Centre for Innovation in Rail
Advancing products and services in the railway supply chain

We offer a unique collaboration between world-class rail academics and industry professionals to provide access to leading-edge research and development expertise. Together with the potential to form new partnerships and access funding and business advice, we will help create a route to market and deliver your innovation to the rail industry.

What can we do for you?
By partnering with us, we can help you:
• Understand and remove barriers to innovation within the railway sector
• Build collaborations and consortiums; putting you in touch with the right railway people
• Identify railway industry and government funding opportunities to drive innovation forward
• Gain access to multi-disciplinary railway engineering research, development and testing
• Develop your business process; building the best business plans and route-to-market strategies for your concepts.

“The work we have conducted with the University’s Centre for Innovation in Rail has been invaluable in validating and refining our device for use in depots across the UK.”

Stephanie Klecha
MRX UK Engineering Manager
Expand your capabilities

Focusing on new technologies, processes and product development, the CIR is supported by a large team of multi-disciplinary research staff to offer:

Computer Simulation and Control
- Dynamic and kinematic modelling
- Advanced Finite Element analysis
- Control system development

Computer Aided Engineering and Rapid Prototyping
- CAD, 3D visualisation and reverse engineering
- Additive manufacture in polymers and metals using laser technologies
- Advanced metrology using x-ray analysis and surface inspection

Advanced Testing Facilities
- Test programme design and experimental methods
- 50t capacity advanced dynamic test cell (11m x 4m bed)
- Portable instrumentation, data acquisition and processing
- Full-scale bogie rolling contact, adhesion and braking rig
- Twin-disc material test rig
- 6-axis motion platform

Business Development
- Access to a wide range of rail partners in the UK and internationally
- Proposal writing and tendering support
- Business case development and marketing
- Funding and commercialisation partnerships

How we work

Communicate:
We’ll set up an initial dialogue to begin developing ideas as to how we can advance your technology or service solutions

Collaborate:
We will work with you together with our expansive network of rail sector contacts to build the right project consortium

Deliver:
Apply our expertise and advanced facilities to progress your concepts from ideation to the rail market

20 and growing!
the number of SMEs the CIR has helped in developing their rail business

Get in touch:
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In partnership with: