



**UNIVERSITY OF LEEDS**

## **CANDIDATE BRIEF**

**Research Fellow in Polar Liquid Crystal Chemistry,  
Faculty of Engineering and Physical Sciences**



**Salary: Grade 7 (£35,333 – £42,155 p.a.)**

**Reference: EPSCH1077**

**Location: Leeds (with scope for hybrid working)**

**Closing date: Sunday 11<sup>th</sup> December 2022**

**Fixed-term for 3 years**

**We are open to discussing flexible working arrangements**

# Research Fellow in Polar Liquid Crystal Chemistry, School of Chemistry.

**Are you an ambitious researcher looking for your next challenge? Do you want to further your career in one of the leading research-intensive Universities in the UK?**

You will join a programme of research into polar and ferroelectric liquid crystals with Dr. Richard Mandle in the Soft Matter Physics group.

Holding a PhD (or have submitted your thesis before taking up the role) in Chemistry, Chemical Engineering, or a related discipline; you will have hands on experience in the synthesis of small molecules, allied to a strong background in chemical characterisation.

You will work as part of a multidisciplinary team with access to state-of-the-art equipment and facilities, focusing on recently discovered polar nematic liquid crystalline systems. You will work on the design, synthesis and characterisation of polar nematic materials. In addition to contribution to different topics as part of the research team, you will be an excellent written and oral communicator, contributing to scientific publications and patents, as well as through dissemination at conferences and industry-focused meetings.

## What does the role entail?

As a Research Fellow, your main duties will include:

- The design, planning and execution of research work as required to accomplish the aims of the project, in consultation with Dr. Richard Mandle;
- Identifying, refining and pursuing independent and original research ideas within and beyond the scope of this project;
- Generating research outputs, analysing and interpreting the results and developing independent and original ideas, as appropriate;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods, models and techniques used and results obtained by other researchers and relating such evaluations to your own research;



- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output including presentations at meetings and conferences;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer and outreach activities where appropriate;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project;
- Contributing to, and encouraging, a safe working environment;
- A commitment to equality, diversity and inclusion.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

## What will you bring to the role?

As a Research Fellow, you will have:

- A PhD (or have submitted your thesis before taking up the role) in Chemistry or Chemical Engineering, or a closely allied discipline;
- A strong background in the synthesis and chemical characterisation of small molecules;
- Experience in experimental characterisation techniques relevant to liquid crystalline materials (e.g. by microscopy, DSC, X-ray);
- The ability to design, execute and write up research independently;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.



You may also have:

- Experience in synthesising and/or characterisation of liquid crystals, preferably polar nematics (e.g. RM734);
- Experience with electrochemical, photochemical, and/or continuous-flow synthesis methodology;
- Prior experience of working in an interdisciplinary environment in academia, as part of a collaboration, or in industrial setting;
- Experience of pursuing external funding to support research.

## How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the [advertised closing date](#).

## Contact information

To explore the post further or for any queries you may have, please contact:

**[Dr. Richard Mandle](#), University Academic Fellow and UKRI Future Leaders Fellow**

Email: [R.Mandle@leeds.ac.uk](mailto:R.Mandle@leeds.ac.uk)

## Additional information

### Faculty and School Information

Further information is available on the research and teaching activities of the [Faculty of Engineering & Physical Sciences](#), and the [School of Chemistry](#)

### A diverse workforce

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.



The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN [Silver](#) Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our [equality and inclusion webpage](#) provides more information.

### **Working at Leeds**

We are a campus based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

### **Information for disabled candidates**

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at [hr@leeds.ac.uk](mailto:hr@leeds.ac.uk)

## **Criminal record information**

### **Rehabilitation of Offenders Act 1974**

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

