

#### **ROLE DESCRIPTION**

**Post:** Research Fellow in Distributed Manufacture for a Circular

Economy

**Department:** The Burberry Material Futures Research Group

**Grade:** 9

**Contract:** Fixed-term until 31 July 2022

**Responsible to:** Professor of Design & Materials

## **Background**

## The Royal College of Art

The Royal College of Art is the UK's only entirely postgraduate university of art and design, dedicated to teaching, research and knowledge exchange with industry.

The College's 1967 Royal Charter specifies that the College's purpose is "to advance learning, knowledge and professional competence particularly in the field of the fine arts... through teaching, research and collaboration with industry and commerce". Fifty years on, the College remains in the vanguard of creative enquiry, and in 2018/19 the College will have around 2,300 students from more than 75 countries registered for MA, MRes, MPhil and PhD degrees. Applications are strong, and the College's strategy sets out an ambitious plan both to increase student places to 3,000 by 2021 and to launch new programmes underpinned by its world-class research.

The College is located on three sites in central London, in Battersea, Kensington, and White City. In 2016 the Chancellor of the Exchequer announced an unprecedented £54 million grant to support a major expansion at Battersea to create a flagship innovation campus, housing new research centres, knowledge exchange labs and additional space for the College's highly successful business incubator, InnovationRCA. With planning consent achieved in February 2018, work on the new building started in early 2018 with the completed campus due for completion in 2020/21.

As well as welcoming students from around the world, the College's global dimension is enhanced through extensive links with business and industry and its partnerships with leading art and design, cultural and educational institutions including, among many others, its neighbours in Kensington (Imperial College London, the Victoria & Albert Museum, the Royal College of Music, the Science Museum, and the Natural History Museum).

The College has more than 400 permanent academic, technical and administrative staff, with in excess of 800 visiting lecturers and professors, including internationally renowned artists, designers, theorists and practitioners. These staff, together with innovative forms of teaching and learning, dedicated technical facilities and research centres, all contribute to create an exceptional creative and intellectual environment and a remarkable record of graduate employment. Numerous eminent graduates have created far-reaching impact and influence, and the College boasts such noteworthy alumni as Sir James Dyson, Thomas Heatherwick, David Hockney, Tracey Emin, Christopher Bailey, Julien McDonald, Margaret Calvert, Alison Jackson, Idris Khan, Sir Quentin Blake, Sir David Adjaye, Suzie Templeton and Sir Ridley Scott.

# The Burberry Materials Futures Research Group

In 2017 the Burberry Foundation awarded £3 million to the Royal College of Art to establish the Burberry Material Futures Research Group – the first of its kind in the world. The new Group is intended to be the first explicit 'STEAM' (science, technology, engineering, arts, mathematics) research centre at a traditional art and design university, applying radical thinking to develop more sustainable materials, transform consumer experience and advance manufacturing for the benefit of industry and the wider community. The Group provides a design-led disruptive research environment for the development of new approaches to innovation in materials and applications.

The intention is for the Group to bring together world-leading researchers in design-led material futures to investigate the major challenges of new and sustainable materials, new and sustainable approaches to manufacturing and supply chain processes, and design-led innovations in consumer experience and product interaction. The Group will comprise of three Research Fellows, and marks the first phase of the RCA Material Science Research Centre, which will undertake pure and applied research that addresses industry and real world challenges. It will do this by combining the RCA's world-leading research strengths in design-led innovation, creativity and craft, with expertise from science disciplines, to create an interdisciplinary research team of Research Fellows from both design and materials science and manufacturing engineering disciplines. Our real world challenges relating to sustainability necessitate such an interdisciplinary STEAM approach in order to produce holistic technical-social-human-economic innovations.

## **Purpose of the role:**

Working as part of a small but growing team of researchers under Professor of Design & Materials, Sharon Baurley, in the newly established Burberry Material Futures Research Group at the RCA, this post involves working with the team to carry out the research programme by making a contribution to collaborative research projects in core research areas related to distributed manufacture for a circular economy, including:

 Resources, Ethics and Transparency: new systems of thinking that addresses scalability of machines and tools, transportability, reshoring, networked micro units, dispersed manufacture and novel, and new technologies and machines;

- Community Impact of Shifting Manufacturing: micro/specialised production, the new industrial craftsperson, reskilling, upskilling of workforces and communities:
- Demand Manufacturing: new systems of access to production including socially responsive engagement;
- Local Manufacturing: infrastructure, availability of resources and local pride in product and production.

The role involves initiating and planning projects, working in conjunction with academic colleagues, industry and research partners on the Centre's research programme, developing and submitting research funding applications, delivering projects, and undertaking and publishing internationally recognised research. It also involves working with partners across industry, government, public sector and community organisations and policy makers.

## Main duties and responsibilities:

- To work closely with the Burberry Material Futures Research Group research staff, undertaking high-quality and rigorous collaborative research projects which lead to robust research outputs and research publications in recognised academic journals.
- Working with the Centre Director, the Professor of Design and Materials, the Executive Director of Research Centres and the RCA's Research & KE Office, to prepare and submit funding proposals to major UK and international research funders, industry partners and other funding sources, to support the Centre's research agenda and the post-holder's own research career development plans.
- To engage with the Burberry Material Futures Research Group's sponsor companies, undertaking collaborative research projects and contributing to working relationships to maintain a productive partnership.
- To engage with relevant academic, industry, government and policy networks, representing the Centre, enhancing its profile, and seeking new partnership and sponsorship opportunities.
- To support the research career development of a small team of post-doctoral research associates, and contribute intellectually, in conjunction with the Centre Director, to the relevant team's portfolio of projects.
- To support a team research culture that reflects best practice in research conduct, including in issues and processes concerning research ethics, research integrity and research data, compliance with relevant funding body processes and reporting requirements, and RCA guidelines concerning the use and procurement of IT equipment and other equipment and facilities; to liaise with the RCA's Research and KE Office staff, Information, Learning and Technical Services staff and others to achieve this, and to undertake relevant training and development opportunities.
- To present the work of the Burberry Material Futures Research Group team at events, meetings, seminars, symposia etc. within the RCA and externally, ensuring that the Centre's research and reputation are enhanced, and tailoring content and style to a broad range of specialist and non-specialist audiences.

- To ensure that Burberry Material Futures Research Group projects are properly documented and disseminated to key audiences, via reports, papers, exhibits, publications, the website etc., working with the Centre Director, Professor of Design and Materials, the Executive Director for Research Centres, the Senior Research Fellow and the RCA Communications & Marketing team as appropriate.
- To supervise the work of any interns or junior research associates engaged in projects, ensure they are equipped to deliver agreed outputs within agreed timescales, and are undertaking work at an appropriate level.
- To contribute to identifying opportunities, preparing material for and supporting the delivery of Executive Education courses and workshops.

#### PERSON SPECIFICATION

#### **Essential:**

- PhD in the area of distributed design and manufacturing in either apparel or product areas, preferably in relation to materials circularity.
- Specified relevant subject knowledge in manufacturing technologies; cloud-based design and manufacturing.
- Evidenced experience of working at post-doctoral level in a research centre, either academic or commercial/industrial.
- Evidenced experience of carrying out research projects and publishing high quality research outputs in highly ranked academic journals.
- Evidenced experience of collaborative projects, preferably involving HE/industry collaborations in a relevant field.
- Evidenced experience of contributing to and reporting on projects, including working with project budgets.
- Demonstrable understanding of good practice in research conduct providing examples (including in research ethics, research integrity and handling research data).
- Demonstrable ability to be an effective and collaborative member of a broader team (with the potential to take a leadership role), working constructively with senior staff and supporting the work of less experienced staff or students involved in projects.
- Evidenced flexibility and confidence to tackle a wide range of tasks, with an open, pro-active, creative and problem-solving approach.
- Evidenced excellent writing, communication and presentation skills, able to adopt an appropriate style for a range of specialist and non-specialist audiences.
- Evidenced strong interpersonal and team-working skills (with the potential to develop mentoring skills).
- Genuine commitment to the aims of the Centre.

## **Additional Information:**

- Salary: £45,850 £51,260 per annum inclusive of London Allowance.
- Fixed term contract to 31 July 2022.
- Normal hours will total 35 hours per week, Monday to Friday, 9.30am to 5.30pm with an hour each day for lunch.
- 25 days annual leave plus extended breaks at Christmas and Easter.

• Contributory defined benefit pension scheme and season ticket loan are available.

# November 2018

#### **PAY & BENEFITS**

## **Pension**

The Royal College of Art is a member of the Superannuation Arrangements of the University of London (SAUL) which is a contributory defined benefit pension scheme. The college will contribute a sum equal to 16% of your salary while you pay 6%.

## **Holiday**

5 weeks' (25 days) paid leave a year plus bank and public holidays normally observed in England and Wales. In addition, the college is normally closed for six days a year, one day either side of Easter and the remainder between Christmas and New Year. Part-time staff will be entitled to the pro rata equivalent.

## **Season ticket loans**

Interest-free loans are available for staff to purchase annual season tickets.

## **Enhanced maternity and adoption pay**

Qualifying employees are entitled to enhanced maternity/adoption pay: 26 weeks' full pay, 13 weeks Statutory Maternity/Adoption Pay. This compares to the statutory provision of 90% of average pay for 6 weeks followed by Statutory Maternity/Adoption Pay for 33 weeks.

## **Enhanced paternity pay**

Qualifying employees are entitled to two weeks' paternity leave entitlement at full pay. This compares to the statutory provision of two weeks' pay at the statutory rate.

## **Enhanced sick pay**

Occupational sick pay after six months' service is three months' full pay/three months' half pay.

## 24/7 confidential support

Staff and family members in their household have access to a free, external confidential support service for work, financial, legal, family and personal problems 24 hours a day, 365 days a year.

## Occupational health

Occupational Health support for the College is provided by Imperial College's occupational health service at their South Kensington Campus.

## **Cycle to Work Scheme**

The Royal College of Art has signed up to the Cycle to Work Scheme – part of the government's Green Transport Initiative – which allows employees to make significant savings on purchasing new bikes and safety equipment.

#### **Life Cover**

Active members of the SAUL pension scheme automatically receive life cover. A lump sum of four times your salary together with a refund of your contributions and a 2/3 pension for your dependent/spouse is payable should you die whilst in employment.

# Library

All staff are welcome to join the college library.

# **Events**

All staff are welcome to attend exhibitions, lectures and private views held by academic schools and programmes.