

The Science Council

- The Science Council is a membership organisation representing 41 learned societies and professional bodies¹ drawn from across science and its applications. Our mission is to support the professional development of scientists through setting common high standards and codes of conduct across the disciplines and sectors of science and at all levels in the science workforce.
- 2. The Science Council's principal area of work is to advance the professional practice of science across the breadth of the science workforce, including technical roles in science. A key aspect of this is professional registration and having introduced Chartered Scientist (CSci) in 2004, the Science Council has added Chartered Science Teacher (CSciTeach), Registered Scientist (RSci) and Registered Science Technician (RSciTech).² RSci and RSciTech aim to raise the profile, aspirations and retention of scientists at graduate and technician level.

Recognising and rewarding excellent teaching

- 3. Science technicians in higher education have a significant impact on students' learning experience. To ensure that they continue to provide an excellent teaching experience, higher education institutions, in partnership with the Science Council, should encourage the professional registration of their science technician workforce through its Employer Champion scheme.³
- 4. The Science Council welcomes the government's recognition of the importance of academic support staff to teaching quality in higher education. Over 33,000⁴ technicians are employed in English universities who contribute greatly to student learning outcomes in many ways. Recognising and rewarding institutions that demonstrate a commitment to the continuous professional development (CPD) of teaching and academic support staff will help drive improved standards in HE science teaching, and in turn will produce the type of science graduates that are in demand by employers.
- 5. The UKs anticipated withdrawal from the European Union means that it will be even more vital that employers have access to a sufficient supply of highly-skilled scientists and technicians in order for the UK economy to prosper.
- 6. The Science Council is working with HEIs⁵ that are committed to the professional development of their science teaching and technical staff through our Employer Champion Scheme. Within the assessment criteria the TEF should recognise institutions that become Employer Champions, as doing so demonstrates those institutions that are committed to investing in their technical staff's CPD. This will help drive up teaching standards by encouraging others in the sector to demonstrate a similar commitment. The scheme is without charge and should be an aspiration for all HEIs that want to demonstrate excellence in their teaching quality. Government support for the scheme can hasten the drive to improve teaching standards in HE.

¹<u>http://www.sciencecouncil.org/our-members</u> ² <u>http://www.sciencecouncil.org/professional</u>

http://www.sciencecouncil.org/employers/become-an-employer-champion/

⁴ <u>http://www.gatsby.org.uk/uploads/education/reports/pdf/he-techn-final-report.pdf</u>
⁵ <u>http://sciencecouncil.org/web/wp-content/uploads/2016/03/Science-Council-Working-with-Higher-Education.pdf</u>

- 7. Employer Champions commit to upholding the Science Council's professional standards by investing in their staff and having their skills and competence recognised. The professional registers provide a benchmark that embrace and uphold standards of excellence in the practice of science. Achievement and retention confirms an individual's commitment to the highest levels of professionalism and competence through ongoing development of their skills and knowledge.
- 8. The HE technician workforce is an ageing one, meaning that large numbers of highlyskilled technicians will be retiring over the next decade or two, taking their knowledge and experience with them. To adequately replace and retain this vital workforce, the technician role must be an attractive career choice with demonstrable career progression built in, which the Science Council's professional registers provide. Becoming an Employer Champion demonstrates that an HEI is actively investing in the career development its staff.
- 9. The Science Council supports the proposal to award Commendations to HEIs that demonstrate excellence in supporting, rewarding and recognising their teaching and support staff. Achieving and maintaining Employer Champion status with the Science Council would be a way to demonstrate that an institution has achieved excellence in this area.

Rewarding student outcomes and learning gains

- 10. The TEF assessment framework should recognise HEIs that demonstrate they are working with professional bodies and employers to ensure students are given high-quality work experience opportunities that are linked to professional registration.⁶
- 11. The Science Council works in collaboration with HEIs and employers to endorse highquality, year-long industry placements for students. Students who complete their year in industry and Science Council assessment can gain nationally recognised RSci status for the knowledge and skills they have gained. This sets them on a journey to achieving CSci status. For employers, aligning the RSci standards to placements has provided greater structure to their programmes, improved their quality and an added competitive edge enabling them to attract the best students.
- 12. HEIs actively encouraging students to take on placements that enable them to achieve RSci can enhance their students' employability prospects, raise student satisfaction levels and reinforce their support for excellence in teaching.

The role of degree accreditation in raising teaching standards

- 13. As recommended in the Wakeham Review of STEM Degree Provision and Graduate Employability⁷, the Science Council will, over the coming months, explore how it can develop a unified accreditation framework for the science disciplines. We are committed to working with the sector to champion a coherent approach to degree accreditation across science in HE.
- 14. Degree accreditation can contribute to student learning gains by providing an independent quality stamp that confirms an institution's teaching is high-quality and is producing graduates with the knowledge, skills and resilience demanded by employers.

⁶ http://sciencecouncil.org/scientists-science-technicians/benefits-of-professional-registration/ 7 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/518582/ind-16-6-wakeham-review-stem-graduate-employability.pdf

Collaboration between employers, the science professions and HEIs on course design can help institutions ensure their students meet recognised professional standards that employers want.

- 15. Degree accreditation can also provide the incentive for HEIs to work with employers and professional bodies to raise the quality of their teaching, particularly those with high levels of graduate under-employment.
- 16. If the TEF is designed to operate at the institutional level, more granular information about teaching quality within individual departments will be required to help inform student choice; course accreditation is the best means of providing this.

HEIs reporting on diversity metrics

17. We recognise that HE can be a strong driver of social mobility. The Science Council is working, through its member bodies, is committed to working towards a UK science workforce that reflects society's diversity.⁸ We agree with the metrics proposed, and would recommend that data at the subject level must also be included. This will be important in order to measure current progress and improve access into all the leading professions. More granular data will enable professional bodies and others to better target schemes designed to reach groups to attract them to HE.

⁸ http://sciencecouncil.org/professional-bodies/diversity-equality-and-inclusion/