Working with **Higher Education** to set the standards for professional scientists



100



The science students of today are the professional scientists of tomorrow.

To strengthen the science profession and build public trust and confidence in the application and practice of science, we must engage with students at universities and other higher education institutions.

From many years teaching and my own experience building a successful business from science research, I know that students across the UK have enormous potential to use their passion for science for a better future for all.

I believe that the work the Science Council is doing to engage the higher education sector is hugely important. And I over the next few years more institutions will partner in our work.

Professor Sir Tom Blundell, President of the Science Council



Technicians are the unsung heroes of research and teaching in HE.

When I was studying science at university, I learned first-hand how valuable a good technician can be for an enthusiastic student. We want to encourage all students, and staff, to recognise their value.

There are several strands to our vision: an able and professional technical staff supporting the practical education of science students; approved work placement schemes that set students on a path to professional recognition; and a commitment across the sectors and disciplines of science to ethical conduct by scientists.

If you share this vision, then I and my team are looking forward to working with you!

Belinda Phipps Chief Executive of the Science Council

Professional technical staff

Technicians are vital to the success of the UK's universities. and research institutes.

They underpin the key activities of their organisations, providing the technical expertise essential to research, teaching and knowledge transfer. Alongside this, many technicians are researchers and teachers in their own right. Despite the importance of technicians, traditionally their role has not been well recognised and their career and professional development can often be overlooked.

The Science Council has been working to increase the recognition for technicians and to improve their professional development opportunities at all career stages. Registered Science Technician (RSciTech), Registered Scientist (RSci) and Chartered Scientist (CSci) recognise people in technical science roles with different degrees of responsibility, knowledge and skill.

CASE STUDY: NEWCASTLE UNIVERSITY



Newcastle Newcastle University is very proud of the quality of their research and teaching. According

to their Vice-Chancellor, Professor Chris Brink, for this to succeed, "There must be a strong cohort of technicians." Mel Leitch, Technical Manager for the Institute of Neuroscience, immediately recognised the potential for professional registration to inspire not only his team, but all technical staff in the university. "Newcastle University as an employer is very committed to encouraging career development, and since our technicians make such a crucial contribution to the core research and teaching of the University, we felt the Science Council's programme was tailor-made for us to

It is unimaginable that we could deliver what we do without a really well qualified and motivated technical staff.

Professor Sir David Greenaway; Vice-Chancellor University of Nottingham, Chair of the Russell Group



meet this commitment."

Working with the Science Council, Mel has organised workshops, registration days, and encouraged those in his team that are already registered to act as mentors for anyone going through the application process.

"Recognition is something that we've been struggling with as a group of workers within Higher Education and professional registration has been a vehicle for giving us this recognition," says Mel. "Those technicians that have become professionally registered have become super motivated. They come to me with solutions, not problems; they come with initiatives that they want to drive forward. Having that empowerment is really impressive." Watch the video at **sciencecouncil.org/newcastle**

Science Council Working with Higher Education

Improving student employability

The Science Council works with universities to help employers and students get the most out of industry placements, through the professional standards of Registered Scientist (RSci).

RSci standards cover the breadth of scientific disciplines - from food science to sports science to bioscience and beyond. This means that the student, having completed their year in industry and Science Council assessment, achieves nationally recognised registered status for the practical skills they have gained on placement.

For students, recognising their vocational experience through the RSci standards gives them the edge over new graduates and enhances their employability.

For employers, aligning the RSci standards to placements has provided structure to their programmes and an added competitive edge enabling them to attract the best students.

Encouraging Pfizer placement students to apply for RSci helps them recognise everything they have achieved in their year in industry. **Recognising their vocational** experience gives them the edge over new graduates and Pfizer is proud to support that.

CASE STUDY: THE UNIVERSITY OF NOTTINGHAM

The Universitu of Nottingham UNITED KINGDOM · CHINA · MALAYSIA A year in industry can be hugely valuable for students, not simply as a separate event, but as an integral part of their academic

experience and their professional development.

In 2015 the University of Nottingham introduced the Science Council to their Food Sciences placement students to learn how their experiences might align with the competences for the Registered Scientist award. Students were very keen to gain recognition as professional scientists in time for graduation and subsequent employment.

The students all said the process of aligning their placement year experiences to national standards made them reflect on what they had achieved and areas for future development. Dr Judith Wayte, who leads the university's placements programme is pleased with the opportunities this has provided: "Through discussions with employers, we now have a way of sharing good practice with new placement providers."

In December of that year the first group of students were assessed for the Registered Scientist award and a celebratory event was held for all those who were successful. The university is now expanding the scheme across their Year in Industry programmes.

Influencing the policy environment

The Science Council brings together a wide range of disciplines and sectors, through our member organisations and employer champions, for collaboration and campaigning.

The Science Council provides a voice on policy issues affecting the science community, fostering debate and the exchange of ideas. Becoming an Employer Champion provides exclusive access to these forums and other opportunities to influence the conversation.

Most recently, the Science Council has been represented on The Wakeham Review of STEM degree provision and graduate employability. As a result, we are leading on the development of a broader system of accreditation to ensure that graduates have the core skill set required of a STEM graduate.

The Science Council also regularly contributes to a wide range of policy consultations from Government. Parliament and stakeholders across the science community and beyond, including access to postgraduate study, apprenticeships and funding for science research.

The Science Council really helped us to get the message across to politicians and their advisors on the importance of science and scientific skills to the UK's economy.

Polly L Arnold, Crum Brown Chair - Chemistry, Edinburgh University

Kate Barclay; Director, Pfizer Ltd

Supporting your organisation

The Science Council recognises organisations that encourage professional registration of their staff and invest in their development through our Employer Champion programme.

All our Employer Champions have set out their commitment to guality and ethical standards for their employees, students and their organisation as a whole. In return we provide dedicated support from our staff team, along with tools and resources that promote professional practice within their organisation.

CASE STUDY: UNIVERSITY OF EXETER



Members of the University of Exeter's Technical Services team attended the University Bioscience

Manager's Association conference in Nottingham in April 2015, where they heard about the Science Council Employer Champion programme. "After the conference we went onto the website to find out more and got in touch with the Employer Engagement team," said Jonathan Cresswell, Deputy Head of Technical Services

The University had recently transformed how it delivered technical support across the organisation, and registration seemed an ideal way to embed professional development within the new structure.

"We're in the embryonic stages of being an Employer Champion," says Jonathan. "But we're looking forward to engaging our technical staff, establishing links with professional bodies, and promoting professional registration across Technical Services and the wider University"

Being an employer champion has boosted the confidence and momentum of the Research and Support staff, realising their value to science and the JIC. The initial successful registrants have had a positive 'ripple effect', mentoring colleagues to follow in their footsteps and generating wider enthusiasm and motivation across the institute.

Vanda Morgan, Training and Development Manager, John Innes Centre



Career framework through professional competences

Our professional registers respond to society's need to attract, train, retain and retrain for a thriving science workforce, as well as encouraging improvement through continuing professional development.

For your staff, this can be an excellent tool for motivating and developing people in their roles. For students, it can set them on a defined career path and help set them apart as potential employees.

RSciTech Registered Science Technician	RSci Registered Scientist
Registered Science Technician	Registered Scientist
De siste se d Caiser es	Registered Scientists
Registered Science Technicians work in	apply their skills and knowledge in a
technical roles, delivering	managerial or relatively
essential scientific	senior role, where they
services and support	have responsibility for
within laboratories,	others but
schools and universities,	are not yet working at a
hospitals and in many	chartered level.
other workplaces.	

From doing my professional registration I hope to get a sense of recognition for what I do and what I love doing."

Emma Bennison; Technician at Newcastle University



Chartered Scientist

Chartered Scientists lead teams and departments. using specialist knowledge and broader scientific understanding to develop and improve the

application of science and technology.

CSciTeach Chartered Science Teacher

Chartered Science Teacher

Chartered Science Teachers combine scientific knowledge with pedagogic skill, delivering high standards of teaching and learning.

Become an Employer Champion

to support the scientists of today and of the future

Get in touch to find out more **sciencecouncil.org/contact-us**





Contact us: T: 020 3434 2020 E: enquiries@sciencecouncil.org

sciencecouncil.org

The Science Council, Hodgkin Huxley House, 30 Farringdon Lane, London EC1R 3AW

The Science Council is registered with the Charity Commission in England No:1131661