Hot Robotics Facility

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HOT ROBOTICS
A National Nuclear User Facility

The National Nuclear User Facility for Hot Robotics (NNUF-HR) is an EPSRC-funded facility to support UK academia and industry to deliver ground-breaking, impactful research in robotics and artificial intelligence for application in extreme and challenging nuclear environments.

RACE

University of BRISTOL

MANCHESTER 1824
The University of Manchester

NATIONAL NUCLEAR LABORATORY

Partners and facilities

The facility is arranged across three regional nodes with four research partners.

UKAEA - RACE Facility

Remote Applications in Challenging Environments, Oxfordshire

RACE forms the primary NNUF-HR hub where a large array of robots and mock-ups are housed. Additional functionality is provided through 'hot' test capabilities and portable solutions.

Collaboration with academia and industry is facilitated by RACE's proximity to Harwell, AWE and a multitude of academic institutions.

University of Bristol

Fenswood Facility, North Somerset

The University of Bristol's facility will provide substantial space for developing mobile robotic applications as enhanced tools for environmental field surveying.

Its main capabilities will focus on UAVs and mobile ground vehicles and it offers 245 acres of space for test deployments.

University of Manchester

Dalton Cumbrian Facility

Located at the centre of the UK's nuclear industry in West Cumbria, this facility provides mock-ups and robotic equipment to enable researchers to address nuclear decommissioning challenges.

Specific capabilities include a pond equipped with an underwater position system, robotic manipulators and a variety of mobile robots.

National Nuclear Laboratory

Workington Facility, Cumbria

NNL's facility comprises of equipment and flexible floorspace to develop, test, and demonstrate robotic solutions for the nuclear industry.

The research test rigs available at the NNL Workington Laboratory will be on an industrial scale, acting as a link between low TRL robotics research and technology progression to TRL 9.

Facilities will include:

- Robot laser cutting
- Sort and segregation capability
- A flexible decommissioning cell
- Flexible operating enclosures for development and testing of ROVs.

Contact details

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Availability

Facilities will be available from April 2021. In the interim, users can access a reduced selection of equipment either onsite or offsite. This capability will progressively increase over time. To view the current available equipment, please see **https://www.nnuf.ac.uk/hot-robotics**.