**Department of Chemistry** 



### **Job Description**

## **Computational Chemistry Teaching Fellow**

**Department: Chemistry** 

Grade: 7

Location: UCL Bloomsbury Campus

**Reports to:** Director of Studies (currently Dr Jamie Baker)

### Context

### **The Chemistry Department**

The Chemistry Department at University College London is the oldest in England, and today is one of the best in the UK, being ranked 2<sup>nd</sup> in the UK for the world-class impact of its research in REF(2014). We are located in Bloomsbury, at the heart of London, and offer an exciting and vibrant environment in which to study in one of the UK's top universities. The Department of Chemistry at UCL is committed to supporting excellence in both research and teaching. The department offers undergraduate BSc and MSci programmes in Chemistry and currently teaches 600 undergraduates registered in Chemistry as well as students who select Chemistry on the Natural Sciences programme and first year Chemistry for life scientists. The department also offers a number of Postgraduate Taught Masters courses with about 100 students per year and has an overall PGR student school of about 250 students.

The Chemistry Department has over 55 members of academic staff carrying out world-leading research. We specialise in the areas of organic synthesis, chemical biology, computational chemistry, nanotechnology, inorganic and materials chemistry, physical chemistry and chemical physics. The department has an annual research income of around £15 million, derived from many sources including the Research Councils (EPSRC, BBSRC, MRC, and NERC), European Commission and a wide range of charities and industrial partners in the UK, Europe and the USA.

Details about our research can be found on the departmental website http://www.ucl.ac.uk/chemistry.

### Main purpose of the job

The Department of Chemistry seeks to appoint a Computational Chemistry Teaching Fellow. The postholder will be required to develop computational chemistry across the undergraduate and postgraduate programmes, including designing and running computational chemistry laboratory courses, developing new practicals and teaching computational chemistry and programming across the syllabus.

Last updated: 25/6/2019

- The appointee will take a central role in supporting the ongoing shift to online delivery and connected learning across the department and will contribute significantly towards the development of e-learning in relation to curriculum, teaching resources and student assessment.
- The postholder will prepare and deliver whole or parts of undergraduate modules, including lectures, workshops and tutorials.
- In consultation with the Departmental Teaching Committee the postholder will lead initiatives in bringing new e-learning methodologies to the department's teaching and will be responsible for the training of users.
- The postholder will be a member of the teaching and learning support team, which will include eight Teaching Fellows.

### **Duties and responsibilities:**

- To design and deliver new computational chemistry practicals for courses at both undergraduate and postgraduate level.
- To deliver and supervise computational chemistry laboratory courses, providing technical support to academics and students, including liaising with Information Systems teams.
- To prepare and deliver computational chemistry and scientific programming taught material across courses at both undergraduate and postgraduate level.
- To survey our current computational chemistry course provision and oversee changes to improve content and delivery across the Undergraduate and Postgraduate programmes.
- To prepare and deliver whole or parts of modules appropriate to the background and experience of the applicant: including preparation of teaching material, delivery of lectures, workshops, tutorials, laboratory classes, assessments and marking of coursework and project reports.
- To play a leading role in supporting the shift to online delivery across the department, to achieve the desired connected learning outcomes and enhance the student experience.
- To lead initiatives in bringing new e-learning methodologies to the department's teaching and be responsible for the training of users.
- To develop teaching tools for improving computational skills of students in core information and communication technologies, data analysis and scientific programming.
- To develop Moodle-based submission, assessment and feedback tools, including training in their use.
- To undertake teaching and assessment activities across the department as required.
- To supervise postgraduate teaching assistants and report markers, including ensuring the students are trained and performing to the expected standard.
- Assist with and develop other activities (e.g. enhancing student experience/widening participation/outreach/schools liaison and recruitment activities) as required.
- To provide advice and support to students, acting as 'Personal Tutor'.
- To contribute to the induction and direction of other staff and students as requested.

- The job description reflects the present requirements of the post, and as duties and responsibilities change/develop, the job description will be reviewed and be subject to amendment in consultation with the post-holder.
- The postholder will carry out any other duties as are within the scope, spirit and purpose of the job as requested by the line manager.
- The postholder will actively follow UCL policies including Equal Opportunities and be expected to give consideration within their role as to how they can actively advance equality of opportunity and good relations between people who share a relevant protected characteristic and people who do not share it.
- The postholder will maintain an awareness and observation of Fire and Health & Safety Regulations.
- To be aware of and act upon:

Disciplinary procedure and disciplinary rules Grievance procedure Section 7 and 8 of the Health and Safety at Work Act

# **Person Specification**

Criteria	Essential or Desirable	Assessment method (Application/Interview)
Qualifications, experience and knowledge		, ,
Undergraduate degree in Chemistry or relevant related discipline.	Essential	Application
PhD in Chemistry or related area	Essential	Application
GCSE English Grade C or above (or equivalent, e.g. IELTS)	Essential	Application
Experience in teaching computational chemistry at undergraduate or postgraduate degree level	Essential	Application and Interview
Experience in the delivery of computational chemistry laboratory courses/practicals at undergraduate or postgraduate degree level	Essential	Application and Interview
Experience in the assessment of computational chemistry practicals	Essential	Application and Interview
Comprehensive information and communication technologies skills	Essential	Application and Interview
Experience in use and delivery of e-learning platforms	Essential	Application and Interview
Skills and abilities		
Ability to teach students with a variety of skills and backgrounds	Essential	Application and Interview
Good interpersonal skills and the ability to liaise with a variety of people, including the ability to relate to staff and students in a teaching and learning context	Essential	Application and Interview
Excellent verbal and written communication skills in English	Essential	Application and Interview
Ability to prioritise and organise own workload	Essential	Application and Interview
Ability to work under pressure and to meet time-critical schedules	Essential	Application and Interview
Personal attributes		
Commitment to high quality teaching and fostering a positive learning environment for students.	Essential	Application and Interview

Criteria	Essential or Desirable	Assessment method (Application/Interview)
Ability to work collaboratively and as part of a team	Essential	Application and Interview
Ability to interact with small and large groups of students with differing abilities	Essential	Application and Interview
The desire to develop a portfolio of work that demonstrates pedagogical research into chemistry.	Essential	Application and Interview
Enthusiasm to acquire new skills to support your work and a commitment to keeping skills and knowledge up to date	Essential	Application and Interview

#### **General Information**

### **Terms & Conditions of Employment**

The post is a UCL grade 7 post, the salary for which ranges from £35,965 to £43,470 per annum (including London Allowance of £3,148 p.a.). Starting salary is usually £40,062.

All posts that are based outside of London, for example at Harwell, will **not** have London Allowance included in the salary.

Progression through the salary scale is incremental. Cost of living pay awards are negotiated nationally and are normally effective from 1st August each year. UCL's non-clinical pay and grading structure is at <a href="http://www.ucl.ac.uk/hr/salary\_scales/final\_grades.php">http://www.ucl.ac.uk/hr/salary\_scales/final\_grades.php</a>.

UCL's terms & conditions for research, teaching and professional services staff are at:

https://www.ucl.ac.uk/human-resources/conditions-service-research-teaching-and-professional-services-staff

The full range of benefits is at http://www.ucl.ac.uk/hr/benefits/employee\_benefits.php

### **General information for Overseas Applicants**

 $\frac{https://www.ucl.ac.uk/human-resources/working-ucl/employment-contract-administration-team/immigration}{team/immigration}$ 

https://www.ucl.ac.uk/human-resources/working-ucl/relocating-uk-guide

### **Equal Opportunities**

www.ucl.ac.uk/hr/docs/equal\_opportunity.pdf

The Department has been awarded a Bronze Athena Swan Award and we support the Athena beliefs that:

• The advancement of science, engineering and technology (SET) is fundamental to quality of life across the globe.

- It is vitally important that women are adequately represented in what has traditionally been, and is still, a male-dominated area.
- Science cannot reach its full potential unless it can benefit from the talents of the whole population, and until women and men can benefit equally from the opportunities it affords.

Further information on Athena Swan is at <a href="http://www.athenaswan.org.uk/">http://www.athenaswan.org.uk/</a>

## **Apply**

To apply for this position visit:

ucl.ac.uk/jobs

Search under Ref no:1872286