



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

**Research Fellow in Liquid Crystal Physics and Devices,
School of Physics and Astronomy**



Salary: Grade 7 (£33,199 – £39,609 p.a.) Due to funding limitations an appointment will not be made above £37,345 p.a.

Reference: MAPPA1069

Closing date: 26 May 2019

Fixed-term up to 28 February 2022

We will consider job share / flexible working arrangements

Research Fellow in Liquid Crystal Physics and Devices

School of Physics and Astronomy

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

You will join a collaborative programme with Merck Chemicals Ltd, the world's leading company working in liquid crystals. You will work with a team of scientists from the company along with Prof Helen Gleeson, Prof Cliff Jones and Dr Mamatha Nagaraj in the Soft Matter Physics Group at Leeds University.

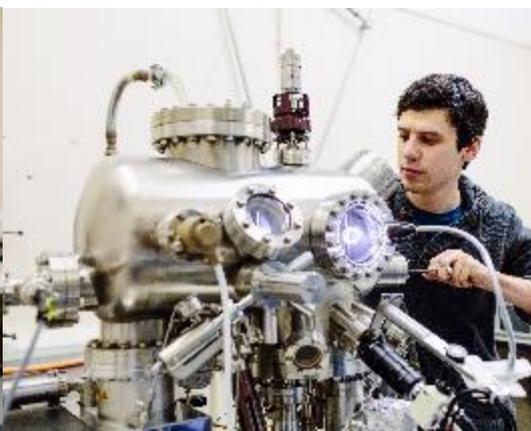
You will have an experimental PhD degree or equivalent, and research experience in Physics and/or Engineering along with significant experience in liquid crystal physics, optics, electro-optics, active and passive device fabrication or related areas.

You will focus on a range of liquid crystal-based technologies and work on the design, fabrication, optimisation and characterisation of liquid crystal devices. In addition to carrying out a series of research projects, you will be an excellent communicator, responsible for day-to-day interactions with the company, writing papers, contributing to patent applications and making presentations. You will travel regularly to the company's premises in the UK and Germany.

What does the role entail?

As a Research Fellow, your main duties will include:

- Designing, planning and carrying out the experimental and theoretical work needed to accomplish the aims of the project, in consultation with the academic leads;
- 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;
- Generating research outputs, analysing and interpreting the results and developing independent and original ideas, as appropriate;
- Making a significant contribution to the generation of intellectual property and the dissemination of research results, by publication in leading peer-reviewed journals, and by presentation at national and international scientific meetings;



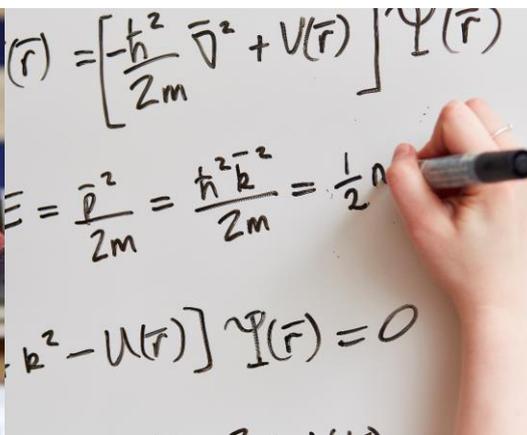
- Working independently and as part of a larger team of researchers, both internally and externally, to develop new links and collaborations and engage in knowledge transfer activities where appropriate;
- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations to your own research;
- Contributing to, and encouraging, a safe working environment.
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project; acting as a mentor to less experienced colleagues and being the first point of contact for researchers in the partner laboratories relevant to each project;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate.

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 close to completion) in Physics and/or Engineering and research experience in liquid crystal physics;
- Experience in advanced optics, optical devices and experimental techniques relevant to liquid crystal research including physical, dielectric and electro-optical measurements;
- Experience of fabrication and/or characterisation of liquid crystal devices;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- Excellent communication skills, both written and verbal, with the ability to work with industrial partners and communicate your research at national and international conferences;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.
- The ability to design, execute and write up research independently;
- The ability to work accurately and carefully.



You may also have:

- Skilled in computing, both in writing software to control experimental apparatus and numerical analysis and simulation of data;
- Experience in liquid crystal device fabrication, clean room techniques, photolithography or nano-imprint lithography;
- The ability to work in an interdisciplinary environment, with experience of working in an industrial research environment or collaboration;
- Experience of handling chemicals and with chemical safety regulations;
- The ability to mentor and act as a role model for postgraduate researchers;
- Knowledge of the scientific concepts underlying the project, in this case, those relevant to optics and liquid crystalline materials;
- Evidence of pursuing 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:

[Professor Helen Gleeson](#), Cavendish Professor of Physics

Tel: +44 (0)113 343 3863

Email: H.F.Gleeson@leeds.ac.uk

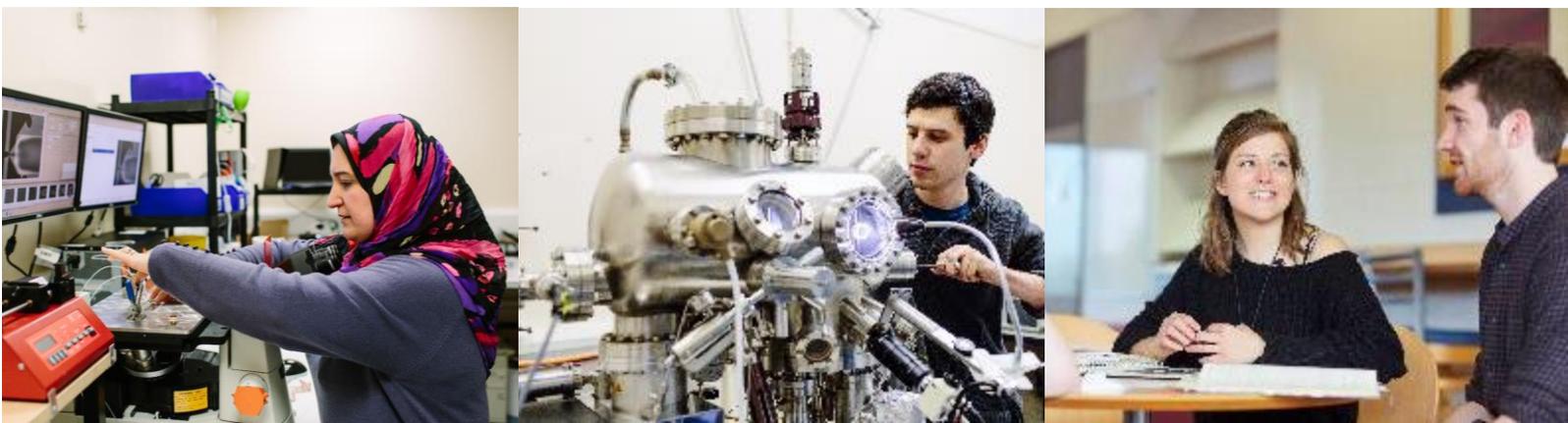
Additional information

Faculty and School Information

Further information is available on the research and teaching activities of the [Faculty of Mathematics and Physical Sciences](#) and the [School of Physics and Astronomy](#).

A diverse workforce

The Faculty of Mathematics and Physical Sciences is proud to have been awarded the [Athena SWAN Bronze 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

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.

Candidates with disabilities

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

Criminal record information

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.

