



## ST HUGH'S COLLEGE, OXFORD AND THE DEPARTMENT OF ENGINEERING SCIENCE, UNIVERSITY OF OXFORD

## Further Particulars for the

# Mary R. Emerson Career Development Fellowship in Engineering Science

Applications are invited for a Career Development Fellowship in Engineering Science at St Hugh's College, Oxford, tenable from 1<sup>st</sup> October 2020 or as soon as possible thereafter. This is a fixed-term three-year position, and will suit an individual who has recently completed a PhD/DPhil, and who wishes to develop their academic career by furthering their research while gaining experience of teaching.

Under the direction of the Fellows in Engineering, the postholder will contribute (to an average of three hours per week during term) to the teaching of undergraduates, at St Hugh's or other colleges, and will also be expected to use the period of the Fellowship to begin building an international research profile. The research activities of the Fellow will be supported by the University's Department of Engineering Science, where they will have laboratory space. Career Development Fellows have teaching spaces at St Hugh's, and are encouraged to take a full part in the intellectual life of the College.

An additional and integral aspect of the role will the promotion of women in Engineering in academia and in industry. The postholder will organise a programme of events to raise the profile of women in the sector. This will be done in collaboration with the Department of Engineering Science and in particular with the Department's Academic Outreach Officer. The College will also offer assistance in the organisation of such programmes.

#### St Hugh's College

St Hugh's College has some 420 undergraduates and around the same number of graduate students, a fellowship of 70, 50 college lecturers and a non-academic staff of 90. From its garden site in North Oxford, close to the Engineering Department St Hugh's promotes an inclusive culture of research and rigorous intellectual engagement.

The College has three Fellowships in Engineering Science, held by Professor Stephen Duncan Professor Chris Stevens, and Professor Antoine Jérusalem; all three are involved in undergraduate teaching. St Hugh's currently admits around six students each year to read for the four-year undergraduate masters in Engineering Science, and has around 15 students enrolled on research degrees in Engineering. More information about St Hugh's College can be found at <u>www.st-hughs.ox.ac.uk</u>.

### Engineering Science at Oxford

Engineering teaching and research takes place at Oxford in a unified Department of Engineering Science whose academic staff are committed to a common engineering foundation as well as to advanced work in their own specialities, which include most branches of the subject. The Department has strong links with Computer Science, Materials Science,

Medicine and also the Saïd Business School. The Department employs 120 academic staff, and an experienced team of teaching support staff, clerical staff, and technicians. The Department has well-equipped laboratories and workshops, which together with offices, lecture theatres, library and other facilities have a net floor area of about 25,000 square metres. The Department is ranked first in the world in the latest Times Higher Education World University Rankings for Engineering & Technology.

Each year around 170 undergraduates are admitted to read Engineering; the undergraduate course is accredited at MEng level by the major engineering institutions. The syllabus has a common core extending through the first two years; specialist options are introduced in the third and fourth year.

Research in the Department is particularly strong. We have approximately 500 research students and about 250 postdoctoral researchers. Direct funding of research grants and contracts, from a variety of sources, amounts to an annual turnover of approximately £29m in addition to general turnover of about £28m. According to the results of the six-yearly UK-wide assessment of university research, REF2014, the Department of Engineering Science is the best engineering department in the country. The research activities of the department fall into eight broad headings, though there is much overlapping in practice: Information Engineering (Robotics, Computer Vision and Machine Learning); Control Engineering; Thermofluids; Materials Engineering and Mechanics; Civil and Offshore; Electrical and Optoelectronic; Chemical and Process; Biomedical Engineering. <u>www.eng.ox.ac.uk</u>.

The postholder will be integrated into their particular expertise group in the Department of Engineering Science. This will include the provision of office and laboratory space, as well as a starting support payment of £10,000 with an extra £500 per year for three years, comprising a total of £11,500 over the three-year period, but with the opportunity to bid for more support. The candidate will be provided with teaching opportunities in the department.

The Department holds an Athena Swan Bronze award, highlighting its commitment to promoting women in Science, Engineering and Technology. More information about this, and the University's *Women in Engineering* network, can be found online: <u>www.eng.ox.ac.uk/women-in-engineering</u>.

#### Terms of Appointment

The duties of the post holder will be: To carry out research of international standing, to offer an average of three hours teaching each week during term for the College; to assist in directing studies, admissions, and pastoral care of undergraduates; to promote women in Engineering Science through events with the College and University, as well as schools, industry, and the wider community.

The successful applicant will be elected to the Mary R. Emerson Career Development Fellowship in Engineering Science at St Hugh's College. The stipend will be based on the University's scale for Fixed-Term Fellows (Grade 6), starting at around £30,942 per annum. The post holder will have the option of becoming or remaining a member of a contributory pension scheme, the <u>Universities Superannuation Scheme</u> (USS). If it is available, the post holder will have the option to rent single accommodation from the College.

There will be an initial probationary period of one year, during which the appointment may be terminated by one month's notice on either side. The post will be renewed for a further two years provided that there is evidence of satisfactory progress in research and teaching. A Career Development Fellow of St Hugh's College is entitled to free meals at common table when the College kitchens are open, and some support is available for research-related costs. The Fellow will be a non-voting member of the College's Governing Body.

#### Selection Procedure

Applications for this post will be considered by a selection committee responsible for conducting all aspects of the recruitment and selection process; the committee does not, however, have the authority to make the final decision as to who should be appointed. The final decision will be made by the Governing Body of St Hugh's College on the basis of a recommendation made by the selection committee. No offer of appointment will be valid, therefore, until and unless the recommendation has been approved by the Governing Body and a formal contractual offer has been made. The appointment will be subject to provision of proof of the right to work in the UK.

The formal selection criteria for the post are as follows:

- 1. Evidence of ability to produce work of international standing within the candidate's field of research.
- 2. Evidence of ability to teach undergraduate students Engineering Science at the highest level.
- 3. The candidate should have already received the degree of PhD/DPhil or equivalent at the point of application. The candidate should not normally have accumulated more than seven years (not counting career breaks) in full-time graduate study or research.

The selection committee will apply these criteria bearing in mind the stage reached in a candidate's career.

The qualities that we are therefore seeking include:

- 1. Expertise in and enthusiasm for undergraduate teaching.
- 2. The ability to bring advanced research projects to fruition; excellent presentation skills; the ability to contribute to a research community.
- 3. Experience of publicising and advancing the role of women in STEM subjects.
- 4. Sympathy for the nature and aims of the University of Oxford and St Hugh's College and enthusiasm for participating in the life of the College.

### **Application Procedure**

Applications and references should be sent by email to the Academic Administrator, Miss Adams (college.office@st-hughs.ox.ac.uk), by **9am on 20**<sup>th</sup> **May.** Applications should be in the form of a single PDF comprising:

- 1) a covering letter
- 2) a full *curriculum vitae*, including a full list of publications
- 3) an account of teaching experience (not more than one page)
- 4) a proposal for a postdoctoral research project (not more than one page)
- 5) a proposal for outreach activities (not more than one page)
- 6) the details of two referees

Candidates should ask their referees to submit references directly to the Academic Administrator (college.office@st-hughs.ox.ac.uk) by the same deadline.

Interviews are likely to take place remotely around 5<sup>th</sup> June. Shortlisted candidates will be asked to give a ten minute presentation on their recent research work, and to talk about how they would undertake outreach work and promote and encourage women in Engineering.

Informal enquiries can be made to Professor Stephen Duncan (<u>stephen.duncan@st-hughs.ox.ac.uk</u>).

Candidates are also asked to complete a copy of an equal opportunities form, available from <u>www.st-hughs.ox.ac.uk/vacancies</u> and return it to the HR Office, either by post to St Hugh's College, or by email to <u>hr@st-hughs.ox.ac.uk</u>. This form is used for monitoring purposes only and will not be seen by any member of the selection committee.

#### **Equal Opportunities**

The policy and practice of St Hugh's College, University of Oxford require that entry into employment with the College and progression within employment shall be determined only by personal merit and the application criteria which are related to the duties of each particular post. Subject to statutory provisions, no applicant or member of staff will be treated less favourably than another because of his or her gender, marital or civil partnership status, sexual orientation, religion or belief, racial group, age or disability. In all cases, ability to do the job will be the primary consideration.