

CANDIDATE BRIEF

Research Fellow in Liquid Crystal Physics and Devices, Faculty of Mathematics and Physical Sciences



Salary: Grade 7 (£32,004 – £38,183 p.a., due to funding limitations an appointment will not be made above £32,958 p.a.)

Reference: MAPPA1043

Fixed term for 2 years, with the possibility of extension for up to 5 years Closing date: 3 May 2017 Interview date: 12 May 2017

Research Fellow in Liquid Crystal Physics and Devices School of Physics and Astronomy, Faculty of Mathematics and Physical Sciences

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

You will join a five-year collaborative programme with a world-leading company working in liquid crystals. You will work with a team of scientists from the company along with <u>Professor Helen Gleeson</u>, <u>Professor. Cliff Jones</u> and <u>Dr. Mamatha Nagaraj</u> in the <u>Soft Matter Physics research group</u>.

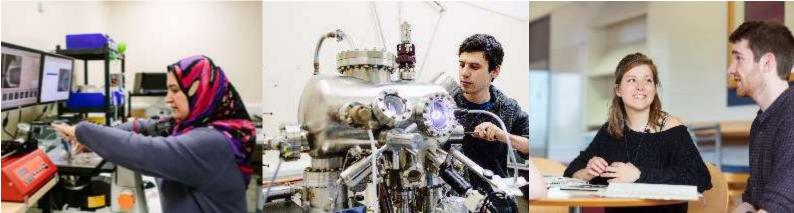
You will have an experimental PhD degree, or equivalent, in Physics and/or Engineering and research experience in liquid crystal physics, along with significant experience in electro-optics, active and passive device fabrication or related areas.

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 regularly travel to the company's premises in the UK and Europe.

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 Professor Helen Gleeson;
- 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 meetings;
- Working independently and as part of a larger team of researchers, both internally and externally, to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;



- Contributing to the supervision of junior researchers and PhD students, acting as a mentor to less experienced colleagues and acting as a first point of contact for researchers in the partner laboratories relevant to each project;
- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations to your own research;
- Contributing to, and to encouraging, a safe working environment.

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.

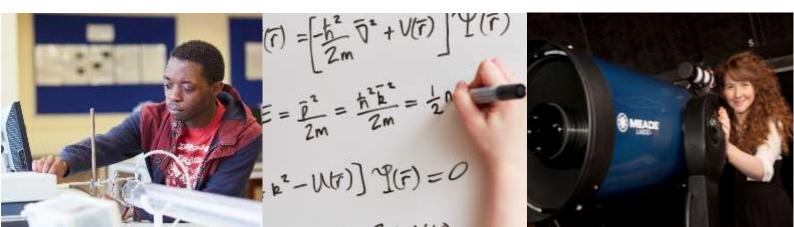
What will you bring to the role?

As a Research Fellow you will have:

- A PhD in physics and/or engineering and research experience in liquid crystal physics;
- Experience in optics and other experimental techniques relevant to liquid crystal research including physical, dielectric and electro-optical measurements;
- Experience of fabrication and/or characterisation of liquid crystal devices;
- An initiative approach to exploring new ideas and contributing to the development of the research, both conceptually and in practice;
- The ability to design, execute and write up research independently;
- A developing track record of peer reviewed publications in international journals;
- Excellent communication skills, both written and verbal, with the ability to work with industrial partners and communicate your research at national and international conferences;
- Good time management and planning skills, with the ability to meet tight deadlines;
- The proven ability to work well both independently and as part of a team;
- The ability to work accurately and carefully;
- A strong commitment to your own continuous professional development.

You may also have:

• Skills 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;
- The ability to design apparatus and interact with technical staff with respect to its construction;
- 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 perusing external funding to support research.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> 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:

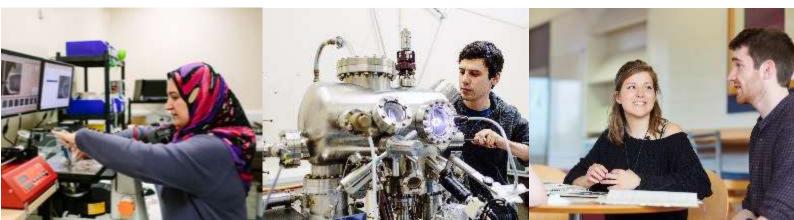
Professor Helen Gleeson, Cavendish Professor of Physics

Tel: +44 (0)113 343 3863 Email: <u>h.f.gleeson@leeds.ac.uk</u>

Additional information

A diverse workforce

The Faculty of Mathematics and Physical Sciences is proud to have been awarded the <u>Athena SWAN Bronze Award</u> from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. You can find out more on our <u>equality and inclusion</u> information page.



Working at Leeds

You can find out more about our generous benefits package and more about what it is like to work at the University and live in the Leeds area in our <u>Working at Leeds</u> information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found in our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.

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 made in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our <u>Criminal Records</u> information page.

