

# **School of Civil Engineering and Geosciences**

# **Lecturer in Environmental Engineering**

Grade: F/G Vacancy Ref: D39796A

# **Academic Job Summary**

The University has developed Academic Job Summary Guidance which summarises the range of activities that academic staff may be expected to perform. Academic staff are not expected to be discharging all of the activities all of the time and the actual duties and activities that academic staff are expected to carry out will be determined by the Head of Academic Unit. The Job Summary Guidance document can be found at <a href="http://www.ncl.ac.uk/hr/recruit/academicsummary/">http://www.ncl.ac.uk/hr/recruit/academicsummary/</a>.

# **Academic Staff Development**

Newcastle University accords parity of esteem to teaching and research; aims to deliver teaching and facilitate learning of the highest quality; and invests in excellent staff. A popular course in academic practice is available for staff with responsibilities in teaching and research supervision and new appointees are required to gain the first module. Full details of Newcastle University's Certificate in Advanced Studies in Academic Practice can be found at <a href="http://www.ncl.ac.uk/staffdev/academic/modules/">http://www.ncl.ac.uk/staffdev/academic/modules/</a>.

# **Specific Responsibilities of Position**

The appointee is expected to undertake independent research of an international standard in an area compatible with the research interests of other academic staff in CEG and-or others researcher across the Newcastle University research community. In addition, the appointee must seek external funding for their work and supervise PhD students as the leader or member of a supervisory team.

The teaching aspect of the post is to lead or assist with undergraduate and postgraduate courses in environmental engineering and science with associated student support and assessment over the academic year. In particular, the appointee with undertake a normal academic workload of module leadership or teaching from courses. Examples include:

- Sustainable Engineering Systems Design Project (CEG3004)
- Water Supply and Treatment (CEG8103)
- Wastewater treatment (CEG8104)
- Solid Waste Management (CEG8105)
- Environmental Engineering Design and Project Management (CEG8108)
- MSc Project and Dissertation in Environmental Engineering (CEG8198)

• A new module that is specific to appointees personal expertise

# **Person Specifications (Grade F)**

# **Knowledge (inc. Qualifications)**

#### Essential

- A Good Honours degree in a relevant subject area
- PhD (or equivalent) in a relevant subject area
- In-depth subject expertise in a specific area of scholarship

#### Desirable

- Membership or eligibility for Chartership as a professional engineer in the UK
- Teaching qualification

# Skills (professional, technical, managerial, practical)

#### Essential

- Undertake internationally leading research
- High level of analytical and problem-solving capability, with the personal skills, initiative and drive to achieve the solution
- Ability to clearly communicate complex information both orally and in writing
- Knowledge, ability and expertise to teach subjects at undergraduate and postgraduate levels, including group teaching and project supervision.
- Ability to respond enthusiastically and positively to students, and engage in counselling and pastoral care where appropriate
- Ability to work collaboratively and constructively with academic colleagues and support staff to encourage the commitment of others
- Good networking skills and the ability to develop strong links with professionals from other organisations and agencies with whom the University interacts, such as professional bodies, industrial partners and societies
- High level of planning, organisational, administrative and IT skills
- Effective time management and prioritisation skills to balance the potentially conflicting demands of teaching, research and administration

#### Desirable

- Proven experience in engineering design, especially waste and wastewater treatment and other processes in environmental engineering
- Demonstrable expertise, through direct industrial experience, research and/or coursework, in applied chemistry or biology in environmental engineering
- Proven project management skills
- Ability to provide leadership to research and-or teaching teams

### **Experience and Achievements**

#### Essential

- A clear, ambitious yet realistic vision for their research
- Evidence of the potential for developing a national and international personal reputation in research, indicated by successful leading journal publications
- High quality publication record in the discipline, including peer-reviewed publications at a high international level

- Able to meet the University's standard for submission to the Research Excellence Framework
- Experience of presentation of work to the national/international research community (at conferences, seminars and similar high profile events)
- Proven delivery of research outcomes to a defined timescale
- Evidence of success in collaborative research
- Demonstrable success in the teaching, support and supervision of undergraduate and postgraduate students, including group teaching and project supervision

#### Desirable

- An international reputation in research and evidence of having initiated interdisciplinary collaborations
- Evidence of effective management of projects and teams, including proven ability to delegate cooperatively and effectively
- Track record of successful project completion, on time
- Experience of course development and management
- Successful experience of the recruitment and supervision to completion of research students
- Proven ability to recognise and take forward opportunities to develop existing and new curricula in collaboration with relevant industrial stakeholders

#### Other

#### Essential

- Willingness to undertake work outside normal office hours when required
- Willingness to balance personal travel versus needs of colleagues to ensure adequate supervision for research students and meet teaching obligations

# **Person Specifications (Grade G)**

# **Knowledge (inc. Qualifications)**

### Essential

- A Good Honours degree in a relevant subject area
- PhD (or equivalent) in a relevant subject area
- In-depth subject expertise in a specific area of scholarship

#### Desirable

- Membership or eligibility for Chartership as a professional engineer in the UK
- Academic teaching qualification
- Teaching qualification

# Skills (professional, technical, managerial, practical)

#### Essential

- Undertake internationally leading research
- High level of analytical and problem-solving capability, with the personal skills, initiative and drive to achieve the solution
- Ability to clearly communicate complex information both orally and in writing

- Knowledge, ability and expertise to teach subjects at undergraduate and postgraduate levels, including group teaching and project supervision.
- Ability to respond enthusiastically and positively to students, and engage in counselling and pastoral care where appropriate
- Ability to work collaboratively and constructively with academic colleagues and support staff to encourage the commitment of others
- Good networking skills and the ability to develop strong links with professionals from other organisations and agencies with whom the University interacts, such as professional bodies, industrial partners and societies
- High level of planning, organisational, administrative and IT skills
- Effective time management and prioritisation skills to balance the potentially conflicting demands of teaching, research and administration
- The knowledge, ability and expertise to teach the relevant subject at undergraduate and postgraduate levels, including large group and small group teaching and project supervision.

#### Desirable

- Proven experience in engineering design, especially waste and wastewater treatment and other processes in environmental engineering
- Demonstrable expertise, through direct industrial experience, research and/or coursework, in environmental engineering and science
- Proven project management skills
- Potential to mentor junior staff
- Ability to provide leadership to research and-or teaching teams

### **Experience and Achievements**

### Essential

- A clear, ambitious yet realistic vision for their research
- Evidence of the potential for developing a national and international personal reputation in research, indicated by successful leading journal publications
- High quality publication record in the discipline, including peer-reviewed publications at a high international level
- Able to meet the University's standard for submission to the Research Excellence Framework
- Evidence of success in developing innovative research proposals and securing research funding
- Demonstrable potential to secure significant funding in their own right from major funding agencies
- Experience of presentation of work to the national/international research community (at conferences, seminars and similar high profile events)
- Proven delivery of research outcomes to a defined timescale
- Evidence of success in collaborative research
- Track record of successful project completion, on time
- Demonstrable success in teaching, support and supervision of undergraduate and postgraduate students, including group teaching and project supervision

### Desirable

 An international reputation in research and evidence of having initiated interdisciplinary collaborations

- Evidence of effective management of projects and teams, including proven ability to delegate cooperatively and effectively
- Experience of course development and management
- Successful experience of the recruitment and supervision to completion of research students
- Proven ability to recognise and take forward opportunities to develop existing and new curricula in collaboration with relevant industrial stakeholders

#### Other

# Essential

- Willingness to undertake work outside normal office hours when required
- Willingness to balance personal travel versus needs of colleagues to ensure adequate supervision for research students and meet teaching obligations

For full details about this vacancy and essential information on how to apply, visit our Job Vacancies web page at <a href="http://www.ncl.ac.uk/vacancies/">http://www.ncl.ac.uk/vacancies/</a>