

## JOB DESCRIPTION

<b>POST TITLE:</b>	Assistant Professor of Energy
<b>DEPARTMENT:</b>	Chemistry
<b>POST RESPONSIBLE TO:</b>	Head of Department
<b>SALARY IN THE RANGE:</b>	£37,012 - £44,166 pa
<b>REFERENCE NUMBER:</b>	72271-102
<b>CLOSING DATE:</b>	30 November 2012

### JOB PURPOSE:

To carry out internationally leading work in any area of chemical research relating to energy leading to publications in international journals, and to deliver inspiring teaching in aspects of chemistry at undergraduate and postgraduate degree levels.

### DUTIES AND RESPONSIBILITIES:

#### Research

1. To pursue independent and collaborative research of internationally recognised quality in an area of chemical research relating to energy.
2. To publish the results of this research in appropriate peer reviewed international journals.
3. To seek and secure significant levels of external funding through research grants or contracts to support a developing research programme.
4. To develop and lead an independent research group within the department, including for example, postdoctoral researchers, postgraduate students and masters students.
5. To attend and present research findings and papers at appropriate national and international conferences.
6. To ensure the results of the research contribute to the research impact agenda, through for example, engagement with industry, the development of intellectual property, public outreach activities, and the contribution to science policy.
7. To contribute fully to the research plans developed by the department, including providing such information as may be required to monitor research progress and to support the department fully in the preparation of material required for the Research Excellence Framework (REF) or similar activities.

## **Teaching**

8. To teach and supervise chemistry at undergraduate and postgraduate degree levels.
9. To co-operate with colleagues in the continuous review and development of the curriculum.
10. To give lectures, seminars, tutorials and other classes as appropriate in support of the required teaching obligations and to supervise laboratory work by undergraduate and postgraduate students.
11. To undertake academic duties (i.e. setting examination questions, marking, invigilation and pastoral support of students) required to sustain the delivery of high quality teaching.

## **Administration**

12. To undertake such specific departmental roles and management functions as may be reasonably required by the Head of Department.
13. To attend departmental meetings and to participate in other committees and working groups within the department, the Faculty of Science and the University.
14. To engage in continuous professional development.
15. To comply with all Health and Safety legislation.

## PERSON SPECIFICATION

**POST TITLE:** Assistant Professor of Energy

**DEPARTMENT:** Chemistry

The Person Specification focuses on the knowledge, skills, experience and qualifications required to undertake the role effectively.

<b>REQUIREMENTS</b> The post holder must be able to demonstrate:	<b>ESSENTIAL (E) or DESIRABLE (D) REQUIREMENTS</b>	<b>MEASURED BY:</b> a) Application Form b) Test/Exercise c) Interview d) Presentation
A PhD or equivalent in chemistry or a related subject (e.g. materials science, physics and engineering).	E	a
A strong record of publications in refereed international journals.	E	a
Evidence of presenting results of research at appropriate national/ international conferences.	E	a
Ability or potential to generate significant external funding (grants, contracts etc) to support research.	E	a, c
Experience or evidence of potential in leading a team of researchers.	E	a, c
Experience or potential to teach chemistry at undergraduate and postgraduate level.	E	a, b, c
Good effective communication skills (oral and written).	E	a, c, d

## FURTHER PARTICULARS

### The University

For further information about the University of Warwick, please visit our website at <http://www2.warwick.ac.uk/services/humanresources/jobsintro/furtherparticulars>

### Department of Chemistry

For further information about the Department of Chemistry, please see our website at [www.warwick.ac.uk/chemistry](http://www.warwick.ac.uk/chemistry)

### Energy research at Warwick

Warwick has strengths in many key areas of energy research, including power electronics, solar energy, thermal energy and confirmed fusion for clean energy. Three of these areas have already led to spin-out companies and our academics have been working with business and industry to apply and develop these new discoveries.

The University has recently identified a number of Global Research Priorities, including Energy. Warwick academics from across the University are collaborating to combine areas of research strength in Energy research, in order to enhance our ability to respond to funding bodies' priorities.

Further information can be found at: <http://www2.warwick.ac.uk/insite/topic/research/gpp>

The Science City Research Alliance (a long-term collaborative research project between the University of Warwick and the University of Birmingham) has also led to investment in energy research. Funding from Advantage West Midlands through Birmingham Science City has allowed for investment in state-of-the-art facilities and scientific equipment across the two institutions. The £9.5M Energy Efficiency Project covers themes such as Electricity, Efficiency of Energy Conversion and Power Distribution, Efficient Fuel Combustion for Transport and Power, Hybrid Electric Powertrain Technology and Sustainable Thermal Technology and Buildings. The £6.5M Hydrogen Energy project was the first project to be funded through Birmingham Science City. Researchers are already working with over 50 different companies developing new fuel cell components and processes, novel hydrogen storage materials and new ways of turning waste into energy.

As well as the research projects and academics involved in energy research, the University has a substantial range of supporting strengths, for example world class research in materials, analytical science, complexity, climate change, decision making and economics which already contribute to our energy research activity.

With a current grant portfolio of over £20M and strong links to industry and policy makers, Warwick's energy related research is a truly multi-disciplinary and multi-sectoral activity.

More information at: <http://www2.warwick.ac.uk/research/priorities/energy/>

## The Post

Applications are welcomed from any area of chemical research related to energy.

The Assistant Professor in Energy will join one of the existing three sections of the Department: Physical and Theoretical Section, Inorganic and Materials or Organic/Bioorganic Chemistry. They will also contribute to undergraduate teaching in one or more of these areas. Existing research strengths in the department in the area of energy include: biomaterials and bioenergy, green chemistry, solar cells and hydrogen energy.

Priority will be given to candidates who can complement our existing research strengths or contribute to, or develop, new multi-disciplinary activities at Warwick.

## **Recruitment of Ex-Offenders Policy**

As an organisation using the Criminal Records Bureau (CRB) Disclosure service to assess applicants' suitability for positions of trust, the University of Warwick complies with the CRB Code of Practice and undertakes not to discriminate unfairly against any subject of a Disclosure on the basis of a conviction or other information revealed. More information is available on the University's Vacancy pages and applicants may request a copy of the CRB Code of Practice.