WARWICK
THE UNIVERSITY OF WARWICK

Our Technician Commitment

Introduction

It's eight years since the University of Warwick signed up for the Technician Commitment and we've achieved a huge amount in that time.

Thanks to the commitment from our Senior Management Team and our engagement with technicians we've introduced things that will make a difference to our technicians, and we aim to do more. Throughout this brochure you will read about things that we have achieved through our action plans and what we want to achieve into the future. We can't do this without the help of our technical community and you will also read about ways that you can feed into our Technician Commitment and really make a difference.

Warwick became a signatory to the Technician Commitment in 2017 and since then, a huge amount of work has been undertaken on job families and career development, including the addition of our Technical Specialist Promotional Pathway. Of course, there is still much to do; but we are committed to the work that this requires. Now, we are involving the technical community with the project, listening, and focussing on things that are important to our technicians at this time. This is vital and important work in its own right. But there is an added element to this. It has become increasingly clear to all staff, not just those involved in particular parts of the university, just what a massive role our technical staff play in our world-class teaching and research. Technical staff also play a key role in implementing our sustainability strategy. We will ensure the visibility and recognition of our technical staff over the course of our action plan. I hope that this is a very exciting time to be a technician, with more opportunities available than ever before. We want to make you aware, and enable you to take advantage of these opportunities, whilst also listening to how we can support you further.

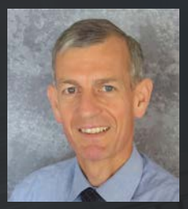
Professor Stuart Croft
Vice-Chancellor & President of University of Warwick

In this brochure, you can read about some of the progress we have made since becoming a signatory of the Technician Commitment and how you can engage further to shape this moving forward.

The Technician Commitment is all about increasing visibility, recognition, career progression and sustainability in a way that benefits technical staff: we are building this together as a community through on-going evolution of the Action Plan, shaped by those whom it benefits most. Greater engagement of technical staff in the life and decision making of the University is part of the plan. To this goal, we have technical representation on our institutional Research Committee and our Research Culture Forum, which includes students, technicians and academics as equal voices.

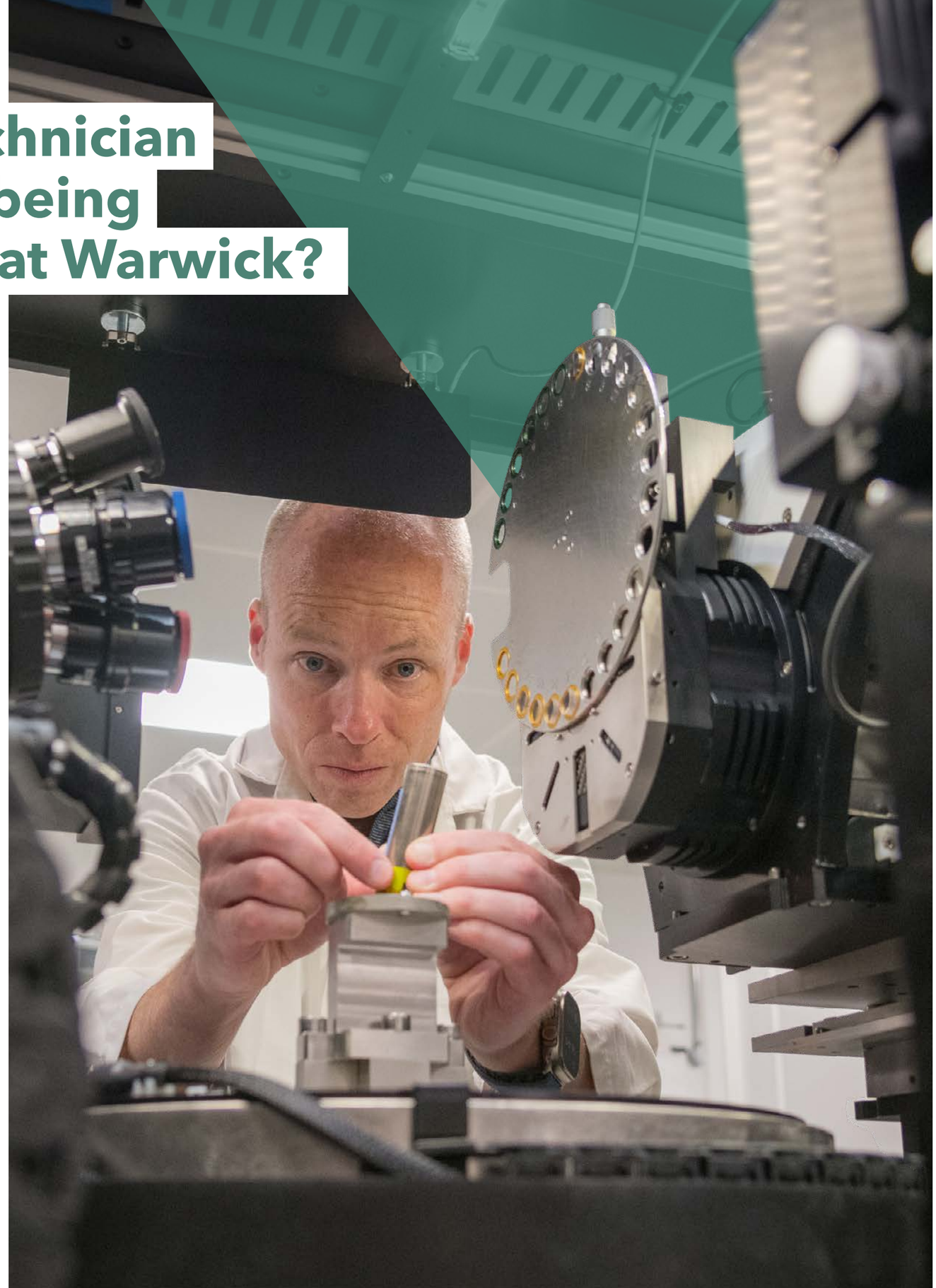
TechNet@Warwick has been created as a website to highlight opportunities and celebrate achievements of technical staff – contributions and suggestions of what you want to see there are always welcome. You can also read about networking and development opportunities designed specifically for technical staff, as on-line and in-person events, especially those provided through the UK Institute for Technical Skills and Strategy (ITSS) and the UK Technology Specialists Network (TSN) Research Technical Professional Opportunities, Knowledge and Skills (ROKS). There has been really positive feedback from those who have engaged with these opportunities and we hope many more technical staff will benefit from a varied program in future. Please do tell us if you really want an event or training opportunities focussed on something different.

I hope that you enjoy this brochure and engage in opportunities to help our vision of making things happen for technicians.



Professor David Leadley
Deputy Pro-Vice-Chancellor for Research

How is the Technician Commitment being implemented at Warwick?



The work on our Technician Commitment is overseen by a Steering Group chaired by Professor David Leadley, Deputy Pro-Vice-Chancellor for Research.

Membership includes the Director of Research Technology and Technical Strategy, Senior Managers of Technical Areas and HR. The Steering Group meets quarterly and all matters relating to Technicians are discussed and approved at the Steering Group.

We also have a Technician Commitment Sub-Group which meets 2-3 times a year to discuss matters that require input from the technical community. The ideas and challenges raised in this group are fed into the Steering Group. We engage with the wider technical community through annual Focus Groups, informal chats and twice-yearly update events (summer and winter). This input is crucial to the success of the project and we will continue to engage in this way and endeavour to encourage Technicians to work with us on smaller projects in the future.

Our initial action plan (July 2018-December 2020) saw work mainly focussed on the formulation of a career progression pathway and Technical Job Family which was implemented in April 2021. Our second action plan (January 2021-December 2023) focussed on reward and career development and during this period we introduced the Warwick Technician Commitment Award for Outstanding Achievement for which we receive nominations for single and team awards twice a year, a career development programme for non-specialist technicians and the pilot of our Technical Specialist Promotional Pathway.

Our next action plan, which commenced in January 2024, has been built around the 10 action points which were committed to with our MI peers in response to the TALENT Commission Report, and this plan continues our work in enhancing the careers of technical staff and concentrates on areas such as:

- Mental health and EDI issues
- Research culture and outreach
- Career progression and development
- Showcasing the work of technicians

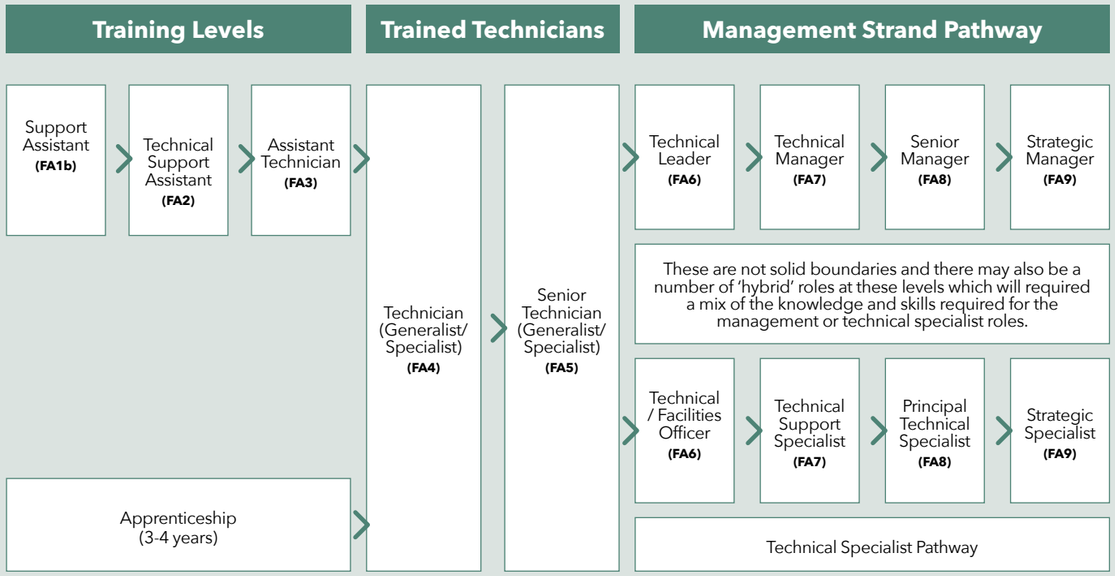
The details of this action plan can be viewed at warwick.ac.uk/research/technicians/ourtechniciancommitment

This is a living document and we welcome feedback and input in this and all matters relating to the Technician Commitment. There are a number of ways you can engage with us online or in-person. Your input into the Technician Commitment is vital and we continue to need your help and support to enable us to make a difference.

Career Progression and the implementation of the Career Pathway/use of generic job titles

The Career Pathway was formulated in 2021 to demonstrate the career pathways that might be available to our technical staff.

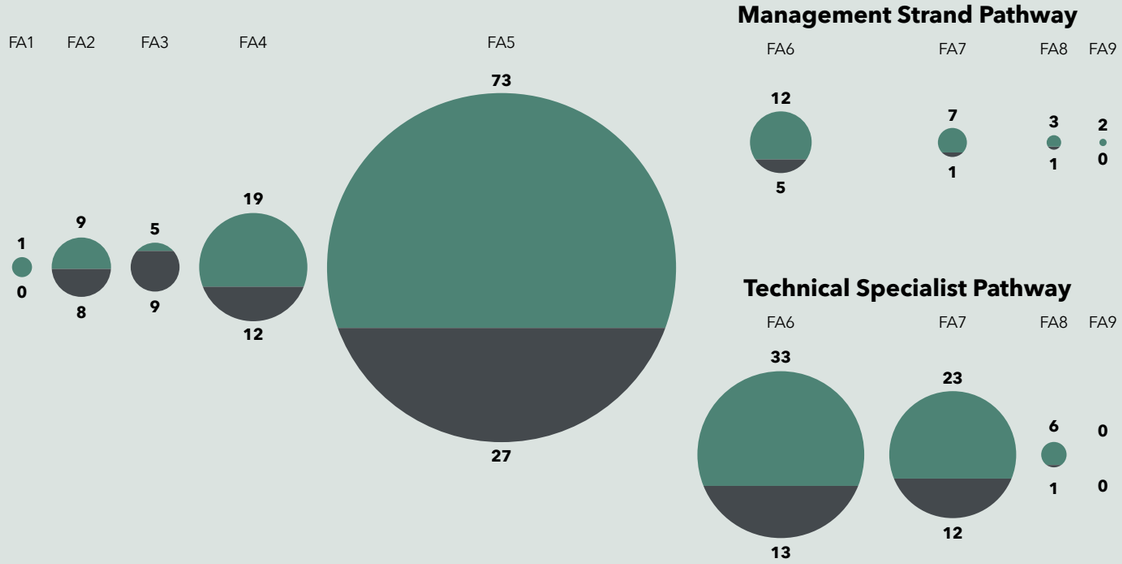
There are a number of routes that your career may take and this can sometimes mean making a sideways move to obtain different skills and knowledge to help you progress. To simplify this, we have introduced generic job titles which enable us immediately to recognise where you sit on the Career Pathway in terms of grade and strand. Our generic titles have been simplified further since the original career pathway was introduced and this is shown below:



PROFESSIONAL REGISTRATION – there are a number of professional bodies across the sector offering support and registration at differing levels from Registered Science Technician (RSciTech), Engineering Technician (EngTech) up to Chartered status. Professional registration establishes your proven knowledge, understanding and competence. Whilst this is not a requirement at all levels it demonstrates your level of knowledge and encourages continuous professional development.

We also regularly update our roadmap of roles which aims to give an indication of the type of roles that are undertaken at each level/career strand in the University. This roadmap outlines the current job titles of technical staff at the University. It is very difficult to assess what grade a role is from the title. It is often difficult to understand what a person does from their job title too. Over time we will aim to streamline job titles to make them more meaningful. In the meantime, it enables us to track changes across the career pathway on a regular basis.

Representation of technical staff at each level at Warwick, where size of bubble directly relates to number of people in roles at that level.



FA1 Support Assistant
FA2 Technical Assistant
FA3 Assistant Technician
FA4 Technician
FA5 Senior Technician

Management Strand Pathway
FA6 Management
FA7 Management
FA8 Management
FA9 Management

Technical Specialist Pathway
FA6 Technical/Facilities Officer
FA7 Specialist
FA8 Specialist
FA9 Specialist

Man (193)
Woman (89)
TOTAL 282

Over the course of the next 3-year action plan we will be looking at succession planning and how we can maintain skill levels across the University as technicians take other avenues open to them. This will mean looking at the recruitment process for technical staff, promotion and how we can achieve success with Warwick as the employer of choice for technicians in the future. This will involve promoting the technical career path.

We also continue to consider recognition of Technicians and how we can develop them to take opportunities that arise in the future.

Case Study

Zac Parkinson

Can you tell us about your career journey so far?

My journey into Engineering started in 2007 while I was still in secondary school. I was given the opportunity to study for an NVQ Level 2 in Engineering at Warwickshire College Group, this was a key turning point for me as it allowed me to gain hands-on experience with engineering tools and machinery that I wouldn't have had access to at school. Over two years, I developed practical skills using manual milling machines, lathes, and hand tools. The programme also required me to complete 50 days of work experience across various engineering industries. One of these placements was at WMG, where I first encountered the world of research and technical support in a university setting.

During that placement, I spoke with members of the WMG technical management team about potential apprenticeship opportunities. WMG hadn't taken on an apprentice in 15 years, but our conversations highlighted the need to invest in new talent to support their ageing workforce. As a result, I was offered an apprenticeship - something I felt extremely fortunate to receive. Over the first four years, I worked across a wide range of WMG departments, gaining experience in research and teaching spaces focused on robotics, advanced manufacturing, computer-aided design, and more. I was supported throughout by experienced technicians and engineers who generously shared their knowledge and encouraged my development. I was also able to attend college, alongside my apprenticeship, to complete my Higher National Certificate (HNC), which helped strengthen my theoretical understanding of the tasks I was doing and allowed me to connect with others in similar roles who had the same passion for the experience as I did.

After completing my apprenticeship, I joined the WMG Technical Services Team as an engineering technician. In this role, I supported research and teaching by programming and operating CNC machinery to manufacture prototypes and test components. As WMG's facilities and technologies continued to evolve, I became involved in integrating new equipment to cater for the needs of our customers. I took the initiative to ensure it was used to its full potential by seeking training, developing safety procedures, and passing on my knowledge to other technicians.

This proactive approach helped build my confidence and led me to think more strategically about how we could improve our workspace and develop the capabilities of junior staff. With WMG expanding rapidly, I saw an opportunity to progress and applied for a secondment in the technical management team as a workshop manager. In that role, I was responsible for overseeing several labs and workshops across five buildings, managing technical staff, and developing relationships with a wide range of stakeholders. These relationships proved crucial when I encountered new challenges as I could call on them for their advice and expertise. This position also gave me valuable insight into the breadth of teaching and research at WMG and allowed me to develop new leadership and problem-solving skills. I also helped to shape our apprenticeship programme by designing a rotational placement schedule, ensuring future apprentices would benefit from a similarly rich and varied experience.

From a school placement to a leadership role in a major research institution, my journey has been shaped by hands-on learning, mentorship, and a strong sense of curiosity and commitment to continuous improvement.

In July 2023, I applied for a newly created role within the WMG Technical Services team: Technical Apprenticeship and Development Manager. This position represented an exciting opportunity to combine my passion for people development with the department's strategic goals. The role was designed to enhance the growth and progression of our technical staff, and I was particularly drawn to the chance to shape and support both our established team members and the next generation of technicians.

The vision for the role centred on building a structured, high-quality development pathway alongside our training providers. This includes laying strong foundations for our newly recruited Level 4 apprentices, ensuring they are well-supported, engaged, and set up for long-term success, and carefully crafting a tailored programme to support the integration and progression of our T-Level students. I saw this as a pivotal opportunity to embed a culture of continuous development within the technical community at WMG, aligned with their individual career aspirations.

Zac Parkinson
Zac is the Technical Apprenticeship and Development Manager in Warwick Manufacturing Group (WMG).

What factors have been key to your advancement and how has Warwick's support, such as the Technician Commitment, helped you progress?

Several factors have played a key role in my development over the years. The most important has been the support of experienced colleagues who've taken the time to share their knowledge and encourage me to step outside my comfort zone. I've built strong, supportive relationships across WMG and the wider University by networking with a broad range of people. These connections have been invaluable when I've faced new or unfamiliar challenges - whether it's resolving infrastructure issues or reacting quickly to support research. Having people I can turn to for advice has been a constant in my career and has really helped me build confidence in both my technical and leadership abilities.

Professional development has also been a big part of my progression, and Warwick has consistently backed this. When I moved into the Workshop Manager role, I knew I needed to approach things differently as managing peers and dealing with complex situations was a whole new challenge. I took part in university management courses which really helped me understand how to support a team effectively. Over time, I found that I genuinely enjoyed that side of the role - helping others develop, spotting training opportunities, and supporting colleagues to plan their next steps.

The Technician Commitment has also made a big difference. It's raised the visibility of technical careers and created more structure around development and recognition. It's helped build a culture where technical staff feel valued and supported to progress, including into leadership roles. That's had a big impact on me personally, and it's shaped how I now try to support others.

Beyond Warwick, initiatives like Midlands Innovation (MI) TALENT and the Institute for Technical Skills and Strategy (ITSS) have given me further opportunities to grow as a manager and leader. They've helped me reflect more strategically on how I work with and lead others, and I've been able to bring those insights back to strengthen relationships within my own team.

It reinforced the idea that going above and beyond isn't just about doing more—it's about enabling others, improving systems, and driving positive change across the organisation.

As a result of all this, WMG is now leading the way in developing technical career pathways. Our apprenticeship and development programmes are being recognised as examples of best practice, and I've been approached by other institutions keen to hear how we've done it. It's been a great experience to be part of that wider conversation and to know that the work we're doing is having an impact beyond Warwick.

Was there a particular moment or milestone in your career where you went above and beyond—something that really helped you take the next step forward?

Yes, a defining moment for me was when I took the initiative not just to learn a new technical process, but to look at how we could integrate it more strategically into our team's operations to better support both research and teaching. Rather than stopping at the basics, I went further - developing the necessary health and safety documentation, streamlining workflows, and identifying opportunities to improve efficiency and reduce lead times. I also took it upon myself to connect with external experts to explore best practice and see how we could get the most out of the technology.

What made this moment stand out wasn't just the technical improvements, it was the shift in how I was seen within the team. I moved from being someone who completed tasks to someone who could lead change, support others, and help build resilience within the group. I began training colleagues, sharing new practices, and thinking more strategically about how we work as a team.

This experience gave me the confidence to contribute ideas for wider improvements across the workshop and to get involved in supporting team development. It played a big part in my progression into a managerial secondment and was the first time I realised the impact I could have beyond my own day-to-day responsibilities. It reinforced the idea that going above and beyond isn't just about doing more—it's about enabling others, improving systems, and driving positive change across the organisation.

Technical Specialist Promotional Pathway

Following our commitment to enact the recommendations of the TALENT Commission, we were amongst the first UK institutions to put in place a Technical Specialist Promotional Framework.

This framework enables technical specialists to progress based on their own merit against a modified version of the four criteria used for the Academic Progression and Promotional Framework, enabling recognition for excelling in a role whilst remaining a specialist.

Why open this pathway to technical specialists?

Academic staff have a well-established route and process for promotion based upon a framework with four core criteria. Increasingly, technical specialists are 'blurring the boundaries', through their direct input to research, teaching and training, and knowledge exchange. This is further demonstrated through recent successes with our technical specialists securing funding from UK Research and Innovation (UKRI). Therefore, with small modifications to the four criteria used for academic promotions, we are able to reflect the differences in roles between the three academic pathways and a pathway suitable for technical specialists. This includes equivalency in threshold scores at each level to the academic pathway.

We acknowledge that not all technical specialist roles will be in a position to take advantage of the pathway due to the nature of the particular role, and so progression will still be achievable through applying for a new position at a higher level, or where there is a business need and significant change in responsibilities, potentially a job re-evaluation. This is in line with all other professional services staff.

The process runs alongside the Academic Progression and Promotional Framework each year. To find out more and for regular updates, including interviews with those who have been successful through the pathway, please visit the website link below:

warwick.ac.uk/research/technicians/technicalspecialistspromotionalframeworkpilot

Case Study

Steve Hindmarsh

What was your journey to becoming a technical specialist?

I've had a non-traditional route into this role, completing a Product Design undergraduate degree before switching fields to work as a Measured Building Surveyor. I then moved into Commercial Building Energy Assessment, though didn't enjoy the role, particularly the huge amount of travel required. Therefore, in 2011 I took the risk of resetting my career, taking a low-grade trainee technician position (grade 3) within the Physics Department at Warwick.

I spent much of the first year gaining experience of different areas and groups within the department, finally ending up within the microscopy group. This was an area that I enjoyed and that had the space and need for a new technician. Over the next few years I reached a good level of competency and gained a couple of promotions up to senior technician level (grade 5). This coincided with the formation of the Research Technology Platforms, with Electron Microscopy forming one of the original core facilities.

In 2018 a higher-grade role (grade 6) became available within the electron microscopy facility at Warwick Manufacturing Group (WMG). With promotion beyond Senior Technician level proving difficult, it was an obvious decision to make the move. I discussed this with our director, who chose to match the job offer and keep me within the core facility. Before the promotional pathway, this 'threat' of leaving was one of the few ways for a technical specialist to progress beyond grade 5, other than switching to a management position.

Going above and beyond our job role is now both recognised and rewarded!

Following the introduction of the promotional pathway pilot in 2023, I chose to apply for a Technical Support Specialist role (grade 7). I had been working at a high level within my role for several years and was providing a mix of benefits to the university beyond my core duties. In May 2024 I was pleased to discover that my application was successful.

It's great to see how your career has progressed quite rapidly at Warwick. Thinking beyond just the pathway, how do you feel things have changed both in terms of moving from a department to a core facility and also in terms of the culture?

The switch from working within a research group to working within a core facility happened quite early in my technical career, coinciding with the point that I was considered to be an expert in my area. So, the change from being 'told what to do' to being 'asked to help' came at a natural point in my career. Becoming a core facility and the different way in which we were perceived was a factor in this change. Being consulted about projects from the beginning, rather than once the microscopy is needed, is something that has happened more recently. This is most definitely due to the Technician Commitment and the recognition technicians now receive.

There are so many opportunities that have opened up for us, such as the creation of technical focussed conferences and user groups, technical awards, and being involved with funding applications. Now that the commitment has been going for a few years the scale of opportunities has grown massively. These opportunities help drive the chance of successful promotion.

It's good to see the change.

Have you noticed any changes in how your work is valued or recognised by others in your department/ faculty/university?

Academics within the electron microscopy group have always valued the work that we put in as technical specialists. In fact, they championed my efforts and helped to push me towards promotions I may otherwise have considered impossible. Researchers within the wider university community also, I hope, now recognise our capabilities. However, the biggest difference I've seen is how the University as a whole views technicians, blurring the boundaries between academic and technical roles and celebrating our achievements.

How has your promotion influenced your team or colleagues?

In 2023 we took on a trainee technician within the microscopy facility. For him to see the pathway available to him has been particularly encouraging. I'm not sure that my promotion has directly influenced my colleagues, but having a better understanding of promotion criteria has certainly affected the ambitions and energy within the team. Going above and beyond our job role is now both recognised and rewarded!

What are your goals for the next few years?

We're hosting a conference next year that I'll be leading the preparations for, acting as the main contact for the event. Having been a participant in one of TSN ROKS grant writing workshops, I'll also be on the lookout for opportunities to bring in some funding.

Over the next few years, I aim to take on more responsibility within the microscopy facility, with the ultimate goal of progressing into facility management. I've had a very good manager and would hope to emulate his successes.

I've been fortunate over the last 14 years to never get stuck at the top of my pay grade. This is partly due to luck, but also the ambition/ effort of taking opportunities that present themselves. Of course, I hope this continues, though achieving grade 8 would be an enormous challenge. The promotion pathway should help ensure that others willing to push themselves can also gain the recognition they deserve.

Steve Hindmarsh

Steve is a Technical Support Specialist in the Electron Microscopy Research Technology Platform, one of the most advanced facilities of its kind in the UK.

The UK Institute for Technical Skills & Strategy (ITSS)

ITSS has been funded by Research England and advocates for the technical community in higher education, research and innovation. ITSS is also the home for the Technician Commitment.

As well as advocacy, research and influencing policy related to technicians, ITSS provides a number of opportunities that technical staff can engage with. These include a global knowledge exchange placement scheme, leadership and management training, project management training, and mentoring.

ITSS hosts four networks; the UK Technology Specialists Network (TSN), the Strategic Technical Leaders Network (STLN), the Technical Equality, Diversity & Inclusion Network (TEDIN) and the Environmental Sustainability Network (ESN).

See here the latest opportunities

TSN ROKS
– Technology Specialist Network: Research Technical Professionals Opportunities, Knowledge and Skills

TSN ROKS is an EPSRC funded initiative from the Technology Specialists Network to deliver funding and funded opportunities for Research Technical Professionals (RTPs) – also known as Technical Specialists at Warwick - to improve their skillset, build a professional network of technical specialist colleagues and undertake professional development opportunities. There are three main workstreams, each with a variety of activities.

All activities are designed to be as accessible and as inclusive as possible. Funding is provided to cover travel, accommodation and carer costs, allowing RTPs to participate in these activities at no cost to themselves.

There is also a fair and open application process for any selective opportunities with a careful independent panel selection made up of TSN committee members and other, non-affiliated, RTPs, providing both a transparent and non-biased review process and valuable review panel experience for technical staff.

Find out more here

Join the TSN JiscMail here

Developing Pipeline and Promoting RTP Careers

This workstream aims to highlight the importance of RTP roles and responsibilities and therefore increase the number and diversity of RTPs. The three different activities each target a different level of entry to the profession.

Outreach Fund
RTPs can apply for up to £6000 to create hands-on outreach demonstrator units.

UG Summer Placement
RTPs can apply for funding to host an undergraduate student to work on a project for 6 – 8 weeks.

Engagement of CDTS
We will engage with EPSRC CDTs to highlight technical specialist career pathways to PhD students.

Skill Sessions and Opportunities for RTPs

The aim of this workstream is to provide opportunities to equip RTPs that work within EPSRC remit with knowledge and skills to further their professional development.

Facility Finances Workshops
In-person workshops to increase knowledge and understanding of the intricacies of facility finances and instrument costing.

Proposal Support Residentials
4-day residentials to support RTPs with successful grant writing, from funder guidelines to mock panels and project management.

Demand Driven Training
Funding to utilise experts to provide bespoke learning and development sessions for RTPs in response to community need.

Visibility and Knowledge Exchange

This workstream aims to promote collaboration and knowledge sharing across the RTP community with the aim of establishing new relationships, increased sustainability for facilities, and greater knowledge and visibility of what, and where, capabilities are available.

Peer to peer Facility Days
RTPs can apply for funding to host a Facility Day, providing a platform to share best practices, and showcase their facilities and expertise to a wider audience of industry experts, academics and other RTPs from outside the host institution.

International Conference Fund
For RTPs wanting to attend an international conference, bursaries of up to £5000 are available, enabling RTPs to gain global insights in their field, expand their network of technology specialists, learn from the leaders of technologies, and explore cutting-edge developments.

Equipment Sharing
A showcase of facilities based on expertise and capabilities with funds to pump prime new relationships. This initiative will enhance resource sharing and collaboration among RTPs, maximising the utilisation of equipment and facilities across the UK, expanding the userbase and increasing visibility of the facilities.

Research Culture

Written by

Sarah Bennett
Head of the BioSRLs,
School of Life Sciences

Research culture encompasses the behaviours, values, expectations, attitudes and norms within our research community.

It covers a wide range of areas, including career pathways, collaboration, support, reward and recognition, leadership, communication, wellbeing, open research and research integrity. Several of these areas have already been addressed through our Technician Commitment plan. For example, we have established defined career pathways, and a promotional pathway for technical specialists, whilst also creating opportunities for recognition and reward, such as our bi-annual Warwick Technician Commitment Award for Outstanding Achievement.

As a community, Warwick has been actively working to enhance research culture, ensuring it is inclusive of the whole community, from researchers to those in research enabling roles. We have technical representation on an institutional Research Culture Forum, led by the Pro-Vice-Chancellor for Research.

Using Research England's Enhancing Research Culture funding, over 100 grassroots initiatives have been selected, with applications from 'research enablers' including technicians encouraged. This has resulted in four technician led/co-led projects and further details can be found in the Research Culture Catalogue:

- **2022** Advancing visibility, knowledge and collaborative opportunities for Research Technical Professionals
- **2023** Creating and supporting shared scientific resources
- **2024** Creating localised and institution wide forums for Research Technical Professionals
- **2024** Technician Led Outreach Demonstrators

Research Culture Catalogue

The projects have led to positive culture change across a range of areas. For example, the pilot project to create and share scientific resources has led to the development of the Bio-Analytical Shared Resource Laboratories in the School of Life Sciences, promoting open research practices and data integrity, and raising the profile of the technical staff working with the technologies.

The Forum for Research Technical Professionals continues to thrive, meeting every couple of months, feeding ideas and suggestions from a Research Technical Professional Committee to the Technician Commitment Steering Group. We now have a strong community, having created new collaborations and increased awareness of the capabilities across campus. This has improved the sharing of ideas, skills and problem-solving issues.

With UKRI recognising the importance of Research Technical Professionals through an EPSRC Strategic Technical Platform call, the University of Warwick was successful in a technician led project to deliver funding and funded opportunities to the community nationally. This project, TSN ROKS, follows three workstreams – developing pipelines and promoting technical careers, skills and opportunities, and visibility and knowledge exchange.

An MI TALENT report 'Research Culture: A Technician's Lens' identified key challenges affecting technicians and made six key recommendations. Whilst we have made significant headway in areas where we have direct influence and control, cultural changes take time to embed across the research base and we are proactively working on areas such as fair attribution through acknowledgement and authorship.

The University of Warwick is currently developing its Research Culture Strategy 2025 – 2030. This strategy aims to define a clear institutional-derived vision for what constitutes 'good' research culture at Warwick, along with establishing an agreed metric baseline to measure our progress. Technicians will contribute and influence this strategy, and we encourage you to share your successes and challenges related to research culture so that we can ensure these are considered during the strategy's development. You can input directly, or through suggestions to our Technician Commitment Steering Committee, or to those on the working group.

Sustainability

Written by

Lesley Ward
Senior Research Technology Support Technician, School of Life Sciences

Sam Shaw
Sustainability Champion, Procurement/Finance

How committed is Warwick?

The University cemented their commitment to a sustainable future in 2024, with the fifth strategic pillar dedicated to prioritising a focus on sustainability in research, education, and our campus operations. Technicians will play a key role in this.

This commitment to embedding sustainability throughout our laboratories is echoed by the funding bodies in the Concordat for the Environmental Sustainability of Research and Innovation Practice. Warwick signed the concordat in November 2024, and joins funding bodies and other institutions such as the Wellcome Trust, UKRI, CRUK, BHF, and UKCEH.

What is Sustainability?

Sustainability covers a wide range of topics – the United Nations have seventeen target areas – and these Sustainable Development Goals (SDGs), are grouped into environmental, social, and governance changes. The University is a signatory of the SDG accord, and regularly reports on the progress made across research, operational, operations and engagement. As technicians our research and teaching will be aligned to various SDGs but the changes we can directly impact within the laboratory space is aligned with the operational impact.

Why do I need to be sustainable?

Ensuring a sustainable future requires everyone to play their part. Technicians are often in a good place to help identify and implement more efficient, sustainable, processes and operational changes.

Laboratory spaces are known to be highly resource intensive, in utilities and consumables, and this makes them an area of key focus when improving the efficiency of campus operations.

How can I be more sustainable?

As technicians, the impacts through operational process changes would mostly affect the environmental impacts and promote changes to local governance and ways of working. If implementing sustainability was rebranded as ensuring efficiency in lab spaces, the areas of impact may be clearer.

Efficiencies such as consolidating deliveries, sharing chemicals, and centralising resources are all more sustainable ways of operating. They are also already in practice at Warwick, using stores for purchasing enables delivery consolidation, the LabCup platform enables chemical sharing, and the RTPs and BioSRLs are centralised services.

These efficiencies are the backbone of the Laboratory Efficiency Assessment Framework (LEAF). Developed at University College London, LEAF is a webtool that allows laboratories to work towards a defined standard: Bronze, Silver or Gold. LEAF provides a systematic path to improving lab efficiency and the webtool contains useful additional resources and is versatile enough to allow for implementation in various areas of focus, although it is biased towards a wet laboratory. Bronze level is very straight forward; any well-run lab should be able to achieve bronze with little effort. Silver and Gold build on Bronze.

For computational labs we also have GreenDiSC. Newly launched in 2024, this scheme provides a roadmap for research groups and institutions who want to tackle the environmental impacts of their computing activities.

Who is supporting sustainable labs?

Laboratories feature strongly in the overall University Carbon Impact Report, which is collated by the Estates Energy and Sustainability team, and this is one of the key reasons there is a lot of work being done to get sustainability embedded into laboratories. The team oversee the sustainable campus operations, and this ranges from utilities monitoring to biodiversity on site (they love a hedgehog). The team support the LEAF and GreenDiSC schemes, as well as departmental Green Action teams and host their own network for staff interested in sustainability.

There is also an external network of laboratory-based professionals who focus on information sharing around sustainability known as LEAN, Laboratory Efficiency Action Network, and the ITSS Environmental Sustainability Network. Both are great places to connect with colleagues and the knowledge exchange gives a great place to start when implementing changes in process.

If I can only change one thing what should that be?

1. "Turn Me Off" / "Leave Me On" Stickers. People often do not feel confident that they have permission to switch off communal equipment; stickers are simple and helpful.
2. Join LEAF, or GreenDiSC. Not the smallest of asks, but aligning your activities to a framework will help you see progress and you get a certificate for your door!
3. Learn more with the Warwick Climate Literacy Training. The world is evolving, and sustainability has gone from the hot button topic of the 2010s to a minimum requirement for students of the 2020s.

Useful Links

University commitment to sustainability

Concordat for the Environmental Sustainability of Research and Innovation Practice

GreenDiSC

LEAF

Case Study

Godwin Yeboah

Godwin Yeboah
Godwin is a Senior Research Software Engineer in Research Computing.

Tell us about how you got to here

My journey to becoming a Senior Research Software Engineer (SRSE) in Warwick's Research Computing team has been shaped by a strong academic foundation, diverse global experience, and a commitment to interdisciplinary research.

I began with a bachelor's degree in Geodetic Engineering from Kwame Nkrumah University of Science and Technology in Ghana, which laid the foundation for my expertise in science, technology, engineering, and mathematics (STEM). After graduation, I became a teaching and research assistant, managing a computer lab, delivering computer programming training, and supporting academic work.

To enhance my technical skills, I pursued dual master's degrees in Computer Science and Geoinformatics & Photogrammetry at Stuttgart University of Applied Sciences, Germany, while working as a part time researcher in the same department, after which I was employed as a Software Engineer/ Developer. This deepened my expertise in software development, geoinformatics, and data science. In 2014, I completed a PhD in Geographic Information Science (GISc) at Northumbria University, UK, supported by a fully funded three-year scholarship drawn from the University's research development fund. I had opportunities to explore Europe and UK via other small grants.

Professionally, I have held a range of roles across academia, industry, and various countries. After working as a Software Engineer/ Developer in Germany I moved to Ghana's digital mapping sector as a Geodetic Engineer, progressing from GIS Manager to Operations Manager and then Director of Digital Mapping, Surveying, and Information Technology (IT). I also worked as a lecturer in Computer Science at the University of Ghana, as well as delivering IT-focused MBA courses at the University of Applied Management (UAM) Ghana Campus. After completing my PhD, I worked as a Research Fellow at the Universities of Aberdeen and De Montfort, before taking up a position as a Senior Research Fellow at the Centre for Interdisciplinary Methodologies (CIM) at Warwick in 2017. Since then, I have moved through departments, including the Institute for Global Sustainable Development (IGSD) and the Information and Digital Group (IDG), before taking up my current role as a SRSE in the Research Computing group in 2021.

In addition to formal education, I've earned certifications from entities like the NVIDIA Deep Learning Institute, enhancing my technical skills. I have published peer-reviewed papers, book chapters, technical reports, and conference proceedings. Additionally, I have developed digital methods in interdisciplinary research, interactive websites, and digital humanities databases, bridging technology and academic research.

What does your current role entail and how does your technical expertise support research at Warwick?

As an SRSE, I support research across the Faculties of Arts and Social Sciences, including associated research centres.

My role is to provide expert software engineering that enables impactful, high-quality research. I work directly with researchers to identify technical needs and deliver tailored software solutions. This includes building data-driven applications, optimising code performance, and ensuring software reliability and scalability. I also lead technical meetings, design tools for database modelling and visualisation, and oversee digital platforms such as interactive websites and archives.

I contribute to funding proposals through technical writing and budget planning, and I run training sessions to build research teams' digital capacity. I foster interdisciplinary collaboration by leveraging on my technical expertise to improve research software, data collection, analysis, and visualisation. I stay engaged with emerging technologies and best practices, ensuring Warwick's research software remains current and effective. I co-chair Warwick RSE Meetings.

I am passionate about leadership and mentorship roles, contributing to Warwick's renowned research excellence. I've mentored PhD students, postdocs, and staff, and served on boards and committees, including as Trustee of the Society of Research Software Engineering and member of Arts Faculty Research & Impact Committee.

I'm a Fellow of both the Royal Geographical Society and the Software Sustainability Institute (SSI) and was on the British Council UK Social Sciences Panel (2015–2020). I co-founded RSE Midlands, founded the SSI funded community of Digital Arts and Humanities RSEs in the Midlands (DAHRSE-Midlands), and served on the academic track committee for State of the Map conferences (2019, 2020, 2023).

In essence, I bridge the gap between research concepts and implementation, enabling academics to focus on their ideas while relying on robust technical solutions.

What support, training, or career development opportunities have helped you advance as a research-focused technician?

Warwick has played a vital role in my development. Support for self-learning including access to LinkedIn Learning and funded training has kept me up to date with emerging technologies. Internal workshops and external conferences have deepened my knowledge of software engineering and research methodologies. Working in Warwick's collaborative environment has also been crucial. Engaging with colleagues across disciplines has sharpened my problem-solving skills and broadened my understanding of varied research contexts.

Warwick has encouraged my involvement with professional networks like the Society of Research Software Engineering, and the Royal Geographical Society. These affiliations have supported knowledge exchange, advocacy, professional growth and networking. Together, training, institutional support, and external engagement have helped me grow into a well-rounded research software engineer contributing meaningfully to Warwick's mission.

In 2025, I was proud to receive the Warwick Research Enabler Award.

> **I bridge the gap between research concepts and implementation, enabling academics to focus on their ideas while relying on robust technical solutions.**

How has Warwick's Technician Commitment influenced the recognition and visibility of research technical professionals like yourself?

Warwick's Technician Commitment has significantly improved the recognition and visibility of technical professionals. It provides a formal platform to highlight and value technicians' contributions to research.

Initiatives like the Technical Specialists Promotional Pathway Pilot have underscored the importance of technical roles in research delivery. The commitment has also built a stronger technician community and encouraged collaboration and peer support.

By enhancing recognition, it has boosted morale and empowered technicians to pursue greater responsibilities and leadership opportunities.

Warwick's investment in its technical workforce affirms its commitment to research excellence and innovation.

What more could be done to further enhance the role of technicians in research at Warwick?

Warwick could enhance technicians' roles by building on the existing promotion pathway initiative, offering structured career progression and leadership opportunities. Increased funding for training, conferences, and dedicated technical research projects would support skill growth and empower technicians to contribute more significantly.

Creating platforms for technicians to present their work and involving them earlier in research planning would highlight their impact and foster interdisciplinary collaboration. Cultivating an inclusive research culture where technicians are valued as core contributors would enrich collaboration and drive excellence.

We can use the Technician Commitment to recognise and empower our technicians to drive innovation and excellence in research at Warwick. Together, we can strengthen our research community and achieve greater outcomes.

Case Study

Linda Cheung

Linda Cheung
Linda is the Teaching Lab Manager for the School of Life Sciences, responsible for overseeing the daily operation of the teaching laboratories.

Tell us about your career journey and how you got to your current role.

After completing my BSc (Hons) in Biochemistry at the University of York, I was keen to start working, having thoroughly enjoyed my placement year at Zeneca Pharmaceuticals. There, I used HPLC techniques to analyse anticancer drugs in serum, gaining insight into antitumour activity and toxicity. My interest in immunology and human health/disease led me to a Scientific Officer role at the Institute of Food Research in Norwich, where I contributed to an EU collaborative project on allergies to milk proteins – synthesising peptides and developing antibodies and ELISAs to track allergenic peptides in serum. This not only strengthened my technical expertise but also developed my communication and collaborative skills, working closely with industrial and academic partners across Europe, fuelling my passion for interdisciplinary research.

Encouraged by my two inspiring supervisors who recognised my potential, I pursued a PhD at the University of Warwick working in a Cat 3 lab analysing the specificities and mechanisms of neutralising antibodies to HIV-1. After submitting my thesis and starting a family, I returned to research as a postdoctoral fellow on a diabetes and cancer project using Toponome Imaging System (TIS - automated multidimensional fluorescence microscopy), in collaboration with German partners. I remained in research in the same department for several years, working across multiple fixed-term contracts. While I loved research, the work-life balance was poor, and I found the lack of stability provided by short term contracts frustrating. Therefore, in 2019, I stepped down to a grade 5 role and transitioned to a permanent Senior Support Technician role.

Now supporting researchers, I drew on my experience in tissue culture and Cat 2/3 labs to train staff on specialist equipment and on lab safety, and assisted in managing core facilities. I enjoyed this new role and learnt about statutory regulations and crisis management. After four years, I was ready for a new challenge. Although I had not envisioned becoming a Teaching Lab Manager, the role felt like a natural progression and fit my skill set well. Encouraged by friends and family, I applied—and got it. A year in, I've found it both rewarding and challenging. The steep learning curve has helped me grow, and with strong support from my team, the transition has been smooth.

What does your current role entail and how does your technical expertise contribute to teaching and student learning at Warwick?

I am responsible for overseeing the daily operations of the teaching labs. My main duties include managing a team of nine technicians who provide essential lab-based support for practical classes (accommodating up to 200 students per session during term time) as well as outreach activities outside of term time. I work closely with academic colleagues to develop, review and improve delivery of existing and new practicals. Last year, following a change to the year 1 undergraduate curriculum, my team collaborated closely with academics and students in the summer to test new practical classes. Other key parts of my role involve maintaining high standards of health and safety in the laboratories, organising preventative maintenance of lab equipment and replacement when required and liaising with different stakeholders such as estates, facility teams and IT to get things fixed. My lab skills and my technical expertise ensure that my team delivers practical sessions on time and to specification, while also providing students and graduate teaching assistants with technical advice and support regarding equipment use and waste management and ensuring that health and safety is embedded in all activities in the teaching laboratory.

What are some of the key ways you work with academic staff and students to enhance teaching and learning experiences?

I take a proactive approach by meeting frequently with my senior technicians and academics to discuss upcoming practicals, ensuring that equipment, reagents and consumables are available and that any necessary changes are identified early. I work closely with academics when changes arise, to ensure the practical works or to suggest changes when there are constraints to material or equipment availability or to reduce health and safety risks. After each practical, I seek direct feedback from academics to identify areas for improvement and ensure continual enhancement for the next year.

Recognising that much of our equipment is outdated, I also conduct regular reviews of our inventory, identifying priorities for repair or replacement to enhance student experience. I meet with sales representatives from different suppliers, explaining to them our requirements and building strong relationships to negotiate more competitive quotes.

What training or initiatives have been most valuable to help you develop as a teaching-focused technician?

Before stepping into my management role, I completed several MI Talent courses including a preparation for technical and management leadership programme and introduction to project management. I was also fortunate to be able to attend the EmpowerHER course designed to support women of ethnic minority in developing leadership skills. These courses built my confidence and prepared me to apply for management positions.

I am currently on the Herschel programme, which supports women in technical management and leadership roles. So far, it has covered key areas such as leadership, communication and influencing skills, helping to further strengthen my confidence. It also provides networking opportunities, connecting with other technicians who are going through similar challenges or in similar roles.

I was recently introduced to a teaching-focused mentor at a different university through a casual conversation with a colleague. This really highlights the importance of networking in connecting you with people you may not otherwise meet. I'm hoping this mentorship will support my professional growth and strategic development.

How has the Technician Commitment helped increase the visibility and recognition of technical staff involved in teaching?

Being nominated for, and winning, the Technician's Commitment Outstanding Achievement - Team Award last December significantly increased our team's visibility and recognition. It had a great impact on our team's morale and confidence, which was much needed as more than half of the team were newly recruited and adjusting to a new environment and practicals. It was incredibly rewarding to feel appreciated and recognised for the work we had put in. In addition, we also won the SLS Best Team award in December, further reinforcing the Technician's Commitment Outstanding Achievement Award and boosting our confidence even more. These recognitions motivated us to continue striving for excellence in our work, to support one another as a cohesive team and to maintain the highest standards in delivering practical teaching.

Being nominated for, and winning, the Technician's Commitment Outstanding Achievement - Team Award last December significantly increased our team's visibility and recognition.

What changes or initiatives would further support technicians who contribute to teaching at Warwick?

A key change that has greatly benefited my team is allowing technicians to sit on interview panels for roles at their grade. Previously you had to be a grade higher than the position advertised. This change has provided valuable recruitment experience for all my staff, as I have involved them in many hiring processes since taking on the manager role. My team has appreciated the opportunity for professional development, and it has given them insight into the recruitment process.

Looking ahead, I would like to see more training courses available for teaching technicians during term 3. In SLS teaching, term 1 and 2 are typically very demanding with undergraduate practicals, leaving us stretched and unable to attend training courses during this time. For my three team members on term-time contracts, term 3 is the only window for professional development. Earlier this year, my team almost missed two important training courses on time management and customer service, but fortunately they were rescheduled, allowing us to take part.

Additionally, we would welcome more opportunities for technical training such as tissue culture techniques, molecular biology, and exposure to the latest technologies used in teaching laboratories. It would also be valuable to explore initiatives that allow teaching technicians to participate in visiting exchanges with different departments or universities, enabling us to share ideas and learn from each other.

Case Study

Dorothea Mangels

Tell us about your career journey and how you got to your current role.

I was half-way through my second postdoc contract when the penny dropped that I was in a career I didn't really enjoy. Doing research wasn't playing to my strengths. I have always enjoyed organising lab spaces and streamlining processes and I was much more in my element coordinating lab activity and making sure the space worked for others working on their research projects. Getting instruments to work has always given me more of a buzz than using them to get results. It was quite an uncomfortable realisation that I needed to look at different options for a career than I had always envisaged. However, I eventually made the decision to get out of working at the lab bench and try different things.

After a stint in an educational admin role, during which I learned a lot about how the University works behind the scenes, I moved into the post of Technical Services Manager at Warwick's Department of Chemistry when the opportunity arose. This was a new post, and, while I was thoroughly out of my comfort zone in a Chemistry setting, I was given a lot of freedom shaping the role. The initial brief was to manage the workshops (Electronics, Glassblowing and Mechanical), the technical team supporting the department's Teaching Labs, as well as a small number of technical colleagues supporting research. As the Department expanded, and the University's ambitions and processes became increasingly complex, my remit grew e.g. encompassing higher levels of health and safety compliance, and I began contributing to strategic issues such as business continuity and space management.

Can you describe your role and how it underpins Warwick's research infrastructure?

I now work for the Faculty of Science, Engineering and Medicine as part of the STEM Connect Programme team. Warwick has recently embarked on the single biggest investment programme in its history, creating a state-of-the-art Science Precinct on Central Campus over the next decade. I am working as the Technical Services Lead for the programme, making sure input from research stakeholders gets translated appropriately into laboratory design.

In my role, I provide essential strategic and operational support to sustain and grow Warwick's research infrastructure. I work closely with academic colleagues, professional services teams – particularly technical staff within departments – and external partners to help cultivate an outstanding research environment and ensure that resources are allocated effectively. By facilitating the planning, delivery, and optimisation of infrastructure and the technical capabilities needed to operate and maintain it, I help ensure that Warwick's researchers have the tools, spaces, and expertise required to achieve exceptional outcomes. My work bridges research strategy and practical delivery, helping to create the conditions where innovation can thrive.

What are some of the key challenges and rewards of being a technician that underpins research, teaching and knowledge exchange?

A key challenge of being a technical professional supporting research, teaching and knowledge exchange is balancing competing demands – each area has different technical needs, deadlines, and stakeholders. Managing change, whether it is during big builds – such as the new Science and Engineering Precinct at Warwick – or smaller lab refurbishments or simply major equipment moves, can be complex, especially when trying to minimise disruption to critical activities.

I provide essential strategic and operational support to sustain and grow Warwick's research infrastructure.

Building strong relationships across academics, Estates, Health & Safety, and our student population is essential but can be challenging due to differing priorities.

However, these challenges are part of what makes the role rewarding. It's incredibly satisfying to see technical work directly and indirectly enable research breakthroughs, enhance student experience, and support public engagement.

Personally, I take great pride in leading improvements to technical services and facilities, knowing that these contributions have a lasting impact on the University's academic success.

How has the Technician Commitment influenced how technicians like yourself are valued and supported at Warwick?

The Technician Commitment has been instrumental in getting the technician's voice heard on campus. The Technician Commitment action plan is a true co-creation between Warwick's technical workforce and senior leadership. Not only has it helped build a growing network of colleagues who are now more connected and aware of developments beyond their immediate departments or sections, but it is delivering tangible outcomes, including a new promotion pathway for technical specialists, specialised career development workshops for technicians, and fair attribution guidelines to recognise technical contributions to scientific publications. Initiatives such as the MI TALENT programme, and more recently the ITSS – both outcomes of the Technician Commitment – offer a wide range of training, development, and networking opportunities specifically tailored to the needs of technical professionals.

What further steps could be taken to strengthen the role of generalist and management strand technicians and ensure long-term career sustainability?

I believe it's important to create clear pathways for generalist technicians to grow within their roles and feel recognised and rewarded along the way. Warwick already does a great deal to support career progression, as seen in the many colleagues who began as apprentices or junior assistants and have since moved into senior technical or management positions. However, there is still work to do in developing more innovative ways to recognise and reward colleagues as they take on greater responsibility and expand their expertise over time.

Dorothea Mangels
Thea is the Technical Services Programme Lead for the STEM Connect project. She also is a member of the Technicians Commitment Steering Group.

Case Study

Joseph Benjamin

Tell us about how you got to your current role?

My journey to my current role at Warwick has been shaped by nine years of continuous personal and professional development. I began my career at WMG in 2016 as a technical apprentice. During that time, I had the unique opportunity to work with over 20 different research groups, which gave me a broad exposure to all aspects of engineering and helped shape my interests and skills.

WMG and the University of Warwick have been incredibly supportive of my academic growth, enabling me to achieve qualifications up to degree level.

Today, I'm proud to work as a Project Engineer within the Centre for Imaging, Metrology and Additive Technologies. In this role, I focus on research and development in Metrology and Imaging related activities, an area I'm passionate about and one that continues to challenge and drive me.

What does your role entail and how do you work with industry partners to bridge the gap between research and application?

My role consists of applying measurement technologies, tools and techniques to a range of research and development related projects. The sectors these projects sit within include aerospace, automotive, manufacturing, healthcare and cultural heritage to name a few.

By bringing together a broad range of academic expertise and making use of state-of-the-art facilities equipped with advanced measurement technologies, we are able to address real-world challenges faced by our partners. These challenges include, but are not limited to, performing non-destructive analysis, integrating automated in-line inspection stages within a process, and digital preservation.

Knowledge transfer and education play a vital role in bridging the gap between research and practical application. Through collaboration and shared learning, we support our partners in developing innovative technologies, refining processes, and creating new products that deliver real impact.

What impact has your work had on industry engagement, knowledge transfer, or commercialisation at Warwick?

Throughout my time at Warwick, my work has contributed directly to strengthening industry engagement and accelerating the transfer of knowledge from research into practical applications. By working on collaborative R&D projects, I've supported the development and implementation of advanced measurement and manufacturing technologies that address real challenges faced by our industrial partners.

My role often involves acting as a technical bridge, translating research outputs into formats that industry can understand and adopt. Whether it's through the delivery of technical demonstrations, bespoke trials, or producing actionable data to inform product development, I help ensure that research at Warwick delivers tangible value to industry.

In several projects, the technologies and processes I've worked on have helped companies reduce lead times, improve quality control, or adopt new manufacturing techniques, contributing to their competitiveness and innovation capabilities. This type of work not only enhances our industrial relationships but also supports Warwick's wider mission of delivering commercial and societal impact through applied research.

How has Warwick supported your role in collaborating with industry, and what training or opportunities have helped you grow in this area?

Warwick and WMG have played a key role in supporting my collaboration with industry, both through hands-on opportunities and ongoing professional development. From the very beginning of my career as a technical apprentice at WMG, I was encouraged to engage with real-world engineering challenges alongside industrial partners. This early exposure gave me a strong foundation in understanding how academic research can be applied to meet industry needs.

As I progressed, Warwick and WMG provided access to formal training and academic development, enabling me to gain qualifications up to degree level. Alongside this, I've taken part in industry-led research projects and been trained on many pieces of equipment, which have helped me build the skills and confidence needed to communicate effectively with stakeholders and contribute to any collaborative projects.

Through collaboration and shared learning, we support our partners in developing innovative technologies, refining processes, and creating new products that deliver real impact.

What advice would you give to other technicians looking to develop stronger industry connections, and how do you see your role evolving in the future?

For technical staff aiming to build stronger industry connections, my advice is to actively try to get involved in project meetings and discussions at all stages, from planning to execution and delivery. This involvement not only allows you to showcase your expertise and the quality of the work you produce, but also encourages more frequent interactions with partners, helping them become familiar with your capabilities. As a result, your network of connections, both within and outside your organisation, will naturally grow.

Looking ahead, I see my role evolving to more managerial responsibilities, but for now, I am enjoying being in an application position where every week presents me with a new set of challenges. I am focused on developing my skill sets that allow us to tackle challenges faced today and in the future in the world of inspection. With the growing developments on artificial intelligence, automated inspection, and data handling, I think I am going to be busy developing my application skillsets for now!

Joseph Benjamin
Joseph is a Project Engineer within the Centre for Imaging, Metrology and Additive Technologies at Warwick Manufacturing Group.

Case Study

Jack Woolley

What does it mean to win the RSC Award for Technical Excellence?

When I found out I'd been nominated, I was honestly just quite humbled. There are so many brilliant technicians here at Warwick and across the UK, so to be recognised like this is a real honour. In my view I'm just doing my job so to be nominated for this award highlights that others must think I am pretty good at it, and acknowledgement of that is rewarding. My nomination was led by someone outside my institution, an academic in Portugal whom I've worked with since my PhD, which made it feel particularly special. We've maintained a good working relationship over the years, and we still collaborate and apply for funding together. It's exciting to be recognised, especially by someone who's seen the value of our facility and support over time.

This isn't the only award you've been nominated for or won is it?

No, it's been a good year so far for me on that front. I am also part of the team that has been awarded a Horizon prize for part of a European project I was involved in. I have also recently been nominated for a Warwick Award in Public Engagement in the category of Inspiring Experiences. The basis of this nomination was all the engagement activities I do; I often take my laser unit out to various events including the live lab Christmas lectures, resonate festivals at Warwick and this year we have been to a local art gallery.

Tell us about your work and how you support research.

I'm the Platform Manager of the Ultrafast Spectroscopy facility at Warwick. It's a specialist lab that explores what molecules and materials do when they absorb light and how they respond when energy is introduced. We use ultrafast laser pulses on the order of femtoseconds (10^{-15} seconds) to monitor how materials behave after photoexcitation. This timescale is key because it matches the time at which molecular changes happen. We use one laser pulse to excite the material and then look at what the material does by using a second laser pulse. Using this technique we can monitor changes in the material and build up a picture of what they do with the absorbed energy.

A key example is sun cream, we can observe how molecules absorb UV light and then relax without re-emitting energy as visible light, meaning that you don't end up glowing green when you wear suncream. So we can track this process and that helps us to understand and improve products that protect skin from sun damage. We also work with terahertz spectroscopy to look at conductivity changes in solid-state materials like solar cells.

It's only really me running the facility so my role includes everything from managing finances, purchasing, and health and safety, to training users and designing experiments. I work with a wide range of researchers from master's students to postdocs and PIs, both at Warwick and from other institutions.

I help users run experiments, analyse data, and often teach them how to operate the equipment themselves. That training element is a huge part of what we do. I also spend time talking to academics and supervisors here at Warwick to explain exactly what ultrafast spectroscopy is and how it could support their research, because we've only been a platform for just over 3 years.

There are so many brilliant technicians here at Warwick and across the UK, so to be recognised like this is a real honour.

We also support users, both internal and external, through funded schemes like the EPSRC Warwick Analytical Science Centre grant. That funding allows PhD students without access to these techniques at their own institutions to carry out experiments here. For those new to the field, I provide direct training and support during their visits. I also do some work through Warwick Scientific Services, but we encourage customers to come and see the facility to better understand the technique.

What do you enjoy most about your role?

I really enjoy the lab work especially when someone brings me a complex problem and we can figure it out together. That's incredibly satisfying. I like pushing the limits of what we can do with the equipment too, so developing new methods and trying out strange or ambitious ideas. Those are the projects that really get my attention.

I also value being able to help people, from PhD students to experienced academics, understand how ultrafast spectroscopy can enable their work. It's rewarding to see a researcher understand something new or get a result they didn't expect.

What will you spend your prize money on?

A new laptop!

Jack Woolley
Jack is the Platform Manager for the Warwick Centre for Ultrafast Spectroscopy (WCUS) Research Technology Platform. He has recently been awarded a 2025 RSC Award for Technical Excellence.

What's next for the Technician Commitment?

Warwick's Technician Commitment action plan covers all areas that the Committee is currently focussing on and outlines what has been achieved since 2017.

Future actions will concentrate on how we recruit and retain our technical staff, while also continuing to showcase the work of our technicians and the departments that they work in. We are exploring ways to support the development of our technical staff - not only through training courses, but also through work-shadowing, placements, secondments, and other opportunities that will prepare them for career progression when opportunities arise.

Our Warwick Technician Commitment Awards for Outstanding Achievement are presented twice a year at our Technician Updates and Events. This was an initiative proposed by the Technicians at our Focus Groups and is a real success story of how we can engage with Technicians. We run annual Focus Groups and any actions feed into the action plan and are worked on with our Technician Sub-group.

Useful information and how to keep up to date

Ask to sign up for our newsletter and you will be sure never to miss any update on what's happening with Technicians again.

Email us at technicians@warwick.ac.uk

View the TechNet website at warwick.ac.uk/research/technicians

Find our action plan at warwick.ac.uk/research/technicians/ourtechniciancommitment

Further useful information can be found at:

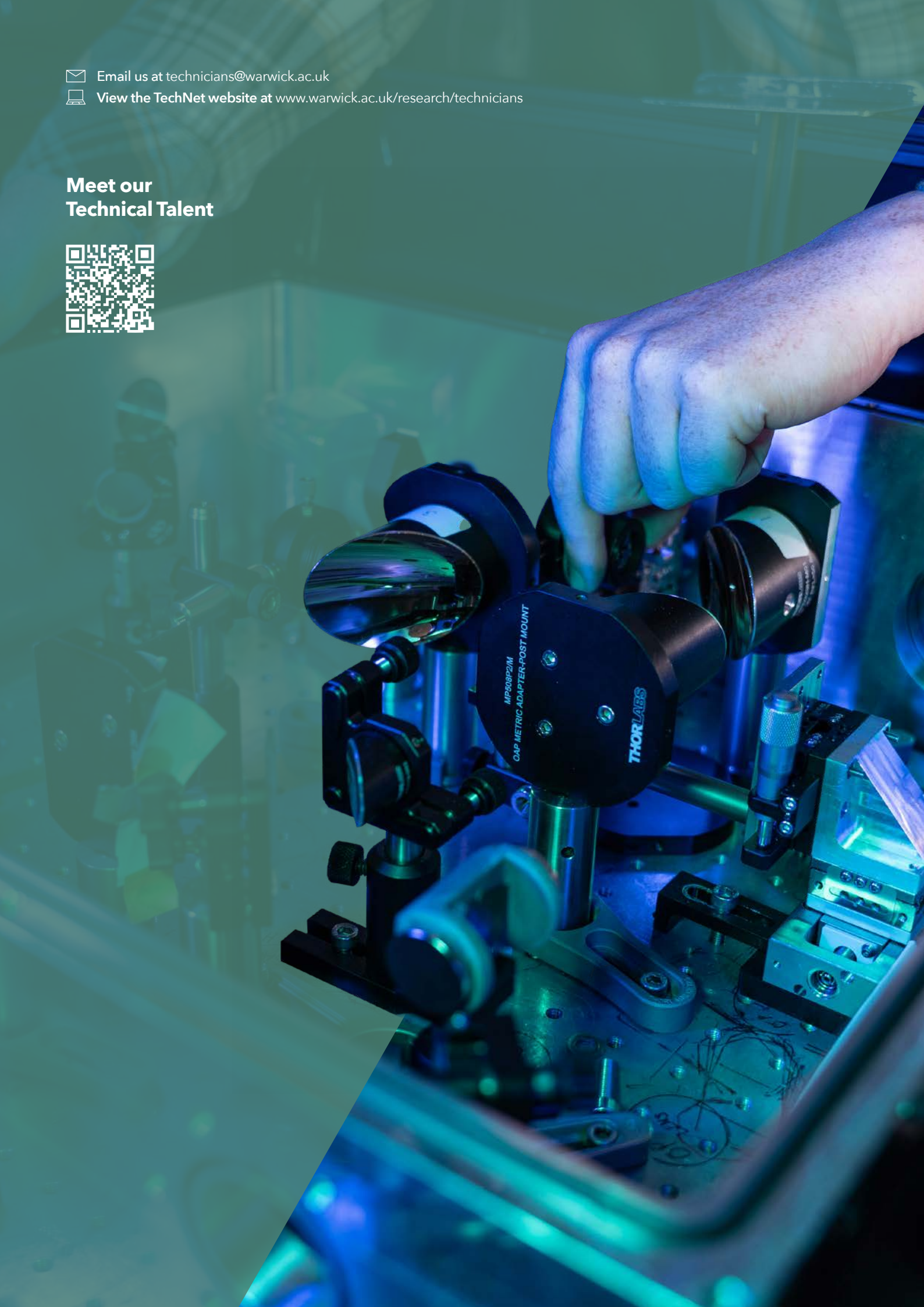
The Technicians Commitment web pages
techniciancommitment.org.uk

The Science Council web pages describing the Technician Commitment
sciencecouncil.org/employers/technician-commitment

Warwick's Organisational Development pages with course and career support
warwick.ac.uk/services/lmd

ITSS - The UK Institute for Technical Skills and Strategy
itss.org.uk

TSN ROKS
itss.org.uk/tsn/tsn-roks-opportunities

Email us at technicians@warwick.ac.uk
View the TechNet website at www.warwick.ac.uk/research/technicians

Meet our Technical Talent