

Post: Postdoctoral Researcher, Circular Supply Chain Systems Design

Department: Materials Science Research Centre (MSRC)

Grade: 7

Responsible to: Director of Materials Science Research Centre (MSRC)

Term: Fixed term for 21 months

(Please note, due to funding, the duration of the contract could be shorter if the post holder cannot commence employment by $1^{\rm st}$ April

2023)

FTE: 1.0 FTE

Background

The Royal College of Art is the UK's only entirely postgraduate institution of art and design, dedicated to teaching, research and knowledge exchange with industry. The RCA has been ranked the number one university-level institution for art and design, internationally, for the eighth consecutive year according to the QS World University Rankings by Subject, 2022.

The College currently has some 2,700 students registered for Graduate Diploma, MA, MRes, MPhil and PhD degrees, and this is set to rise to 3,300 in coming years with the introduction of the new campus at Battersea during 2022. The majority of postgraduate teaching and research supervision is delivered by the RCA's four Schools: Architecture, Arts and Humanities; Communication; Design, with each School led by a Dean of international standing, and a recognised leader in their field.

In addition, the RCA has a number of established and planned research centres: the Helen Hamlyn Centre for Design; the Material Science Research Centre (which includes the Burberry Materials Futures Research Group and the Textiles Circularity Centre); the Intelligent Mobility Design Centre, Computer Science Research Centre, and a future centre in Drawing. The RCA is also home to one of the UK's most successful university incubators, InnovationRCA.

Our People

The RCA's Royal Visitor (Patron) is HRH Prince of Wales; its Chancellor is Sir Jony Ive, and the Pro-Chancellor and Chair of Council is Sir Peter Bazalgette. The RCA's Vice-Chancellor - the CEO of the institution - is Dr Paul Thompson. The RCA has more than 500 permanent staff, including internationally renowned artists, designers, architects, theorists and curators. These staff, together with an innovative pedagogy, world-class



technical facilities and research centres, all contribute to an exceptional environment and a remarkable record of graduate employment. Generations of eminent graduates have created far-reaching impact and influence, such as Barbara Hepworth, Bridget Riley, David Hockney, Sir Ridley Scott, Sir James Dyson OM, Asif Kapadia, Thomas Heatherwick, Chris Ofili, Tracey Emin, Jake and Dinos Chapman, Christopher Bailey, Idris Khan, Chantal Joffe, Sir David Adjaye, Erdem, Philip Treacey, Monster Chetwynd, Oscar Murillo and Lina

Strategic Plan 2022-2027

Lapelyte.

The RCA has developed a new strategic plan with the publication of a new Strategic Vision and Plan for the next five years, and the appointment of our new Chair of Council, Sir Peter Bazalgette.

This plan will embrace the roll out of a new model of delivery for our taught postgraduate programmes to support access and flexibility; it will underscore our commitment to being the world's most research-intensive art and design university; and it will commit to a number of Equity and Diversity goals which will lead towards the RCA becoming an antiracist institution.

Materials Science Research Centre

Research in the Materials Science Research Centre (MSRC) focuses on the *invention* and the *experience* of materials to address real world challenges, specifically environmental sustainability, and human health and wellbeing. Established in 2017, the Centre is part of the RCA's ambition to increase interdisciplinary research, particularly bringing science subjects together with Art & Design (STEAM) to tackle global challenges. As the MSRC has evolved, it has developed partnerships with a wide range of academic and industry partners in the UK and internationally.

UKRI Interdisciplinary Textiles Circularity Centre

The MSRC, in partnership with an interdisciplinary consortium of UK academic institutions, won a large four-year UK Research & Innovation (UKRI) Interdisciplinary Circular Economy Programme award to drive its mission of sustainability in textiles. The Textiles Circularity Centre (TCC) (EP/V011766/1) is aiming to realise a future circular textiles economy for the UK SME apparel-fashion industry based on bio waste - that is shaped by people's participation in materials circularity, consumer experience and supply chain - to create a coupling between the bio waste resource flow and wellbeing. Circularising resource flows of textiles will stimulate innovation in the UK textile manufacturing and SME apparel, and creative technology sectors, whilst reducing reliance on imported and environmentally and ethically impactful materials, and diversifying supply chains. The Interdisciplinary Textiles Circularity Centre has three interconnected Research Strands – *Materials Circularity, Consumer Experience*, and *Circular Supply Chain*.

The TCC aims to design and develop manufacturing tools for the fabrication of regenerative textiles that enable designers to creatively differentiate themselves at small scale, and to design consumer experiences and related tools at the point of consumption



- both of which enable brands and consumers to extend the lifecycle of apparel. The task of supply chain configurations is to connect these strategies.

Purpose of the Post:

We are seeking a highly creative systems design post-doctoral researcher – who has a design background - to work with the *Circular Supply Chain* Research Strand of the Textiles Circularity Centre. This research strand seeks to establish narrow, slow and closed resource flows through better tools for Circular Supply Chains. Led by the University of Cambridge Institute for Manufacturing and the RCA, and working closely with the TCC consortium, it will study which novel supply chain configurations and technologies are needed for bio-based textiles circular supply chains. The postholder will work closely with the TCC consortium to co-create a circular information platform that enables flows of value, information and textiles, and to recommend digital solutions and interface designs.

Main Duties and Responsibilities:

- To work closely with the TCC consortium.
- To undertake high-quality, rigorous, and collaborative research projects which lead to robust research outcomes.
- In collaboration with team members, to manage the award, ensuring execution of proposed research, efficient management of resources, and effective delivery of research outcomes and impacts.
- To work with academic, industry and third sector partners as appropriate on collaborative research and knowledge exchange projects.
- To support engagement with partnering companies and initiatives, undertaking collaborative research projects and contributing to working relationships to maintain a productive partnership.
- To produce and disseminate research outputs that are effectively shared with the world through appropriate channels (for example books, peer-reviewed journals, conferences) to the discipline.
- To produce research outputs. These outputs may be suitable for submission to the national Research Excellence Framework (REF) exercise, with a quality of at least 3* as per the REF definition.
- To support communication of research outcomes to a wide variety of audiences, including through public engagement, tailoring content and style to a broad range of specialist and non-specialist audiences.
- To participate in relevant academic, industry, government and policy networks as appropriate, presenting the work of, and representing the Centre.
- To participate in Materials Circularity Research Strand, Textiles Circularity Centre, and Materials Science Research Centre team meetings and activities, events and workshops, contributing ideas for development, delivery and promotion of projects, and to communicate insights to the consortium, lab and centre.
- To contribute to the RCA Academic community through presentations or teaching in appropriate forums and participation in RCA-wide activities such as Across RCA or Committees and boards as requested.
- Where appropriate, to support the delivery of Executive Education courses and workshops.



Postgraduate Art & Design

- Where appropriate and relevant, to assist the lead researcher in supervision of junior researchers or project workers engaged in projects, ensure they are equipped to deliver outputs within agreed timescales and are undertaking work at an appropriate level.
- To conduct all research reflecting best practice in ethics, integrity, research data management, and research governance, ensuring compliance with RCA policies and external funding terms and conditions and sector standards.
- To ensure compliance with RCA processes and procedures in relation to procurement and use of equipment and facilities, including health and safety policies, working with relevant departments across RCA.
- To ensure confidentiality of sensitive project information is maintained, through appropriate project data protection.
- To undertake general administrative and other tasks relevant as part of the team's and the Centre's work, as required by senior staff.

Person Specification

Essential

- The candidate must be able to demonstrate at least one of the following:
 PhD in systems design (preferably related to supply chain design, or a design application), or a closely related discipline, or equivalent level of experience in a different sector, or a Masters degree and significant experience in research projects.
- Evidence of high levels of design creative thinking and methods.
- Evidenced experience of contributing to and reporting on projects.
- Demonstrable understanding of good practice in research conduct (including in research ethics, research integrity and handling research data).
- Demonstrable ability to be a collaborative member of a broader team, 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.
- Enthusiasm for Circular Economy and transforming existing supply chains, in particular within apparel and textile Industry.
- Confidence in reviewing and evaluating business information platforms, data standards, physical and digital technologies that are integral to supply chains.
- Experience in systems thinking and design research.
- Experience with data visualisation and visual design for complex information flow modelling.

Desirable

- Experience in data modelling, design and implementation of databases and information system design.
- Knowledge of interface design, information systems design.



Postgraduate Art & Design

- Evidence of producing quality research outputs relevant to the career stage and discipline.
- Evidenced experience of collaborative projects, preferably involving HE/industry collaborations in a relevant field.
- Background and experience in the apparel and textile Industry.
- Development experience in full stack programming, to create applications and processes.
- Experience with advanced technologies applied to supply chains such as AI, distributed ledgers, and physical sensors.

Additional information

Salary working 5 days per week: £39,670- £43,029 per annum, inclusive of London Allowance.

Normal hours will total 35 hours per week over 5 days, 9.30am to 5.30pm with an hour each day for lunch.

25 days annual leave per annum pro rata, plus extended breaks at Christmas and Easter, at the discretion of the College.

A contributory defined benefit pension scheme and interest free season ticket loan are available.

Term: Fixed term for 21 months (shorter if the post holder cannot commence employment by 1st April 2023)

Location: Royal College of Art Battersea South Campus, London

November 2022



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 19% 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, at the discretion of the college. 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.