



## THE GOLDSMITHS' PROFESSORSHIP OF MATERIALS SCIENCE

# DEPARTMENT OF MATERIALS SCIENCE & METALLURGY

## 1 The Professorship

## Background

The Goldsmiths' Professorship (originally of Metallurgy, now of Materials Science) was first occupied in 1932. Endowed by the Worshipful Company of Goldsmiths (one of the great London livery companies), it built on earlier donations from the Company stretching back to 1910, supporting a readership and the development of metallurgical laboratories. Over the last 50 years the Professorship has been occupied by: Sir Alan Cottrell, Sir Robert Honeycombe, Derek Hull and Sir Colin Humphreys. The current holder, Prof. Tony Cheetham FRS is due to retire on 30 September 2017.

## Selection Criteria

Candidates will be considered for the Professorship on the basis of the following selection criteria, which they should address in their application.

- An outstanding research record of international stature in materials science.
- The vision, leadership experience and enthusiasm to build on current strengths in maintaining and developing a leading research presence, and an established record in attracting research grant support to further this development.
- The ability to further the academic planning and strategic development of materials science in the University and, where appropriate, to facilitate its development within the UK.
- The ability to manage and interact effectively with staff and students at all levels.
- An enthusiastic commitment to the recruitment, training and mentoring of the next generation of researchers, including undergraduates, research students, and postdoctoral research fellows

Candidates will hold a PhD or equivalent postgraduate qualification.

## 2 The Department of Materials Science and Metallurgy

The Department has over 30 academic staff, (including staff extended beyond retirement age, established academic staff and earlycareer research fellows), approximately 50 administrative, technical and other support staff, and around 50 postdoctoral researchers, 150 postgraduate students and 20 visiting scientists at any time. Our research falls into five themes: structural materials, device materials, materials chemistry, medical and pharmaceutical materials, and materials characterisation (particularly electron microscopy). Further information is at www.msm.cam.ac.uk.

In the REF 2013, the Department had the highestscoring 'quality profile' in the Metallurgy and Materials subject area, with 95% of our research rated 'worldleading' (4\*) or 'internationally excellent' (3\*).

Research funding totals around £12M per annum, and come from a variety of sources: about 40% from the research councils, 16% from industry, 33% from the EU. The Department offers a 3 or 4 year BA/MSci degree within the Natural Sciences Tripos (NST), with the majority of students completing the 4year course. In year 1 the students read four subjects, in year 2 three subjects, before specialising in one subject only. Over 280 take Materials Science in year 1, over 90 in year 2, and over 35 in years 3 and 4. Year 4 includes students who have transferred from other universities to read for the Master of Advanced Studies (MASt) degree. In addition, 10 to 20 students are admitted each year to the oneyear MPhil in Micro and Nanotechnology Enterprise administered by the Department. Further details of the teaching programme can be found on the teaching pages of the departmental website: www.msm.cam.ac.uk/teaching.

We have a thriving Graduate School. Almost all postgraduate research students are working for the PhD, which they complete on average in 3.5 years. We play a prominent role in a number of doctoral training centres, including the NanoDTC (led by the Physics Department at Cambridge), and the DTC in Structural Metallics linking Materials at Cambridge with sister departments at Birmingham and Swansea. In 2013 the Department moved to a new purpose-built building on the West Cambridge Site. This is the first time all academic groups have been housed together in a single building.

The Department is proud to hold an Athena SWAN Bronze Award, obtained in 2012, and was only the second department in the University to achieve such recognition. It has long championed equality and diversity and has one of the highest ratios of female academic staff in the University.

## 3 Standard Duties

## **Teaching and research**

The Professor will be required to deliver lectures and give instruction in materials science and in particular to perform the following duties:

(i) to lecture, or hold classes, consistent with the with the standard workload for Professors in the Department

(ii) to undertake original work and the general supervision of research and advanced work in his/her subject and Department, and to assist students in their studies by supervision or informal instruction.

## Examining

The Professor will be required to undertake such university examining as may be required by the relevant Faculty Board or comparable body.

## Supervision

The Professor will be required to act as the supervisor of graduate students as and when requested.

## Administration

Administrative duties are shared equitably among the teaching members of the Department and Faculty. The Professors are expected to play significant roles from time to time on the Faculty Board and Faculty Committees dealing with such matters as academic and other appointments, admission of graduate students, research and teaching assessments, the libraries and computing arrangements. They are also encouraged to accept appointment to University Committees.

## 4 The Colleges

The University, the Faculties and Departments, and the Colleges are linked in a complicated historical relationship that is mutually beneficial but not simple. Students (both graduate and undergraduate) are admitted by one of the 31 Colleges, although in the case of graduate students the Faculties and Departments determine admissions before the Colleges are involved. Almost all undergraduates, and many graduate students, live in a College. The teaching of undergraduate students is shared between the Colleges and the Faculties and Departments, with the Colleges arranging small group teaching ("supervision") and the Departments providing lecturing, laboratory classes, and advanced supervisions. Most academic staff will also be invited to join a College as a teaching or professorial fellow. College teaching is remunerated separately from the University teaching, and appointment to a College adds an important social and intellectual dimension for many of the academic staff. The Chair of the Faculty/Head of Department or senior colleagues can give more advice.

#### 5 **Procedure for Appointment**

The appointment will be made by a Board of Electors, chaired by the Vice-Chancellor or his Deputy, with a membership which includes members of the Department, members of cognate Departments and external experts.

All applications will be acknowledged. The Board of Electors will decide how they wish to proceed towards making an election, which may include interviews and/or presentations. Short-listed candidates may be invited to visit the Department to give

a seminar on their work and meet prospective colleagues in the course of the process.

Candidates will be informed of the progress of their applications as agreed by the Electors.

It is anticipated that the successful candidate will take up the appointment on 1 October 2017 or as soon as possible thereafter.

## 6 Enquiries and Applications

Informal enquiries about this Professorship may be directed to Professor Mark Blamire, Head of the Department of Materials Science & Metallurgy, 27 Charles Babbage Road, Cambridge CB3 0FS, telephone +44 (0)1223 334359 or email hod@msm.cam.ac.uk.

Further information on the University is available at the following address: <u>www.cam.ac.uk</u>.

Applications, consisting of a letter of application together with a statement of current and future research plans, a curriculum vitae and a publications list, should be made online no later than **15 May 2017**.

If you are unable to apply online, please contact the Human Resources, University Offices, The Old Schools, Cambridge, CB2 1TT (email <u>ibise@admin.cam.ac.uk</u>).

#### **GENERAL INFORMATION**

All appointments to University Offices are subject to the Statutes and Ordinances of the University.

#### A Salary

Salary on appointment will be determined by the Vice-Chancellor at the appropriate point on the University's salary spine for grade 12, taking account of the criteria for the respective contribution band. Professorial salaries are reviewed periodically, on the basis of research, teaching and general contribution, by the Vice-Chancellor with the assistance of a small Advisory Committee.

There is a normal sabbatical entitlement of one term in seven on full pay, subject to the University regulations.

#### **B** Headship of the Department

Should a Professor be appointed to the Headship of a Department, a pensionable payment in addition to salary is made.

#### C Recruitment Incentive

The University has a scheme whereby a single recruitment incentive payment may be made on appointment at the Vice-Chancellor's discretion.

#### D Removal Expenses

If the person appointed is not resident in Cambridge, a contribution from University funds towards expenditure incurred in removal to Cambridge to take up a University office will be made.

#### E Consultancy Work

The University's policy on consultancy work is that consultancy arrangements must be entered into privately between the employee and the organisation concerned. The consultancy work must not interfere with the duties required of the officer under the officer's contract of employment with the University. Consultancy work is not covered by the University's insurances, even when the University has knowledge that such work is being done. The University must not be regarded as being directly or indirectly involved in any consultancy arrangement through the use of University letterheads, advice given or work done in the individual's capacity as an employee of the University. Individuals undertaking private or consultancy work are advised to take out personal insurance.

Alternatively, professional indemnity cover may be obtained by channelling private work through the University company Cambridge Enterprise Ltd. Anyone wishing to do so should, in the first instance, contact Cambridge Enterprise at <u>www.enterprise.cam.ac.uk</u>.

## F Professorial Fellowships

The great majority of Professors at Cambridge hold a professorial fellowship of a College. Although election to a fellowship is a matter for an individual College, the University takes active steps to draw to the attention of Heads of House the names of those Professors eligible for election. In seeking the views of referees, their permission will be sought for the release of their comments on the successful candidate if it were to be requested by the professorial fellowship electors of a College.

# G Health screening on appointment to University Office and in the case of University Officers undertaking a change of duties

Offers of appointment made to prospective University officers whose work will fall within certain categories are conditional on the completion of a medical questionnaire and, if necessary, on a satisfactory health check by the Occupational Health Service.

Only the person elected will be asked to complete the questionnaire at the time of election.

#### H Family friendly policies and benefits

The University has a range of family friendly policies to aid employee's work-life balance including maternity, paternity and parental leave, flexible working and career break schemes. In addition, childcare vouchers, access to two nurseries and a holiday play scheme are available through the Childcare Office to help support University employees with childcare responsibilities. Further information can be found at: <a href="http://www.admin.cam.ac.uk/offices/hr/staff/benefits/family.html">http://www.admin.cam.ac.uk/offices/hr/staff/benefits/family.html</a>

#### I Eligibility to work and reside in the UK

UK immigration procedures stipulate that an employer may not consider the appointment of any person unless they have seen evidence of their immigration status. Accordingly, shortlisted candidates, whatever their nationality, will be asked to provide such evidence at an appropriate stage in the recruitment procedure.

#### J Equal Opportunities Information

The University of Cambridge appoints solely on merit. No applicant for an appointment in the University, or member of staff once appointed, will be treated less favourably than another on the grounds of sex (including gender reassignment), marital or parental status, race, ethnic or national origin, colour, disability (including HIV status), sexual orientation, religion, age or socio-economic factors.

#### K Information if you have a Disability

The University welcomes applications from individuals with disabilities. Our recruitment and selection procedures follow best practice and comply with disability legislation.

The University is committed to ensuring that applicants with disabilities receive fair treatment throughout the recruitment process. Adjustments will be made, wherever reasonable to do so, to enable applicants to compete to the best of their ability and, if successful, to assist them during their employment. We encourage applicants to declare their disabilities in order that any special arrangements, particularly for the selection process, can be accommodated. Applicants or employees can declare a disability at any time.

Applicants wishing to discuss with or inform the University of any special arrangements connected with their disability can, at any point in the recruitment process, contact, Dr Gosia Wloszycka, who is responsible for the administration of the recruitment process for this position, by email on mw425@admin.cam.ac.uk