Japan 2: PCV debris location 'DAMSEL'

 Combining submerged ROV, sonar and radiation detection system to locate and characterise fuel debris.





🗱 National Maritime Research Institute





The University of Manchester



DAMSEL team near to Sellafield in the UK

AVEXIS ROV schematics



IF Unit 3

JUNO

A Network for Japan – UK Nuclear Opportunities

Network for Japan – UK Nuclear Opportunities

- PI / Director: Neil Hyatt, Sheffield
- CoPI / Co-Director: Malcolm Joyce, Lancaster

EPSRC Award of ca. £437k over 5 years

Project aim: to nurture and network the UK and Japan research communities in civil nuclear energy, leading to the collaborative development of novel methodologies and tools, to address common challenges in:

- Decommissioning and waste management,
- Reactor safety and regulation
- Nuclear energy policy
- Public communication and engagement
- Environmental safety

Initial themes are those defined in the annual / UK Japan dialogue and EPSRC UK / Japan proposal calls – they will be developed over Network lifetime





JUNO Network: Objectives

1) To deliver an annual meeting for grant holders in the UK – Japan Civil Nuclear Research Programme, to *promote collaboration and knowledge exchange*.

2) To effectively *network the wider UK and Japan research communities* within the joint priorities of the UK – Japan Nuclear Dialogue.

3) To deliver meetings and workshops to stimulate and pump-prime research collaborations and proposals in the challenge themes.

4) To *engage and bring together ongoing research projects*, CDTs and Networks in the EPSRC nuclear fission portfolio, to enhance UK – Japan collaboration.

5) To *provide strategic advice on priorities for UK / Japan collaboration* in nuclear fission, as may be appropriate and required.

JUNO Network: Some principles

- Membership open to academe, industry and government (call in Q3 2016)
- Setwork resources will be awarded, on a competitive basis (and published)
- Resources allocated on basis of EPSRC principles (excellence, relevance impact)
- ا ♦ Agility to respond to evolving priority themes of UK / Japan nuclear dialogue
- Ian for turnover in management board and potentially in theme leads

Initial UK members and partners – contacted major grant holding institutions in EPSRC portfolio during application.



If we did not contact you with a request for support or you could not respond in time, we apologise – the proposal was put together in less than three weeks! Please contact <u>n.c.hyatt@sheffield.ac.uk</u> - a membership drive will take place later this year

JUNO Network: Planned activities

Annual Network Meeting

- Attendance open to all members and invited stakeholders
- Update presentations from UK / Japan nuclear fission grant holders
- Breakout sessions to define and prioritise new collaboration topics

Theme led meetings

- Attendance open to all members and invited stakeholders
- Focused research meetings one per theme per year
- Potential for webcast to maximise participation including Japan

Sandpit workshops

- Challenge led workshops to scope new research collaborations
- Invitation by competitve application process
- Competitive award of Network resources to pump prime collaboration

JUNO Network: Pump priming funds

Collaboration building, meeting or public engagement fund. Allocation of up to £1,750 for one-off scientific meetings, short collaboration forming visits, of up to one month duration.

Collaboration development fund. Allocation of up to £4,500 for secondment visits of up to 3 months to an external organisation to undertake a defined piece of collaborative research or policy study.

Collaboration pilot research fund. Allocation of up to £15,000 - £25,000 through sandpit workshop, to pump prime a collaborative pilot research project or policy study up to 6 months, with the intent of producing a peer reviewed journal publication or grant proposal. Direct costs only.

The budget allocation to each mechanism and balance of intervention may change as Network develops, as agreed by the Steering Group.

Network funds will be awarded to members on the basis of open competition on the basis of EPSRC principles (excellence, relevance impact)

JUNO : Management & Leadership

Management Team: responsible for overall delivery of network

- Neil Hyatt University of Sheffield
- Malcolm Joyce University of Lancaster
- Bill Lee Imperial College London
- Bruce Hanson University of Leeds

Theme leaders: delivery of theme meetings and research agenda

- Decommissioning and waste management: Joe Hriljac Birmingham
- Nuclear energy policy Bill Nuttall
- Reactor Safety & Regulation: Chris Pain Imperial College London
- Public Communication: Chris Jones Sheffield
- Environmental Safety: Jo Renshaw Strathclyde

Network Steering Group: advise on direction and development of network

- Director & Co-Director
- Management Board
- Theme Leads
- Elected network members