

Research Topic Area:

Lower Strength Sedimentary Rock (LSSR) - Workshop and Funding Calls

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Research brief development

Research priorities identified with SMEs and Discipline Leads and wider community.

SMEs secure RWM funding / RSO considers gearing and determine the scale and type of research to support (i.e. PhD, PDRA or other)

Research brief development – PhD, PDRA, Topic Area

Research brief is developed into a funding call which is published openly and transparently



Radioactive Waste
Management

NDA/RWM/167

Geological Disposal
Science and Technology Plan 2020

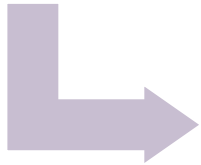
October 2020



Advancing the safety case for a Geodisposal Facility (GDF) in LSSR

Lower Strength Sedimentary Rock (e.g. mudstone and clay rich formations)

- Common across the UK
- Favourable properties (e.g. low permeability)



Potential for hosting a radioactive waste GDF

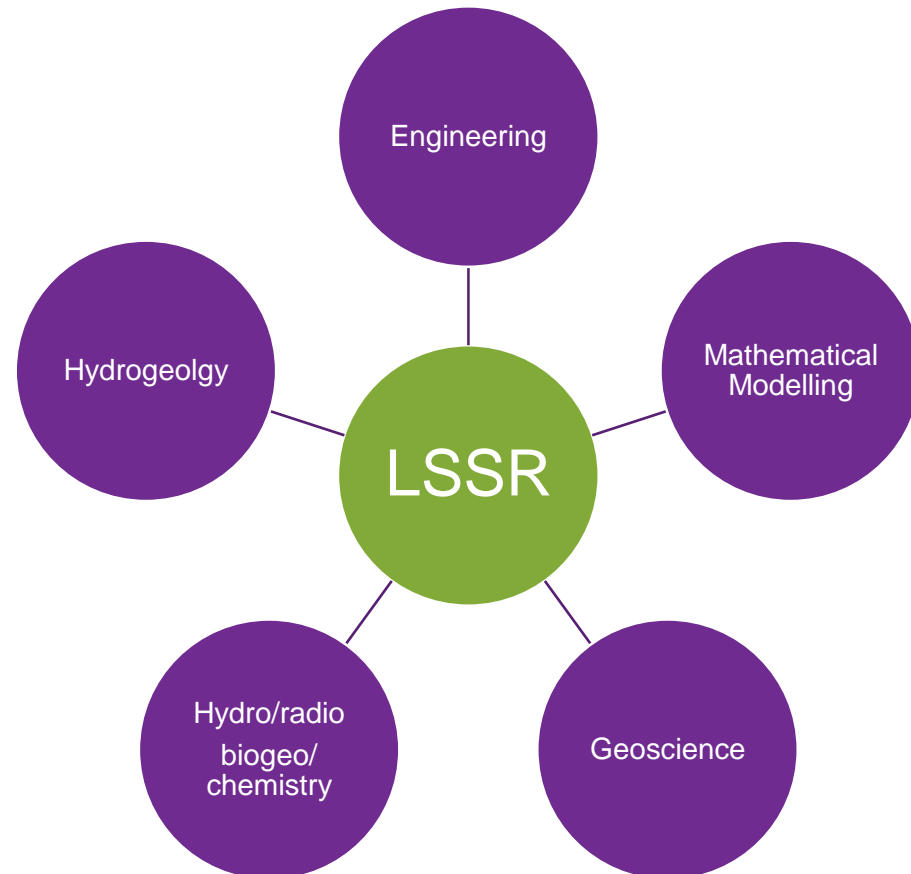
To assess potential and underpin any safety case, fundamental underpinning research is required.



LSSR identified as a research priority area
– RWM “LSSR Sprint” activity 2021

Key LSSR Research Areas

- *Site characterisation data* – What data are needed for a LSSR sites?
- *Conceptualisation of boundaries and complexity in the geology of LSSR systems*
- *Flux of radionuclide and gases in LSSR*
- *Mathematical modelling* – Cross-cutting theme to aid the development and consolidation of models



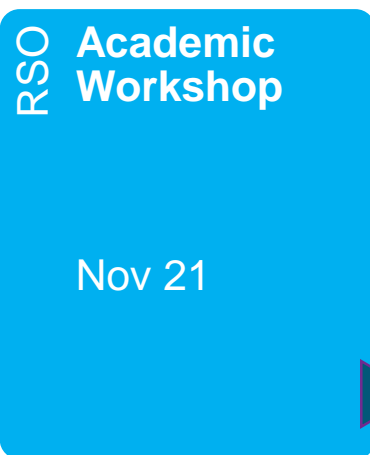
LSSR Topic Area - Aims

- (1) Defining LSSR research areas and objectives
- (2) Development of the LSSR research community and skills
- (3) Delivery of world leading underpinning primary research related to LSSR.

LSSR Programme – Activities

Initial plan is for a 4 year research programme funded by RWM and UKRI partners with an indicative budget of £2 to 4M.

Defining LSSR research areas/objectives



Funding call development and delivery



Projects Funded



LSSR Topic Area – Workshop

- **Date:** 8th November 2021
- **Venue:** Franks and Steel Rooms, Wellcome Trust, 183 Euston Road, London NW1 2BE
- **Participation:** RSO is committed to ensuring representation from diverse range of participants, from a variety of organisations. ECRs and academics who have not engaged with GDF research previously are encouraged to attend.

Workshop Aims:

- Provide an opportunity for the academic community to participate in the development of the LSSR programme
- Assist RWM and RSO in understanding current status of the UK academic community associated with LSSR research e.g. size, expertise and facilities
- Facilitate networking in advance of any funding calls.

