Maximising research opportunities for businesses
The Engineering and Physical Sciences Research Council (EPSRC) is part of UK Research and Innovation, a non-departmental public body funded by a grant-in-aid from the UK government. For more information visit epsrc.ukri.org

EPSRC is the main funding body for engineering and physical sciences research in the UK. By investing in research and postgraduate training, we are building the knowledge and skills base needed to address the scientific and technological challenges facing the nation.

Our portfolio covers a vast range of fields from healthcare technologies to structural engineering, manufacturing to mathematics, advanced materials to chemistry. The research we fund has impact across all sectors. It provides a platform for future UK prosperity by contributing to a healthy, connected, resilient, productive nation.
This brochure explains how EPSRC can broker relationships between academia and small, medium and large businesses. EPSRC can help businesses engage with universities to create collaborations to improve their products and services. While EPSRC cannot fund businesses directly there are many ways for businesses of all sizes to work with us, and universities, to maximise opportunities and impact for all. Below are some examples but the size of an organisation does not restrict the means of engagement – our aim is to ensure that our investments in research and training are accessible to all businesses.

**Small businesses:** There are many collaborative opportunities on offer, but if you are not familiar with EPSRC you can start by using our online tools to access our research or speak to us so that we can help facilitate connections with relevant researchers and research groups.

**Medium businesses:** You may already be collaborating with a research group, but could consider which other collaborative opportunities meet your needs or speak to us so that we can help you decide on the most appropriate route for your business.

**Large businesses:** You may have an extensive research portfolio, but could consider how your strategy can help inform ours by contributing through our advisory groups or speak to us about your specific research challenges so that we can work together to solve them.
Maximising research opportunities for business
Collaboration opportunities for businesses

We have a significant investment footprint of £4.6bn, of which £3.4bn is relevant to industrial sectors. We have a large portfolio of active research projects which businesses can engage with by contributing their knowledge, expertise and co-investment to leverage our investments and accelerate the impacts of research. We are also keen to encourage co-creation of new proposals and co-delivery of research between business and academia, developing relationships by working together to solve shared research challenges.

While we only fund research and training through universities, we strongly encourage academic researchers to collaborate with partners in developing their ideas where this can deliver high-quality academic research and impact.

Ways to get involved

**Prosperity Partnerships** – This initiative was established in 2016 and will be an annual call to support existing, strategic, research-based partnerships between businesses and universities. Each Prosperity Partnership comprises matched co-investment by EPSRC and industry in large-scale collaborative research programmes which are business led. The programmes are business-initiated and focus research activity on meeting long-term industrial challenges and delivering real business benefit.

**Standard Schemes (Standard Grants, Fellowships, New Investigator Awards)**

Standard Grants are a flexible mechanism to fund the type of project required by the Principal Investigator and could range from proof of concept, research projects, large critical mass grants or instrument development across the EPSRC remit. The grants have no financial limit and can be applied for at any time. Businesses can partner on these grants by providing cash or in-kind support as well as influencing the direction of the research.

**Programme Grants** – Programme Grants provide funding to world-leading research groups to address significant major research challenges. They are intended to support a variety of activities focusing on one strategic research theme. Businesses can partner on these grants by providing cash or in-kind support as well as influencing the vision of the research and providing input through advisory boards.
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UKRI Future Leaders Fellowship scheme (FLF) – The FLF aims to develop, retain, attract and sustain research and innovation talent in the UK. Providing up to seven years of funding, for at least 550 early-career researchers and innovators, the scheme will tackle difficult and novel challenges.

UKRI FLFs can be held at any UK-based organisation currently registered as eligible to apply to the Research Councils (e.g. Higher Education Institutes, Research Council Institutes and eligible Independent Research Organisations), or Innovate UK. Companies or other privately owned research organisations are encouraged to host FLFs if they can provide an innovation and/or research environment of international standing.

Centres for Doctoral Training (CDTs) – Providing cohort-based training, CDTs focus on specific topics and produce well-rounded doctoral students equipped with research expertise and skill sets for the modern economy. All CDTs have collaborating partners which help to shape the research and training and ensure the centres have ongoing relevance and further financial support. Businesses can benefit from CDTs by finding talented and skilled graduates and students through recruitment and student placements. The ability to propose user inspired research projects is another key advantage. Businesses can also make use of cutting edge facilities, commercialise university innovations through licensing agreements, build long lasting relationships with universities, and unlock funding for research by accessing grants only available through a university collaboration. Businesses can be involved either at the initial call stage for new CDTs or partner with an existing CDT – See our website for a list of current centres epsrc.ukri.org/skills/students/centres/ or contact us to help you navigate the landscape of CDTs.

Doctoral Training Partnerships (DTPs) – DTPs are direct, flexible allocations to universities which enable them to strategically invest in the training of doctoral students, respond flexibly to emerging priorities, and grasp opportunities to leverage additional funds. Businesses can contribute to DTP through suggestion of projects and either cash or in-kind contributions. We want to encourage businesses to get involved in DTP projects – this could also lead to CASE conversion.

Industrial Co-operative Awards in Science and Technology (iCASE) – iCASE awards provide funding for doctoral students where businesses take the lead in arranging projects with an academic partner of choice. The project is at the discretion of the company, and iCASE involves a period of placement at the company. Awards are allocated to businesses using an algorithm based on their financial contributions to EPSRC-funded grants. A company allocated an award, defines a research project and chooses an academic partner.
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**Impact Acceleration Accounts (IAAs)** – IAAs provide flexible support for activities which accelerate and widen the delivery of impact from our portfolio. They offer a flexible resource that universities can use to encourage business collaboration, translation and proof of concept. This is a flexible, short term option for businesses to take an interest in the outcomes of EPSRC projects. Specific IAA activities are tailored to build upon the existing research strengths and strategies of the host university.

**Knowledge Transfer Partnerships (KTP)** – KTP is Europe’s leading programme to help businesses with a UK base innovate and grow by improving their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK knowledge base. The scheme employs a three-way partnership between a business, a research organisation and a high-calibre graduate to work for up to three years on projects that are core to the strategic development of a business. The scheme allows businesses to gain access to academic expertise and specialist skills that they do not have in-house. Each partnership is part-funded by government with the balance of the costs coming from the company partner. The academic or research organisation partner will help to recruit a suitable graduate, known as an Associate. They will act as the employer of the graduate who then works at the company for the duration.

Businesses can find out more by contacting their local Knowledge Transfer (KT) advisor [a list of them is here](www.gov.uk/guidance/knowledge-transfer-partnerships-what-they-are-and-how-to-apply#ktadviser)

**Innovation and Knowledge Centres (IKCs)** – IKCs are university-based centres of excellence set up to accelerate and promote business exploitation of an emerging research and technology field, and to ensure that great ideas are swiftly translated into industrial development, products and jobs. Their key feature is a shared space and entrepreneurial environment in which researchers, potential customers and skilled professionals from both academia and business can work side-by-side to scope applications, business models and routes to market.

Currently four IKCs are closely aligned with emerging technology areas of strategic importance to the UK: advanced materials, medical technologies, cybersecurity and synthetic biology. IKCs create impact by enhancing wealth generation of the businesses with which they work.

To engage with and discuss how best your business can engage with an IKC, please contact a relevant centre directly. [epsrc.ukri.org/innovation/business/opportunities/impactschemes/ikcs/](epsrc.ukri.org/innovation/business/opportunities/impactschemes/ikcs/)
Ways for businesses to engage with EPSRC

We greatly value input from businesses to our strategic advisory bodies and Peer Review College. We also have a dedicated network for businesses (Business Engagement Forum) that wish to engage with us in more long-term collaborative ways.

**Business Engagement Team** – Our Business Engagement Team can help you with general business-related enquiries. They can assist you in making connections across UKRI, understanding our strategy and ways of working, and help you get more involved in EPSRC-funded academic research.
Contact: user.engagement@epsrc.ukri.org

**Business Engagement Forum (BEF)** – The Business Engagement Forum was established to provide regular opportunities for two-way engagement with our key business stakeholders and other non-academic collaborators. Our aim is to develop a community of enterprise and non-enterprise partners that represent the whole of our remit and research portfolio through:

- Early sharing of mutual corporate strategies relevant to engineering, physical sciences and technology research and training, with a view to maximising strategic alignment where appropriate
- Working together to continue to act as a strong advocates for sustained investment in engineering, mathematics and ICT, physical sciences and technology research and training for the benefit of the UK economy and society
- Identifying opportunities to work together to maximise the impact from our investments through, for example, greater coherence across the public and industrial funding landscape or co-creating research challenges with the academic base and cross-company consortia

We value engagement with the members of the Business Engagement Forum because they provide a key link between business needs and long-term research, and they provide a clear route to exploitation of our research investments.

If you would like to register for our Business Engagement Newsletter please contact: user.engagement@epsrc.ukri.org

**Peer Review College** – Our Peer Review College provides expert, independent comments on research proposals submitted to EPSRC for funding consideration. Its members also assist us by sitting on our peer review panels.

We wish the college to be representative of the whole of our research base, including business. Your involvement in the college is vital in enabling a robust peer review process.
By becoming a business member of the college you will be providing a valuable service while gaining insight into the process of peer review and state-of-the-art research which can be hugely useful when working with academics to co-create research proposals for submission to EPSRC. College members will receive training. Find out more by visiting our College pages on the EPSRC website or contact the peer review team at: college@epsrc.ukri.org

**Strategic Advisory Teams and Network** – Our Strategic Advisory bodies advise us on research and training strategy in different areas of our remit. Our Strategic Advisory Network provides our Executive with advice to assist in the development, implementation and modification of plans to make recommendations to our Council.

Strategic Advisory Teams act as a body of advisors to EPSRC, with a primary affiliation to one Theme area, helping to ensure that the skills and research base are there to support the advancement of knowledge and the future needs of business and society.

We are always seeking applications from prominent industrialists to sit alongside academics and individuals working in the third sector and government organisations to provide a balanced viewpoint.

There is an annual recruitment process where EPSRC seek applicants to join EPSRC’s Strategic Advisory bodies. For more information please see: epsrc.ukri.org/about/governance/recruitment/
Maintaining the skills pipeline

EPSRC is helping to foster the next generation of world-class researchers and empowers and develops leaders who have the knowledge and transferable abilities – the ‘skills’ – to do and lead the best research. This generation of research scientists and engineers from around the world is being fine-tuned in Britain’s research-intensive universities.

Almost half of the 9,700 EPSRC-supported students being trained at any one time are working collaboratively with more than 1,000 industrial partners. The skills being harnessed give companies – both in the UK and abroad – the innovative edge they need to succeed in a fiercely competitive global marketplace.

With a research and training portfolio of £4.6bn, EPSRC is playing a key role in expanding and deepening the talent pool of the world’s very best and brightest scientists and engineers including long term skills required for industry needs.

We invest in doctoral projects which provide students with challenges and expertise while also allowing companies to collaborate on user inspired challenges. By encouraging companies to collaborate on doctoral training projects and providing a flexible route to do this at a range of levels they can work with students who may be prospective employees or future collaborators. This provides opportunities to explore novel research collaborations and strengthen current partnerships.

By bringing people together from across disciplines, by breaking down intellectual boundaries and by working closely with private and public sector partners, our investments are contributing to the nation’s prosperity through productivity, connectivity, health and resilience. From the development of new technologies and materials, to improvements in medical diagnostics and faster and more secure communications, our funding is changing lives for the better.
About EPSRC

**Our vision** is for the UK to be the best place in the world to research, discover and innovate.

Committed to excellence and impact, we support the talented scientists, engineers and postgraduate research students who, through their research, discover new knowledge, explore new ways of thinking and drive innovation.

Our research portfolio ranges from physics, chemistry and mathematics to materials, computing and engineering. The research we support provides underpinning knowledge that informs other fields such as the life sciences and creative industries. It saves lives, creates prosperity, protects the environment and inspires future generations.

**Our goals** support our vision:

- **Research and Discover** – For the UK to be respected as an international research leader, where discovery thrives and our support generates the highest quality research in engineering and the physical sciences.
- **Research and Innovate** – For the UK’s excellent research base and talented researchers to work with us to accelerate innovation for the benefit of society and the economy.

**Our strategies** help us to achieve our goals:

- **Balancing Capability** – Our Balancing Capability strategy is our means of determining priorities at the research area level. By articulating and signalling evidence-based trajectories for each area, we will make appropriate levels of investment, in line with UK strengths and needs, and taking account of existing capacities.
- **Building Leadership** – Our Building Leadership strategy recognises that it is inspirational scientists and engineers who lead excellent research and maximise its impact for the economy. We will invest in and nurture the most promising and skilled researchers and innovators, enabling them to maximise their contribution within universities, business and other organisations to build a prosperous nation.
- **Accelerating Impact** – Our Accelerating Impact strategy ensures that those investments have as much impact as possible for society and for the economy. We take action to make it more likely that impact will arise, that it will arise more quickly, and that benefits accrue to the nation.
Our Prosperity Outcomes – Productive Nation, Connected Nation, Resilient Nation and Healthy Nation provide a framework for businesses to engage with our Strategic Delivery Plan and to consider how their research and innovation agendas may dovetail with the research base. We use this framework as we facilitate dialogue and broker relationships between universities and businesses, and other end users of research.

- **Productive Nation** – The future competitiveness and creativity of the UK economy requires the successful development of world-leading products, processes and technology based on discovery and innovation in Engineering, ICT and the Mathematical and Physical Sciences.

- **Healthy Nation** – Our mental and physical wellbeing affects our quality of life, the resilience of communities and national productivity.

- **Resilient Nation** – UK prosperity depends on the smooth and sustainable functioning of complex infrastructures: transport; communications networks; water; energy and waste utilities.

- **Connected Nation** – The UK’s success will be driven by as yet unimagined new industries and services, and by innovative, more cost-effective ways of providing existing services through transformational technologies which connect people, things and data together – in safe, smart, secure, trustworthy and productive ways.
EPSRC works with businesses to create connections, deliver outcomes, inspire innovation and leverage investment to enhance research outcomes.

Inspiring innovation
EPSRC creates the environment for new ideas, discoveries and innovations to flourish, leading to the creation of new products, solutions, policies and industries that will shape our future.

Creating connections
EPSRC’s distinctive role is in generating and nurturing collaborations and facilitating knowledge exchange within the academic, industrial and public sector communities. We do this by investing in and connecting skilled people, environments and infrastructure.

Leveraging investment
EPSRC’s world-leading research portfolio attracts investment from UK and global partners. We uniquely support a broad remit vital to all sectors of the economy. Our innovative approaches de-risk early stage innovation for companies, helping to secure the UK’s economy.

Delivering outcomes
EPSRC has a proven track record, with a demonstrable return on investment that contributes to UK prosperity and addresses global challenges.

Enhancing the knowledge and skills base
EPSRC invests in early-stage research and training, collaborating with industry to accelerate the transfer of knowledge and stimulate the flow of people and skills to deliver prosperity to the nation.

Research intelligence for business
In addition to utilising our rich knowledge and understanding of the research base, we also have various tools which detail every aspect of our research portfolio. Businesses can learn about funded research projects, partners and key academics and programmes using online tools to obtain the information they need.

Tools
Visualising our Portfolio – (VoP) VOP graphically showcases our research portfolio and allows users to explore details of our funded projects and programmes.
epsrc.ukri.org/research/ourportfolio/vop/

For businesses, VoP is a valuable source of research intelligence, giving you an insight into the research challenges that academics are currently investigating and the programmes that your company and others are involved in.
Gateway to Research (GtR) – The Gateway to Research (GtR) website has been developed by UK Research and Innovation (UKRI) to enable users to search and analyse information about publicly funded research. This website will be of particular interest to innovative Small and Medium Enterprises (SMEs), enabling easy access to information about current research projects and outcomes of past projects; it will however also be of interest to other users, such as academic institutions and the general public. gtr.ukri.org

Konfer – Konfer can connect businesses of all sizes with universities. It is designed to help businesses find opportunities for collaboration including research, researchers, facilities, equipment, funding and support. It also helps universities to find potential research partners.

Created by the National Centre for Universities and Business (NCUB) in partnership with the Higher Education Funding Council for England www.hefce.ac.uk, (now Research England) and the UK’s Research Councils, Konfer brings knowledge and growth to businesses, provides valuable exposure for university talent, and helps to support the future strength for the UK economy. www.konfer.online
£4.6bn total research and training portfolio

£1.2bn leveraged from business and other partners

£3.4bn of EPSRC portfolio relevant to industrial sectors

90+ universities supported across the UK, working with over...

3,800 collaborating organisations

60% of which are SMEs

55% of our portfolio is collaborative

56% of our portfolio is multidisciplinary

over 6,000 world-leading researchers supported

over 9,700 students supported

£1bn of EPSRC funding coupled with a similar level of funding from government, EU and industry has contributed to:

£64bn of economic activity

£16bn of cost savings in public and private sectors

400 new businesses

50,000 people employed
Endorsements from business

As a company with a major presence and important customer base in the UK, it’s very much in Schlumberger’s interest for the UK to be efficient, successful and capable of reaping the economic and other rewards of research and innovation. Working with EPSRC is a vital element in the chain, enabling us to maximise our ability to contribute to, and benefit from, the ongoing evolution of science and engineering excellence at UK universities.

Dr Simon Bittleston
Vice President of Research
Schlumberger

The UK has world-beating capabilities in a range of fields critical to the ongoing evolution of telecommunications technology. Our partnership with EPSRC has proven its ability to identify and develop strengths to the UK’s competitive advantage in a market that increasingly defines the world around us and will continue to shape the future.

Fraser Burton
Head of BT University Research
BT PLC

Our partnership with EPSRC is facilitating significant progress that could not be achieved by either organisation alone. Together, we’re pushing the boundaries to enable innovative collaborations that will really help drive cancer research forwards so that we can benefit more patients sooner.

Dr Ian Walker
Director of Clinical Research and Strategic Partnerships
Cancer Research UK

EPSRC’s in-depth knowledge of the UK research landscape ensures we can access the academic powerhouse that is the UK universities system.

Dr Steve Harris
Head of External Partnerships and Brokering
BAE Systems
Contact us
For further information visit our website epsrc.ukri.org or call 01793 444000 and ask to speak to a member of the EPSRC Business Engagement team.