedback on own performance.

**Health and Safety/Risks**

This post has been identified with the following risks: (activities, hazards or exposures)

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