

**Faculty of Science  
School of Chemistry**

**Senior Research Associate • Ref: RA1767**

**The Post**

A Senior Research Associate is required to join the research group of Prof Julea Butt to perform research funded by the Leverhulme Trust. The research aims to incorporate non-natural amino acids into multiheme cytochromes of electrogenic bacteria for enhanced understanding of electron transfer by the proteins alone and in bacteria. This post will involve performing i) genetic reprogramming to produce the necessary proteins, ii) experiments necessary to validate formation of the required proteins, and iii) electrochemical, spectroscopic and structural characterisation of the corresponding proteins alone and in bacteria.

While working under supervision, the post holder is expected to plan and manage their own research activity, contribute ideas for advancing the project and assist in the dissemination of key findings through the preparation of manuscripts.

The project is highly interdisciplinary requiring skills from biology, chemistry and physics. It will be supervised by the PI (Butt) in collaboration with CoIs (Sachdeva, Clarke and Meech). The post-holder will be expected to take the initiative in keeping all of the team up to date on their research plans and findings. They will be expected to take significant initiatives in their work while consulting with the PI over details of the project.

They may contribute to the School's teaching, through supervision of projects, overseeing practical classes, or taking small group tutorial classes. They may work within teams and should contribute to the academic life of the School through participation in research seminars and contribution to appropriate School meetings.

They will be provided with academic and pastoral support within the School (including guidance on realistic career opportunities) and training and development activities will be available. These will be designed to develop their competencies and ability to take on a wider range of responsibilities.

The precise duties will be agreed in discussion with the Manager/PI. With guidance from the Principle Investigator and collaborators the successful applicant is expected to plan and manage their own research activity, contribute ideas for advancing the project and assist in the dissemination of key findings through the preparation of manuscripts. S/he may be involved in the conception

and design of allied projects. S/he will have opportunity to work with postgraduate and undergraduate students and, if desired, opportunities exist to contribute to the taught curriculum in the School, for example in final year laboratory projects. S/he will be provided with academic and pastoral support within the School (including guidance on realistic career opportunities). Training and development activities will be available to expand existing competencies and enhance the ability to take on a wider range of responsibilities.

### **The Project**

The research is supervised by Prof Julea Butt (Principle Investigator) and benefits from collaborative interactions with Dr Amit Sachdeva (School of Chemistry, UEA), Dr Tom Clarke (School of Biological Sciences, UEA) and Prof. Steve Meech (School of Chemistry, UEA). The project is complex and requires integration of skills in molecular biology, biochemistry, spectroscopy and electrochemistry. To facilitate successful completion of the project the aim will be to appoint a postdoctoral researcher with previous relevant experience.

The postholder's key duties and responsibilities will be as follows:

- Establish genetic reprogramming that produces biomolecular wires containing non-natural amino acids.
- Quantify electronic properties of the biomolecular wires through biochemistry, electrochemistry and spectroscopy.
- Determine and deploy appropriate methodologies for research, with advice and support from the PI and her collaborators.
- Assess research findings for the need/scope for further investigations.
- Write up their own research work for publication, with appropriate support, in respected journals or equivalent and/or contribute as a team member to larger publications.
- Present research findings, either at conferences or seminars appropriate to the discipline.
- Contribute to grant applications submitted by others.
- May (consonant with the terms of their funding) contribute to the teaching of students in the School, usually within their own field of expertise and knowledge of research methods.
- May be involved in the supervision, with guidance, of final year undergraduate/taught postgraduate research projects as well as the day-to-day supervision of PhD students.
- Begin to referee papers for external bodies.
- Participate effectively in activities to achieve engagement with research, and/or impact beyond academia.
- Where the research is apposite, begin to develop entrepreneurial or collaborative links either with external organizations or with in-house companies.
- Where appropriate, register patents to protect intellectual property.
- Will be actively developing their own research network with researchers in other institutions, nationally and internationally.
- Will communicate with users of, and communities relevant to, the research and, as appropriate, the subjects of their research.

## **The School**

The School of Chemistry at UEA (<http://www.uea.ac.uk/che>) has vigorous and successful research portfolios in the areas of synthetic, physical and analytical, and biophysical chemistry. Since January 2001 more than £20M has been spent on research activities from Research Council, EU, charitable and industrial sources. Activities cluster around the Wolfson Materials and Catalysis Centre, the UEA Energy Laboratory, and the Centre for Molecular Spectroscopy and Biology. The School consists currently of 30 research group leaders and has typically around 40-50 postdoctoral research assistants and 60-70 postgraduate students.



The University of East Anglia is proud of the increasing diversity of its campus and works with staff, students and organisations around Norwich, Norfolk, regionally and nationally, to achieve its aim of being an inclusive place for study and work. The University is strongly committed to the Athena SWAN principles and is the proud holder of an institutional Bronze Athena SWAN award. This Award recognises and celebrates good practice in recruiting, retaining and promoting women in science, technology, engineering, mathematics and medicine (STEMM) in higher education.

In May 2015 the charter was expanded to recognise work undertaken in arts, humanities, social sciences, business and law (AHSSBL), and in professional and support roles, and for trans staff and students. The charter now recognises work undertaken to address gender equality more broadly as well as barriers to progression that affect women.

The School of Chemistry is committed to the principles of the Athena SWAN charter and we have obtained our own School level Bronze Award.

Further information about Equality and Athena SWAN at the University of East Anglia can be found here <http://www.uea.ac.uk/equality/athenaswan>

Our School aims to provide the facilities and the working environment that allows all staff and students to contribute fully, to flourish and to excel. Our Athena SWAN Committee is committed to recognising and addressing inequality and to promoting a culture that supports diversity and encourages women's wider participation and representation across the School's portfolio of activities. We recognise the importance of supporting women at all stages of their careers, and we proactively support women in applications for promotion, pay awards, flexible working, training and career development in both research and teaching.

The UEA campus has a range of facilities to promote family-friendly working. We have a fully equipped dedicated baby change and feeding room with hand washing facilities, baby changing station, fridge, microwave, bottle and food warmer, and a medical bed for rest purposes. Baby changing facilities are also available in our campus coffee shop. The campus has a medical centre, a dental practice, and a nursery offering Ofsted-rated 'Outstanding' day care for children from three months until school age in purpose built surroundings with large outside play spaces.

We also support a range of flexible working initiatives, designed to promote a healthy work-life balance as well as supporting staff returning from parental leave and career breaks.

Many other aspects of the University contribute to the overall quality of life and work for our staff at UEA, further details can be found here <https://ired.uea.ac.uk/web/working-life/home>

### **Informal Discussions**

For an informal discussion please contact Professor Julea Butt, (Tel: 01603 593877 or email: [j.butt@uea.ac.uk](mailto:j.butt@uea.ac.uk)).

### **Person Specification**

The person specification for this post is attached as Appendix A.

## **GENERAL**

### **Salary**

Salary will be £33,797 to £40,322 per annum, on Grade 7 on the single salary spine. The normal expectation is that starting salary will be at the minimum of the advertised salary scale.

### **Starting date**

This full time post is available from 1 September 2020 or as soon as possible thereafter for a fixed term period of up to three years but must end on 31 August 2023.

### **Terms and Conditions of Appointment**

Full details of terms and conditions of employment for Research and Analogous Staff will be made available to the candidate to whom the appointment is offered.

### **Annual Leave Entitlement**

There is an annual holiday entitlement of six weeks plus statutory (8 days) and customary (6 days) holidays.

## **Superannuation**

The post is superannuable under the Universities Superannuation Scheme.

## **Proof of Qualifications**

The person specification for this post lists qualifications that are essential and/or desirable and you may hold some or all of these qualifications. Please note that if you are offered the appointment you will be asked to provide original certificates of these educational and professional qualifications. Please **DO NOT** provide these with your application.

## **Entitlement to Work in the United Kingdom**

If you are shortlisted for interview you will be asked to bring to interview original documentary evidence of permission to work in the UK in line with a list of acceptable documents which we will provide to shortlisted candidates when invited for interview. Please **DO NOT** provide this with your application.

This vacancy is eligible for sponsorship under Tier 2 and, where appropriate, the University will apply for a Certificate of Sponsorship. Non-EEA workers who do not have residency status within the UK and will require entry clearance or further leave to remain should familiarise themselves with the [Tier 2 \(General\) Guidance](#).

## **Occupational Health Assessment**

Appointment will be subject to a satisfactory Occupational Health Assessment to be carried out by the University's Occupational Health Service.

## **APPLICATION AND RECRUITMENT PROCESS**

**To apply for this vacancy, please follow the online instructions at:**  
<https://myview.uea.ac.uk/webrecruitment/>

Your completed application and CV should be submitted by **10 August 2020**.

All communication with candidates regarding their applications will be by email. Please check your emails (and spam folder) regularly.

Please note that feedback will not normally be provided to those applicants who are not shortlisted for this post.

## **Equal Opportunities Monitoring Form**

Please note that an Equal Opportunities Monitoring Form must be completed and returned with ALL applications, whether submitted by post or by email. If submitted by email, the Equal Opportunities Monitoring Form must be sent as a separate document/attachment to the Application Form.

The Equal Opportunities Monitoring Form will be detached from the received application before short-listing takes place and will not form any part of either the short-listing or decision making process.

### **Referees**

In naming referees in your application, you are requested to give only those who can immediately be approached and one of these must be your current employer, or if not employed your most recent employer.

### **Interviews**

It is anticipated that interviews will take place on **25 August 2020** and candidates who have not heard by this date should assume their application has been unsuccessful.

Successful shortlisted candidates may be notified of their interview times by telephone and/or email and it is therefore essential you include both of these in your application.

Candidates should note that travel and incidental expenses incurred in attending the interview will not be reimbursed.

**This document is available in alternative formats e.g. large print, disc and on-line. If you need this document in an alternative format please contact us on 01603 593034, fax 01603 593522, or email [hr@uea.ac.uk](mailto:hr@uea.ac.uk)**

## PERSON SPECIFICATION

Post title: Senior Research Associate Ref: RA1767 School: CHE		Prepared by: JB Date:08/07/2020
CRITERIA	Essential	Desirable
<b>Education, Experience &amp; Achievements</b>	<ul style="list-style-type: none"> <li>• A relevant postgraduate research degree or equivalent professional experience in the research area.</li> <li>• Significant experience of core molecular biology techniques</li> <li>• Experience of generating results to publication standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Peer-reviewed publications in relevant areas.</li> <li>• Conference presentations at national or international meetings.</li> </ul>
<b>Skills &amp; Knowledge</b>	<ul style="list-style-type: none"> <li>• Demonstrable communication skills in English language.</li> <li>• Excellent data analysis skills.</li> <li>• Excellent report writing and presentation skills.</li> <li>• Excellent time management and organizational skills.</li> <li>• Excellent interpersonal skills.</li> </ul>	<ul style="list-style-type: none"> <li>• General knowledge of redox active metalloproteins or electrogenic bacteria.</li> </ul>
<b>Personal Attributes</b>	<ul style="list-style-type: none"> <li>• Able to work independently and as part of a collaborative team to achieve project goals.</li> <li>• Well-organized, methodical approach.</li> <li>• Self-motivated with attention to detail.</li> <li>• Willingness to undertake appropriate training and apply knowledge gained.</li> <li>• Ability to communicate scientific results effectively to diverse audiences.</li> </ul>	<ul style="list-style-type: none"> <li>• Evidence of broad scientific knowledge base.</li> <li>• Evidence of flexibility in working practices.</li> </ul>

<b>Special Circumstances</b>	<ul style="list-style-type: none"><li>• Due to the nature of the materials used and generated in the project, some flexibility of working hours is required.</li><li>• Ability and willingness to travel nationally / internationally to disseminate results and perform experiments.</li></ul>	
------------------------------	---	--