

CPD fuels a thriving science sector



Della Freeth, The Science Council

Scientists and technicians are, at heart, problem solvers. This is something that the Science Council's partnership with Lab Innovations, the UK's leading trade show for laboratory professionals, has sought to position front and centre since they began working together in 2019.

One of the great joys of scientific work is the moment when a complex challenge yields to careful reasoning, experimentation or collaboration. That spark of satisfaction sits at the centre of innovation, and it is also central to the reason why professional development matters.

To support that joy, and to ensure it continues to translate into world-leading research, discovery and commercial success, the United Kingdom must nurture the skills, confidence and professionalism of the scientific workforce.

The project Lab Innovations and the Science Council collaborate on seeks to support that goal by promoting professional registration and supporting CPD-accredited content, bringing recognised standards and legitimacy to the laboratory community attending the show.

This is delivered through high-quality, CPD-accredited content across themes such as quality, compliance, skills and development, biotechnology, AI and automation, sustainability and laboratory innovation. These areas of focus form the backbone of a resilient, future-ready science sector.

The benefits to employers

The Science Council is the UK's umbrella organisation for the professional registration of scientists and science technicians. Through designations such as registered science technician (RSciTech), registered scientist (RSci) and chartered scientist (CSci), it provides independent, peer-reviewed validation of professional standards.

These registrations are voluntary, but they carry significant value, and we encourage their use wherever possible. They signal that a scientist or technician has demonstrated competence, professionalism and a commitment to ongoing development.

But our framework goes beyond deep technical expertise. Registration confirms that individuals can apply their knowledge in complex, unpredictable situations; that they take responsibility for the impact and quality of their work; that they can communicate effectively with specialist and non-specialist audiences; and that they continue to refine their practice through structured development.



For employers, this offers reassurance. It provides a portable, cross-sector quality mark that helps them build a workforce capable not only of meeting today's demands but adapting to the needs of tomorrow. It creates trust.

Trust in science

Trust in science is precious. In a time when fake news and misinformation can travel faster than evidence, and when questions of ethics, safety and compliance are raised more frequently, demonstrating professionalism is essential. Continuing professional development is one of the most effective ways to reinforce this trust.

"There is no doubt that the public, politicians and the press hold 'scientists' in high regard," explains Paul Lee RSci, a healthcare scientist and Science Council registered scientist. "Anyone who works within the science field would benefit, from schools, colleges, NHS, private sector, those involved in research and development and teaching. Anyone who has something to offer, or something to share then they would all benefit in some way."

"The spark of satisfaction at solving complex challenges sits at the centre of innovation."

Registration with the Science Council requires ongoing CPD, but it also requires reflection on that learning. Scientists and technicians must consider how new knowledge changes their practice and how it benefits the users of their work.

This reflective element is vital. It reinforces the idea that CPD is not a tick-box exercise but a meaningful investment in quality, safety and integrity. In fast-moving areas such as biotechnology, automation and AI, it ensures that practice remains current and accountable.

When employers, policymakers and the public see that professionals are maintaining standards through structured, peer-reviewed development, it strengthens confidence in the reliability of scientific work.

The value of CPD to the individual

For individuals, the impact of CPD and professional registration can be transformative.



Registrants often tell us that the process builds confidence and encourages thoughtful, deliberate practice. It also supports progression, opening pathways into more advanced or diverse roles.

Professional registration gives scientists and technicians a clear way to articulate their competence, particularly to employers who value evidence of professionalism.

Making this visible is important. Scientists and technicians who include their postnominals in email signatures or professional profiles help raise awareness of professional standards across their organisations. It prompts colleagues to ask questions, sparks curiosity and, in many cases, encourages others to explore registration for themselves. These small signals help embed a culture of professionalism that benefits the entire scientific community.

"I feel very proud of achieving chartered status, as it's an important professional milestone and it is recognition of the years of work and the experience I've gained along the way, explains Dr Jennifer Blyth, technical and quality manager at independent quality assurance company SSQC. "It's given me greater confidence in my abilities and shows that I have a high standard of integrity. I hope that I can use this to contribute to my profession in a meaningful way."

The value of CPD to the employers

Employers also benefit significantly from supporting CPD and encouraging registration. A registered workforce offers reassurance that the whole team operate to validated standards of competence and ethics.

It means that professionals are capable of applying their expertise in nuanced, real-world contexts, and that they are equipped to anticipate and manage risks. Because registration includes expectations around communication, leadership and interpersonal skills, employers also find that registered individuals can collaborate effectively, represent their organisations confidently and maintain productive working relationships.



This commitment to development has cultural advantages too. Staff who feel supported in their progression are more motivated and more likely to remain with their employer, helping organisations maintain stability in fields where recruitment pressures are often intense. A well-developed workforce strengthens organisational reputation and demonstrates a clear commitment to scientific quality.

Crossing the skills chasm

Skills shortages remain one of the most significant challenges facing the scientific workforce. Whether in laboratory science, environmental analysis, advanced manufacturing, materials science or life sciences, employers consistently report that they struggle to fill roles at every level.

It sometimes seems like British science has less of a skills gap, and more of a skills chasm. But that chasm can be closed if we work together as individuals, businesses and as a country, applying concerted effort to the problem.

CPD is the most direct response an individual can take to this issue. It enables employers to grow their own talent, upskill existing staff and support movement into priority areas such as AI-enabled laboratory processes, carbon capture, digital pathology and sustainable production.

Talking about her chartered scientist, Prof Catherine Hayes CSci, Professor of Health Professions Pedagogy and Scholarship at the University of Sunderland explains, "It has been a real opportunity to try to break down barriers and make science accessible beyond the roles traditionally associated with it

"I have also been able to tell school children about the title at Open Days and to, again, broaden perspectives on the role of applied research and work-based research practice within my role as a supervisor, teacher and facilitator on the Professional Doctorate programme here at the University of Sunderland."

In schools, The Science Council is committed to aligning professional registration with apprenticeships and the

emerging T level system as well as traditional academic routes. By creating shortened pathways to registration for those entering through technical routes, we broaden access and encourage career-long development from the very start.

This means that apprentices and T level graduates can progress quickly into roles where CPD becomes a natural and expected part of their working life. This reduces bottlenecks in the talent pipeline and ensures that the UK's science workforce has the breadth and adaptability it needs.

A reputation built over centuries

The UK's reputation for excellence in science has been hard won but in a competitive global environment, it must be actively maintained. Professional registration and CPD support that goal by embedding competence, ethics and reflective practice across the workforce.

They bring the ambitions of national policy into direct alignment with the everyday work of laboratories, research teams and technical staff.

When scientists and technicians demonstrate their professionalism through recognised standards, they contribute to the UK's standing as a trusted, innovative and high-quality science nation. In turn, this reputation attracts investment, strengthens collaboration and accelerates the development of new technologies.

What's the bottom line?

Enhancing the impact of CPD requires collaboration between industry, employers, policymakers and professional bodies.

"Being a member of my professional body gives me proven, authoritative validation of my abilities within my area of expertise," explains Keith Goulding CSci, Sustainable Soil Research Fellow.



"Scientific excellence is earned through discovery and sustained through professionalism."

"It enables those of us with academic qualifications to prove our professional competence and show that our research is applied by the user community and so has impact," he concludes.

Government can support apprenticeships and T levels to ensure that early career positions remain robust. Employers can invest time and resources into workforce development, offering space and encouragement for ongoing learning. Professional bodies like the Science Council can continue to refine standards, expand access routes and promote the value of registration. Together these actions create an environment where CPD is not an obligation but an opportunity, and where it drives innovation across the sector.

The joy of solving problems

At the heart of all this sits the spark that drives scientists – the joy of solving problems. CPD strengthens that spark. It gives scientists and technicians the confidence to approach new challenges with skill and experience.

Perhaps the last word should be given to Professor Hayes, who said, "Be bold, be brave – but most importantly, and if you want to leave the best legacy imaginable, be authentic and be compassionate to others in their own development and progression." Nothing sums up CPD better.

The Science Council ([sciencecouncil.org](https://www.sciencecouncil.org)) is a Royal Charter charity: a collaborative of 30+ professional bodies representing the full spectrum of science, with over 320,000 individual members across the science workforce. Our purpose is to strengthen the collective impact of the science community for public benefit. We do this by connecting the science professions to foster knowledge exchange, and through our professional registers, offer interdisciplinary recognition. We license four professional registers: Chartered Scientist, Registered Scientist, Registered Science Technician and Chartered Science Teacher. Our vision is a diverse and growing science profession that is trusted, respected, innovative and equipped to meet regional, national and global challenges.



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