

School of Engineering, Design and Technology**LECTURER IN CHEMICAL ENGINEERING****REF: AEN1731****Closing date: 5pm on 3rd April 2012**

All applicants are required to complete a University of Bradford application form.

The University of Bradford operates an electronic application process, please see www.bradford.ac.uk/jobs to apply.

Please contact the person detailed in the Enquiries section if you would like to know the status of your application at any stage.

We welcome disabled applicants. If you consider yourself to be disabled, the University may qualify for a grant towards equipment and support through Access to Work. The successful candidate will receive further information about the provision of University support at the offer of employment.

The University is committed to promoting equality, diversity and an inclusive and supportive environment for its students, staff and others closely associated with its work, in conformity with the provisions of its Charter. In particular, the University will:

- seek to ensure that people are treated equitably regardless of their gender, race, colour, ethnic or national origins, age, disability, socio-economic background, religious or political beliefs and affiliations, marital status, family responsibilities, sexual orientation or other inappropriate distinction;
- promote diversity in its students and staff by recognising the particular contributions to the achievement of the University's mission that can be made by individuals with a wide range of backgrounds and experiences;
- promote and maintain an inclusive and supportive study and work environment;
- affirm the rights of individuals to be treated fairly and with respect and afford opportunities to fulfil their potential.
- To support these aims the University will ensure that in the conduct of all its activities procedures are introduced and implemented which minimise the occurrence of inappropriate discrimination, whether direct or indirect. 2

School of Engineering, Design & Technology

LECTURER IN CHEMICAL ENGINEERING

REF:AEN1731

Grade 8 Salary: £31,948 - £35,938 per annum

The School of Engineering, Design and Technology, at the University of Bradford seeks an individual who will contribute to the School's research output in Chemical, Petroleum and Petroleum Product Engineering, and to the development of teaching at both Undergraduate and Postgraduate levels. Research expertise in any major branch of Chemical/Petroleum Engineering is essential for this post. It is expected that you will contribute strongly to the teaching of petroleum and petroleum product engineering.

In line with our commitment to 'confronting inequality: celebrating diversity' we are aiming to have a more diverse workforce. We would particularly welcome applications from people from minority ethnic backgrounds, women, and people with disabilities, since these groups are under-represented within our workforce.

Informal enquiries prior to application may be made to Professor I.M. Mujtaba on +44 1274 233645 or to e-mail address I.M.Mujtaba@bradford.ac.uk

Closing Date: 5pm on 3rd April 2012

Engineering, Design, and Technology at the University of Bradford has a long and distinguished history. The Mechanics Institute in Bradford was established in 1832 for the 'education of artisans and mechanics'. In 1882, the Bradford Technical College evolved from the Mechanics Institute, with the founding of a single Engineering Department. Since the University of Bradford gained its Charter in 1966, Engineering and Technology have been essential components in the mission of the University in „making knowledge work“.

The School of Engineering, Design and Technology was formed in 2002 by bringing together, in a single interdisciplinary academic unit, the areas of Mechanical and Medical Engineering, Civil and Structural Engineering, Electrical and Electronic Engineering and Industrial Technology. The restructuring into a single School has facilitated the development of interdisciplinary taught programmes and research activity, in line with student interests, employer needs and both national and international trends.

Currently the School has 61 academic staff and 49 support staff. The School offers a wide portfolio of courses which includes accredited MEng/BEng courses, accredited and non-accredited BSc courses, an Engineering Foundation Year course, a part-time Foundation Degree programme in Engineering Technology, a full-time and part-time MSc portfolio and MPhil/PhD research programmes. All our courses are strongly linked to industry and commerce, and our graduates are highly regarded as 'well-rounded' and 'hands-on' 'people who can make an immediate contribution to their employer's business. Our undergraduate courses are all available with a one-year sandwich placement, and we encourage students to take up one of the many opportunities for industrial placement which are offered to Bradford students each year. In addition, the School offers a number of Continuing Professional Development (CPD) short courses aimed at practising Engineers and Technologists. We also have several international collaborations, including a major franchise programme with a partner university college in Malaysia, which includes BEng, MEng, and MSc Programmes.

The School has 4 research groups working at international levels:

1. Environmental and Infrastructure Engineering, led by Professor Simon Tait.
2. Mechanical and Process Engineering, led by Professor Iqbal Mujtaba;
3. Advanced Materials Engineering, led by Professor Phil Coates and Professor Benkreira;
4. Communications Systems, led by Professor Raed Abd Alhameed;

Note, after over 40 years of existence, Chemical Engineering provision was withdrawn in 2002 due to decline in national student numbers. With increasing national and global demand the programme has been re-launched in 2010 with a new 'State of the Art' Chemical Engineering Laboratory.

Mission Statement

To provide a University education that combines students' intellectual interests and aspirations with excellence in Teaching, Scholarship and Research in the academic formation of people of all ages and backgrounds for professional careers in Engineering, Design and Technology.

To excel in providing a University education, in a supportive environment, where all individuals can develop.

To welcome students of all ages, ethnicities and backgrounds for study on distinctive programmes informed by scholarship and research.

To value learning, teaching, and research in preparation for professional careers in Engineering, Design and Technology.

To respond to the education, research and knowledge transfer needs of the local, national and international communities with whom we work.

Aims:

- To provide the first class undergraduate education and training required to allow our graduates to practise as Engineers, Designers and Technologists in Industry.
- To provide industrially relevant postgraduate education and training at Masters and Doctorate level.
- To work towards continuously improving the quality of student education in Engineering, Design & Technology.
- To carry out nationally and internationally recognised research.
- To continue to expand research quality and output.
- To provide high quality Continuing Professional Development courses to meet the current needs of industry.

For further information on the School of Engineering, Design and Technology, visit our website: www.edt.brad.ac.uk/home

Special Information

Candidates invited for an interview will be selected using the criteria in the Post Specification and successful applicants will be notified as soon as possible. Interviews will be held at the University and will be arranged as follows:

Each candidate will make a presentation of approximately 15 minutes to the academic staff of the School on

“Your Vision and Strategy for Developing Petroleum and Petroleum Product Engineering Portfolio in Chemical Engineering Programme”

15 minutes will be available for questions and discussion.

Candidates will also have an opportunity to meet with the staff from the School. Each short-listed candidate will be invited to send to the University ahead of their interview up to four pieces of work reporting their research activities.

Each candidate will be interviewed individually by members of the Appointment Committee for approximately 30 minutes.

How to Apply

All applicants are required to complete a University application form, equal opportunities monitoring form and submit a CV. Applications submitted without these will unfortunately not be considered.

Application forms can be downloaded from <http://www.bradford.ac.uk/human-resources/jobs-at-bradford/jobs/how-to-apply/>

Applicants will be shortlisted on the basis of the information provided.

Your completed application must be submitted by email to jobs@bradford.ac.uk

When submitting your application please state the job reference number in the subject of your email. We don't automatically acknowledge the receipt of applications. If you require an acknowledgement then please add a read receipt to your email and we will acknowledge that.

Please look at the requirements of the application process for each job before applying. If the job asks for an application form and equal opportunities monitoring form only then please do not send a CV and covering letter, these will not be sent to the recruiting manager. The only information sent to the recruiting manager will be the information requested as part of the application process therefore please ensure that the application form is completed in full.

Additional Interview Requirements

You will be asked at a later stage whether you need us to make any adjustments for the interview. If you wish to discuss any concerns about the application process and scheduling in this respect, please contact Human Resources on (+44) (01274) 23 5347.

School of Engineering, Design & Technology

JOB DESCRIPTION

Post Title: Lecturer in Chemical Engineering

Post Reference: AEN1731

Post Grade: 8

Responsible to: Dean of School through Head of Department

Main Purpose of Post:

The post is offered at a Lecturer Grade 8, and is a full-time super-annuated position that requires the holder to contribute fully to the School's research, knowledge transfer, and teaching activities.

The duties of the post will include carrying out research in Chemical and Petroleum Engineering, publishing that research at an international level, supervising research students and staff, and seeking funding to support these activities from external sources. It is expected that the post holder would have or is developing a national reputation for their work and the ambition to develop an international reputation in their chosen field of expertise. National and international research collaborations are strongly encouraged at Bradford. In addition, the post holder will be expected to teach BEng and MEng/MSc students in the area of Petroleum and Petroleum Product Engineering.

This post will support the current and planned developments in Chemical Engineering at Bradford. Given our current staff profile in core chemical engineering, we are particularly keen to hear from those with particular interests in any area in Petroleum and Petroleum Product Engineering.

The Chemical Engineering team has academic staff who are research active in Polymer Processing, Rheology, Advanced Materials, Process Modelling, Control and Optimisation of Process Engineering Systems. In the last Research Assessment Exercise 90% of the work of the group was assessed as being at an international level.

You will be expected to contribute enthusiastically to the teaching and (in time) development of new courses, particularly at a postgraduate level to meet Government and Research Council initiatives. You will be a Chartered member of an appropriate professional organisation or be willing to work towards Chartered membership. You will be fully supported by the existing research groups to develop your research career.

You will be directly responsible to the Dean of School (Professor Alastair Wood) for the effective discharge of your duties. These duties (see Job Description) are carried out within a team-based organisation, so you would be:

- A member of one or more of the existing **Research Groups**.
- A member of the theme-based **Chemical Engineering Programme Team** that is responsible for the development and delivery of discipline-based Chemical Engineering degree courses at all levels within the School;
- A member of the **Process Engineering Subject Group** that is responsible for the academic content and progression of modules that make up component themes in our degree courses.

A Lecturer grade 8 appointment will be made on the basis of a promising research profile with the expectation of making a significant contribution to the School's research portfolio in the next Research Excellence Framework assessment, delivery and development of the taught Chemical Engineering programmes.

A Lecturer grade 8 will be allocated a Mentor and will participate in the University's probation and staff development scheme. A probationary lecturer will be allocated an appropriate teaching load so that they may develop and further enhance their research profile.

You should have an honours degree (or equivalent) in Chemical Engineering. You should also have, or expect to complete soon, a Doctorate (or Equivalent) in Chemical or Petroleum or Petroleum Product Engineering area, and/or equivalent professional qualifications in an appropriate area. You must be able to demonstrate competence in research and evidence of dissemination of that work within the relevant subject area. A good knowledge and understanding of the principles of the subject area are essential and some experience of teaching delivery is desirable. You must be able to work as a member of a team, have good communication skills, and demonstrate an ability to work to tight and often conflicting deadlines and be committed to equal opportunities.

Main Duties & Responsibilities:

1. Active participation in scholarly and research activities to include active engagement with colleagues within Research Group(s) within the School.
2. To assist with the successful application for, and completion of, externally-funded, peer-reviewed research grants.
3. Collaboration with our commercial partners to include contribution to the development of research strategies; supervision of research students and the publication of research outcomes at an international level.
4. To be proactive in marketing the School's research activities at University or external events as required.
5. Lecturing duties for both undergraduate and postgraduate students* as required by the Dean of School and the Associate Dean (Learning and Teaching), including the preparation and delivery of lecture material, the preparation and delivery of appropriate learning support material, e.g. tutorial and laboratory exercises, and any other teaching-related activity at any level, on or off-site, and the support of students on such courses(s).
*Opportunities to teach post-experience students also exist.
6. On occasion, deliver teaching on an evening and/or weekend as required to support the School's academic programmes.
7. To regularly review and update of your programme of study, contribute developing new modules and courses in your subject area to support new undergraduate and postgraduate degree programmes as required.

8. Support for, and development of, collaboration with other Schools and Departments in the University of Bradford, and in other institutions nationally and internationally.
9. Contribute to the general running of the School, including: engage with the rest of the team within your area of responsibility, making contributions such that the team works together to produce agreed objective.
10. Managing student projects at undergraduate and postgraduate levels to include monitoring and visiting student placements and participation in liaison meetings.
11. Contributing to student recruitment activities across the School including visiting local schools and colleges to promote all aspects of careers in engineering.
12. The successful undertaking of academic administration, including duties allocated by the Dean of School to support the operation of taught and research programmes.
13. Engaging with all appropriate University processes and procedures, including QA, student progress and assessment, staff development and Performance Review and, by doing so, contribute fully to the School's Mission
14. Maintain safe working practices and environments at all times.
15. Participate in training and staff development necessary to keep own skills and knowledge up to date, and also help new members of staff to settle in;
16. Take responsibility for the pastoral care and welfare of students and be expected to resolve standard welfare issues.
17. Any other duties commensurate with the grade and nature of the post.

The School of Engineering, Design and Technology organises academic staff workloads using information from a 'workload' model, which is designed to help in the equitable distribution of professional responsibilities across the School each year.

You will contribute to the academic, scholarly, and professional activities of the School of Engineering, Design and Technology at the University of Bradford. In a discipline context, you will contribute to the development of research activities in any branch of Chemical Engineering including Petroleum and Petroleum Product Engineering, and to contribute to curriculum development, teaching and academic administration at undergraduate and postgraduate levels. A grade 8 Lecturer will be expected to make a strong contribution to the School's research output

The post is an indefinite, full-time position within the School of Engineering, Design and Technology at the University of Bradford.

SCHOOL OF ENGINEERING DESIGN & TECHNOLOGY
LECTURER IN CHEMICAL ENGINEERING (REF:AEN1731)
POST SPECIFICATION

The Post Specification is an outline of the **Essential** and **Desirable** Qualifications, Experience, Skills & Knowledge and Personal Qualities that are required for the post, and how these will be identified/verified. **The Post Specification forms the criteria against which we will shortlist candidates.**

	Essential	Desirable	How identified/ Verified
Qualifications	<ul style="list-style-type: none"> Honours degree (or equivalent) in Chemical Engineering and/or professional qualifications in an appropriate area. PhD (or Equivalent) in Chemical or Petroleum or Petroleum Product Engineering (or close to submission of the PhD thesis) 	<ul style="list-style-type: none"> Membership of/commitment to membership of an appropriate professional Institution. Membership of/commitment to membership of the Higher Education Academy. 	A, Q, CV
Experience	<ul style="list-style-type: none"> Evidence of research expertise in Chemical/Petroleum/Petroleum Product Engineering, Evidence of teaching activity to one or more of UG/PG/CPD 	<ul style="list-style-type: none"> Teaching relevant subjects in HE at undergraduate and/or postgraduate level. Designing and developing modules Publishing in international journals and conferences Writing research proposals. Project supervision at undergraduate and/or postgraduate level. Supervising others, in particular successful research supervision (research students). Working effectively with senior managers. Working in inter-disciplinary, collaborative research environments. Commercial or industrial experience. 	A, I, R, P, CV

Skills and Knowledge	<ul style="list-style-type: none"> • Significant knowledge and understanding of the subject area (Chemical and Petroleum Engineering). • Good IT skills especially in Process Modelling Software such as CFD, ASPEN PLUS, gPROMS, MATLAB. Good interpersonal skills. • Good oral and written communication skills. • Ability to contribute to the School's development in the area of petroleum engineering 	<ul style="list-style-type: none"> • Ability to offer innovative teaching methods particularly through the use of ICT. • Evidence of team leadership. 	A, I, R, P, CV
Personal Qualities	<ul style="list-style-type: none"> • Committed to continuing personal/professional development. • Understanding of the University's commitment to Equality and Diversity • Ability to manage time and to work to strict and often conflicting deadlines. • Ability to work as a member of a team. • Willingness to engage in administrative functions. • Commitment to fostering a positive working and learning environment. • Flexible, open and optimistic. 		I, R

Key: A = Application, Q = Sight of Qualifications, I = Interview, P = Presentation/Task, R = References, CV = CV, CL = Covering Letter