BRIDGE

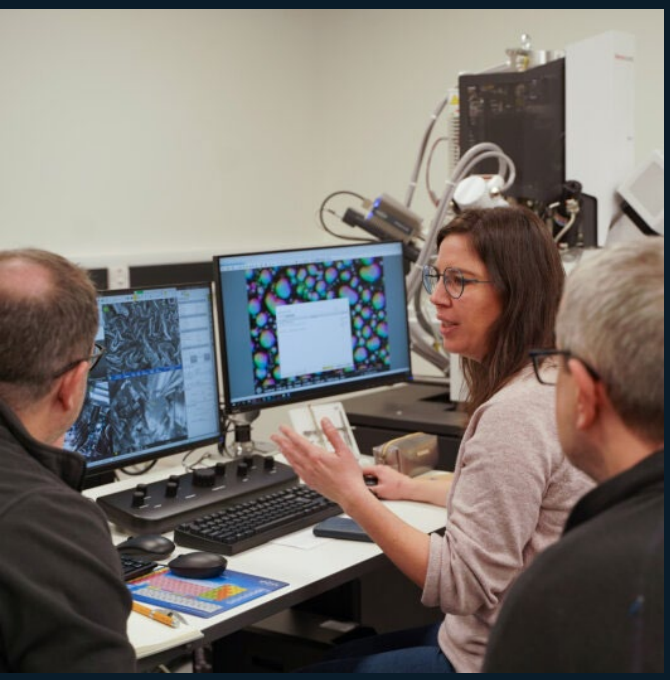
2026

APPLICATION CASE STUDY

INDUSTRY-LED RESEARCH USING SHARED ADVANCED FACILITIES

Bridging internal R&D with external capability

The Bridge Advanced Materials and Engineering R&D facility at the University of Lincoln enables companies to extend their in-house research and development capability by providing direct access to specialist equipment, facilities, and technical expertise. By using The Bridge as an extension of their own R&D function, organisations can accelerate innovation, de-risk development activities, and maximise return on investment in their people and projects.



Concept

Rather than outsourcing work or relying solely on academic-led research, companies can deploy their own engineers, scientists, and technical specialists to work hands-on within The Bridge facility. This model allows partner organisations to retain control of their research direction, timelines, and intellectual property, while benefitting from access to advanced instrumentation that would be cost-prohibitive or impractical to host in-house.

The Bridge effectively functions as an extension of a company's internal laboratory—augmenting existing capability without the overheads associated with capital purchase, maintenance, or specialist staffing.

Approach: collaborative access

Companies engage with The Bridge through a collaborative access model that supports:

- ❑ **Use of advanced equipment by company staff**, following appropriate induction and training.
- ❑ **Flexible access arrangements**, aligned to project demands, from short feasibility studies to long-term R&D programmes.

- **On-demand technical support** from Bridge specialists to complement internal expertise when required.
- **Secure working environment** that respects confidentiality and commercial sensitivity.

This approach ensures organisations remain closely connected to their development work, while significantly enhancing technical reach and experimental capability.

Application

Using The Bridge as an R&D extension enables companies to:

- Rapidly prototype, test, and validate new materials, processes, or components without disrupting internal operations.
- Scale experimental activity beyond the physical and technical limits of their own facilities.
- Apply sophisticated analytical, manufacturing, and characterisation techniques earlier in the development cycle.
- Investigate process optimisation, quality issues, or failure mechanisms using specialist equipment not available in-house.

By embedding their own teams within The Bridge environment, organisations foster deeper learning, faster iteration, and stronger knowledge retention within their workforce.

Benefits to industry partners

- **Cost-effective access to capital-intensive equipment** without long-term financial commitment.

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- ❑ **Increased development speed** through reduced wait times and direct experimental control.
- ❑ **Upskilling of internal teams** through hands-on exposure to advanced technologies and methodologies.
- ❑ **Reduced technical risk** through early-stage validation and high-resolution insight.
- ❑ **Enhanced innovation capacity** while maintaining ownership of IP and project strategy.

This collaborative model is particularly valuable for SMEs and innovation-driven organisations seeking to compete at a higher technological level.

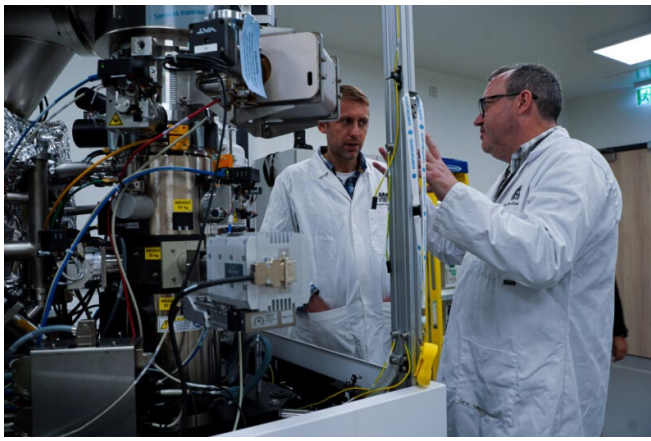
Integration with in-house R&D

Projects hosted at The Bridge are structured to align seamlessly with a company's internal R&D framework. Data, samples, and findings can be fed directly back into existing workflows, ensuring continuity between external experimentation and internal decision-making.

Where required, Bridge academic and technical staff can provide targeted input, acting as subject-matter specialists rather than project owners—allowing company teams to remain firmly in the lead.

Summary: Expanding capability without limits

The Bridge provides a practical, industry-focused route for companies to enhance their R&D capacity using their own people, their own priorities, and their own projects. By combining in-house expertise with access to world-class facilities, organisations can innovate faster, smarter, and with greater confidence—without the barriers traditionally associated with advanced research infrastructure.



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FUNDED BY

European Union European Regional Development Fund

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