

NWS-RSO Highlights

RSO Annual Conference
12th January 2023

RSO - Aim

The purpose of the NWS RSO is to foster, nurture and grow the interdisciplinary and collaborative R&D effort in the UK to underpin deep geological disposal

This work will be undertaken with your help
- and wider

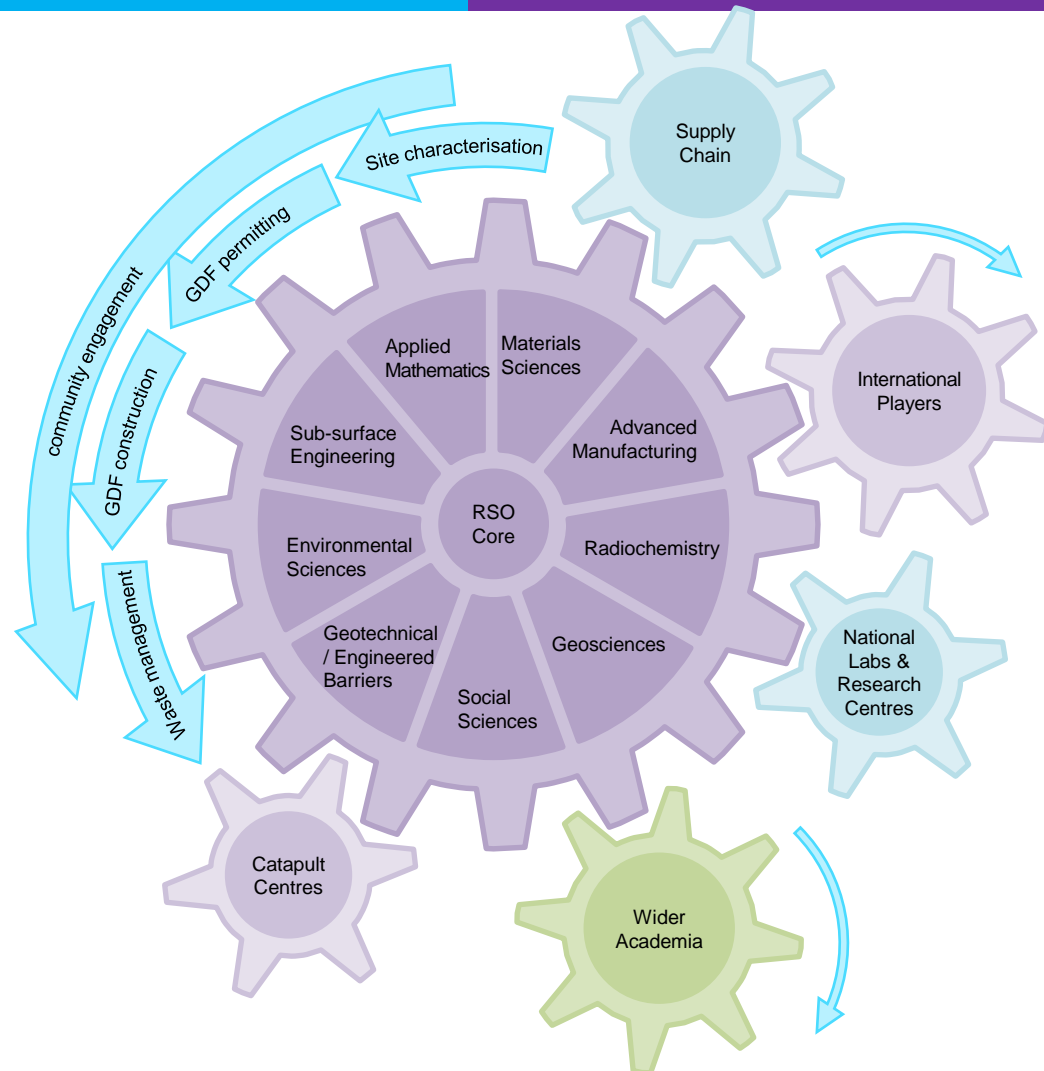
RSO operations

Hub: RSO Core management team, driven by GDF programme needs – coordinating & prioritising research

Spokes: Academic Discipline Leads, working with NWS Subject Matter Experts – defining research scope

Wheel / tyre: Universities, research centres, international bodies – delivering research

Together: Delivering understanding to underpin GDF safety cases and developing an engaged, informed academic network



Hub – Core Team



Lucy Bailey – NWS Head of Research Support Office

Helen Bayram – RSO Project Manager

Claire Corkhill – RSO Core Team Lead, University of Sheffield

Katherine Morris – RSO Director, University of Manchester

Katherine Raines – NWS Deputy Head of Research Support Office

Samantha Roberts – RSO Administration

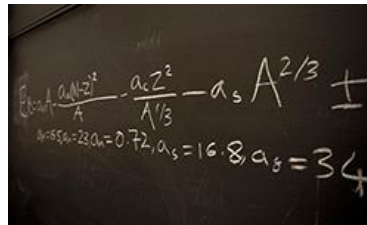
Sam Shaw – RSO Core Team Lead, University of Manchester

Julie Thompson – RSO Administration

Discipline Areas



Advanced manufacturing



Applied mathematics



Social science



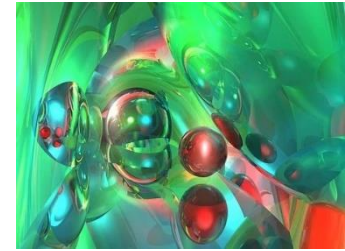
Environmental science



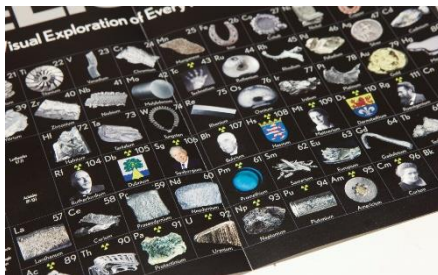
Geosciences



Geo-technical /
engineered barriers



Materials science



Radiochemistry



Sub-surface engineering



Skills & Communication

RSO Researchers

Start year	2017	2018	2019	2020	2021	2022	2023
PhD	2	1	3	5	11	9	14*
PDRA	0	0	2	0	3	1	3+*
Fellows	0	0	0	1	4	1	2+*

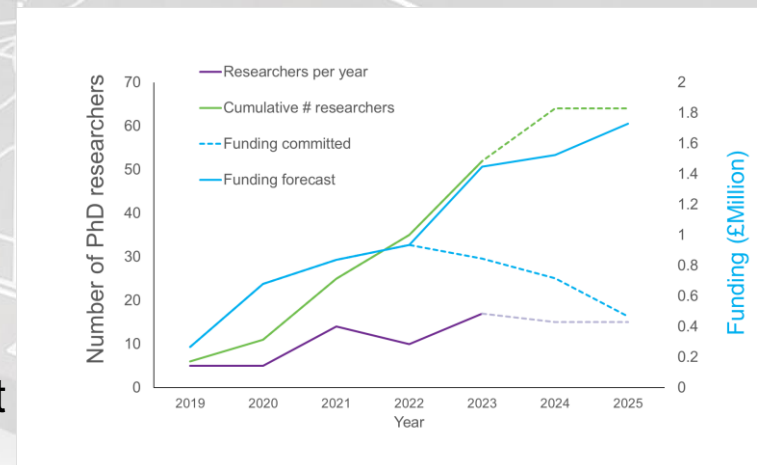
*projected numbers



Currently active
29 PhD projects
3 PDRAs
10-14 PhD projects will
recruit for 2023 start



Affiliate scheme
10 researchers that are
working on topics relevant
to the GDF programme



RSO Community Development

Growth in RSO Community over 15 months significant

- Annual conference 2021 = 99
- Annual conference 2023 = >130

Many new researchers, investigators, institutions and facilities

Community reach across the country – workshops, webinars, facilities visits

Thank you for attending!



De-risking Geological Disposal of Radioactive Waste in the UK.

19th January – NERC/NWS networking event
23rd March – call closes
May – interview panels
October – project starts

Defining LSSR research areas/objectives

Funding call development and delivery

Projects Funded



Derisking geological disposal of radioactive waste in the UK

Reach into new facilities

- Exciting times as new National Nuclear User Facilities come online
- RSO researcher now widely engaging with these facilities, and other unique capabilities in UK
 - AMB Launch
 - EXACT, PLEIDIES, RADER Workshop
- Posters from facilities representatives
- We are keen to hear from you if you are using these facilities



PhDs – Bursary and Affiliates

- 3rd annual cycle of bursary call successfully completed
- 13 project briefs plus open call
- 30 applications across all 14 areas from 22 institutions with majority of investigators new to the GDF programme
- Evaluations nearly finalised – at least 7 new projects

**Next call will open in Autumn 2023 for projects that will
start Oct 2024**

- Affiliates scheme open Autumn 2022, attracted 10 new GDF researchers to RSO community, warm welcome!

Other highlights

Regular “Research in Progress” webinar series
– recordings on the RSO website

March 2022 – social sciences workshop. Slides
available on the RSO website

Nov 2022 – NWS-RSO interfaces workshop.
Developing outputs further in 2023

Advanced Manufacturing community of practice
recruited members

MSc projects

Evidence given to the Science and Technology
Committee Inquiry on Delivering New Nuclear

Research in progress webinar: Gas migration and reactivity in a GDF

24th November 2022

This event was focussed around on-going research relating to **gas migration and reactivity in a GDF**. We were joined by speakers that are working on gas evolution within a full-scale heater test, experimental understanding of gas migration through low permeability clay-based materials, and the gas migration properties of alternative backfill materials.



Upcoming in 2023

- PhD bursary call – open autumn 2023
- NERC Highlight topic response in Marine Environment – 2023
- Development of engineering, social sciences, and post closure safety case topic areas
- Lunch and learn webinars
- Affiliate scheme
- Communication training & opportunity to support engagement in NWS Community Partnerships
- NWS SME lecture series
- Open for ideas – please let us know what you need!

Communications

Follow us on Twitter: @RSO_GDF_UK



Sign up to our
newsletter to be kept
up to date with
events and funding
opportunities

Contact us:

www.research-support-office-gdf.ac.uk
rso-gdf@manchester.ac.uk