

RICHeS EOI 2022

Response ID	Start date	Completion date
914801-914783-97498024	14 Jul 2022, 15:23 (BST)	14 Jul 2022, 15:39 (BST)

1	Name of Organisation	UKRI
2	How would you characterise your organisation?	UKRI Funded facility
2.a	If you selected Other, please specify:	
3	Where in the UK is your organisation based? If you are based in multiple regions, please use the location where you primarily deliver heritage science services.	South West England
4	Please provide the first 3 characters of your organisation's postcode.	SN2
5	Is your organisation eligible for UKRI funding?	Yes
6	How many members of staff in your organisation work directly on heritage science applications, services or equipment as a research professional or project manager? Please describe this as a number of FTEs (full time equivalent staff).	20
7	How many members of staff in your organisation work directly on heritage science applications, services or equipment as a technician, archivist, software engineer, or other specialist? Please describe this as a number of FTEs (full time equivalent staff).	15
8	How many members of staff in your organisation support the work on heritage science applications, services or equipment as an administrator or in a similar supporting role? Please describe this as a number of FTEs (full time equivalent staff).	5
9	Fixed Heritage Science Skills and Equipment. Which of the following categories of heritage science equipment does your current organisation possess and/or have the skills to operate to undertake analyses. Note. It is possible that your organisation may own equipment but currently lack the skilled staff to use it effectively, or vice versa. Please select all that apply.	

9.1	Ageing techniques	
9.1.a	Equipment Types Owned by Your Organisation	
9.1.b	Skilled Staff Available to Operate	
9.2	Biological analysis (inc DNA)	
9.2.a	Equipment Types Owned by Your Organisation	Select for Yes
9.2.b	Skilled Staff Available to Operate	Select for Yes
9.3	Conservation techniques and preparation methods	
9.3.a	Equipment Types Owned by Your Organisation	
9.3.b	Skilled Staff Available to Operate	
9.4	Dating	
9.4.a	Equipment Types Owned by Your Organisation	Select for Yes
9.4.b	Skilled Staff Available to Operate	Select for Yes
9.5	Environmental Monitoring	
9.5.a	Equipment Types Owned by Your Organisation	
9.5.b	Skilled Staff Available to Operate	
9.6	Imaging (multiscale and multispectral)	
9.6.a	Equipment Types Owned by Your Organisation	Select for Yes
9.6.b	Skilled Staff Available to Operate	Select for Yes
9.7	Ion Beam analysis techniques	
9.7.a	Equipment Types Owned by Your Organisation	
9.7.b	Skilled Staff Available to Operate	
9.8	Mass Spectrometries	
9.8.a	Equipment Types Owned by Your Organisation	
9.8.b	Skilled Staff Available to Operate	
9.9	Microscopies	
9.9.a	Equipment Types Owned by Your Organisation	Select for Yes
9.9.b	Skilled Staff Available to Operate	Select for Yes
9.10	Molecular analysis	
9.10.a	Equipment Types Owned by Your Organisation	
9.10.b	Skilled Staff Available to Operate	
9.11	Molecular spectroscopies	
9.11.a	Equipment Types Owned by Your Organisation	

9.11.b	Skilled Staff Available to Operate	
9.12	Neutron techniques	
9.12.a	Equipment Types Owned by Your Organisation	
9.12.b	Skilled Staff Available to Operate	
9.13	Optical spectroscopies	
9.13.a	Equipment Types Owned by Your Organisation	
9.13.b	Skilled Staff Available to Operate	
9.14	Physical characterization	
9.14.a	Equipment Types Owned by Your Organisation	
9.14.b	Skilled Staff Available to Operate	
9.15	Thermal characterization	
9.15.a	Equipment Types Owned by Your Organisation	
9.15.b	Skilled Staff Available to Operate	
9.16	X-ray techniques	
9.16.a	Equipment Types Owned by Your Organisation	Select for Yes
9.16.b	Skilled Staff Available to Operate	Select for Yes
9.17	Isotopic Analysis	
9.17.a	Equipment Types Owned by Your Organisation	
9.17.b	Skilled Staff Available to Operate	
9.a	Other, please specify	
9.b	Please provide an approximate capital value for this equipment in GBP.	10000
9.b.i	If you have this information, please state if the figure just supplied represents a) current value b) original purchase cost c) replacement cost or d) a mix of a, b & c for different equipment.	a
9.c	Please provide an approximate cost for yearly maintenance and other annual on-costs for this equipment in GBP.	3000

10	Mobile Heritage Science Equipment and Skills Which of the following categories of heritage science equipment does your current organisation possess and/or have the skills to operate to undertake analyses. Note. It is possible that your organisation may own equipment but currently lack the skilled staff to use it effectively, or vice versa. Please select all that apply.	
10.1	Point analysis (inc Raman, XRF)	
10.1.a	Equipment Owned by Your Organisation	Select for Yes
10.1.b	Skilled Staff Available to Operate	

10.2	Multi/hyper spectral imaging/mapping	
10.2.a	Equipment Owned by Your Organisation	
10.2.b	Skilled Staff Available to Operate	
10.3	2D/3D analysis (inc laser scanning, tomography, microscopy)	
10.3.a	Equipment Owned by Your Organisation	
10.3.b	Skilled Staff Available to Operate	
10.4	Remote Sensing (inc geophysics, LiDAR, UAV)	
10.4.a	Equipment Owned by Your Organisation	
10.4.b	Skilled Staff Available to Operate	
10.a	Other, please specify	
10.b	Please provide an approximate capital value for this equipment in GBP.	4000
10.c	Please provide an approximate cost for yearly maintenance and other annual on-costs for this equipment in GBP.	1000
10.c.i	If you have this information, please state if the figure just supplied represents a) current value b) original purchase cost c) replacement cost or d) a mix of a, b & c for different equipment.	a

11	On which types of heritage asset do you undertake heritage science work? Please note: these categories are drawn from UNESCO definitions of cultural and natural heritage. Please see the 'more information' tab for further details on the heritage assets covered by these definitions. Please select all that apply.	Fixed (tangible) Cultural Heritage
11.a	If you selected Other, please specify:	

12	Within your organisation, do you currently have access to heritage science skills, services or equipment to meet your needs?	No
12.a	If 'no', do you have access to the skills, services or equipment you need through external providers?	Yes
12.a.i	Please name your external providers, seperated by a semi-colon.	Polaris House labs

13	In what areas would like to strengthen your organisation's heritage science capabilities in terms of equipment or skills? Please select all the apply.	
13.1	Ageing techniques	
13.1.a	Strengthen through Equipment Acquisition	Please select all that apply
13.1.b	Strengthen through Skills Acquisition	Please select all that apply

13.2	Biological analysis (inc DNA)	
13.2.a	Strengthen through Equipment Acquisition	
13.2.b	Strengthen through Skills Acquisition	
13.3	Conservation techniques and preparation methods	
13.3.a	Strengthen through Equipment Acquisition	
13.3.b	Strengthen through Skills Acquisition	
13.4	Dating	
13.4.a	Strengthen through Equipment Acquisition	
13.4.b	Strengthen through Skills Acquisition	
13.5	Environmental Monitoring	
13.5.a	Strengthen through Equipment Acquisition	
13.5.b	Strengthen through Skills Acquisition	
13.6	Imaging (multiscale and multispectral)	
13.6.a	Strengthen through Equipment Acquisition	
13.6.b	Strengthen through Skills Acquisition	
13.7	Ion Beam analysis techniques	
13.7.a	Strengthen through Equipment Acquisition	
13.7.b	Strengthen through Skills Acquisition	
13.8	Mass Spectrometries	
13.8.a	Strengthen through Equipment Acquisition	
13.8.b	Strengthen through Skills Acquisition	
13.9	Microscopies	
13.9.a	Strengthen through Equipment Acquisition	
13.9.b	Strengthen through Skills Acquisition	
13.10	Molecular analysis	
13.10.a	Strengthen through Equipment Acquisition	
13.10.b	Strengthen through Skills Acquisition	
13.11	Molecular spectroscopies	
13.11.a	Strengthen through Equipment Acquisition	
13.11.b	Strengthen through Skills Acquisition	
13.12	Neutron techniques	
13.12.a	Strengthen through Equipment Acquisition	

13.12.b	Strengthen through Skills Acquisition	
13.13	Optical spectroscopies	
13.13.a	Strengthen through Equipment Acquisition	
13.13.b	Strengthen through Skills Acquisition	
13.14	Physical characterization	
13.14.a	Strengthen through Equipment Acquisition	
13.14.b	Strengthen through Skills Acquisition	
13.15	Thermal characterization	
13.15.a	Strengthen through Equipment Acquisition	
13.15.b	Strengthen through Skills Acquisition	
13.16	X-ray techniques	
13.16.a	Strengthen through Equipment Acquisition	
13.16.b	Strengthen through Skills Acquisition	
13.17	Isotopic Analysis	
13.17.a	Strengthen through Equipment Acquisition	
13.17.b	Strengthen through Skills Acquisition	
13.18	Point analysis (inc Raman, XRF)	
13.18.a	Strengthen through Equipment Acquisition	
13.18.b	Strengthen through Skills Acquisition	
13.19	Multi/hyper spectral imaging/mapping	
13.19.a	Strengthen through Equipment Acquisition	
13.19.b	Strengthen through Skills Acquisition	
13.20	2D/3D analysis (inc laser scanning, tomography, microscopy)	
13.20.a	Strengthen through Equipment Acquisition	Please select all that apply
13.20.b	Strengthen through Skills Acquisition	Please select all that apply
13.21	Remote Sensing (inc geophysics, LiDAR, UAV)	
13.21.a	Strengthen through Equipment Acquisition	Please select all that apply
13.21.b	Strengthen through Skills Acquisition	Please select all that apply

14 Approximately how much would it cost in terms of capital expenditure (GBP) to strengthen your organisation's capability through equipment acquisition as just identified?

10000

15	Approximately how much would it cost in terms of yearly maintenance and other annual on-costs to strengthen your organisation's capability through equipment acquisition as identified?	5000
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16	How would strengthening the capacity of your organisation in this way meet your needs?	<ul style="list-style-type: none"> • Build new skills • Increase knowledge exchange • Improvements in efficiency
16.a	If you selected Other, please specify:	

17	Does your organisation have established processes to offer heritage science services to external users under contract or similar commercial arrangements?	Yes
17.a	Approximately how many requests do you receive per annum?	20
17.b	Approximately how many of these requests are you able to service?	5
17.c	Please select the main broad reasons for being unable to service external requests if relevant. Please select all that apply.	<ul style="list-style-type: none"> • Insufficient staff time to operate technology • Insufficient staff time to analyse results • Shortage of sufficiently skilled staff
17.c.i	If you selected Other, please specify:	
17.d	Is the ability to offer commercial or contractual heritage science services to external users a future aim of your organisation?	

18	Do you work in partnership for research purposes or service provision (i.e. not simply under commercial contract) in order to provide or benefit from heritage science services, skills or equipment?	No but I am interested building partnerships
18.a	With what types of organisation would you like to establish a partnership. Please rank in order of importance.	
18.a.1	University	Least Important: 7
18.a.2	Independent Research Organisation	6
18.a.3	Charity / 3rd Sector	2
18.a.4	Commercial	3
18.a.5	Public Sector (inc. national & local government)	5
18.a.6	Museum, Library, Archive or Gallery	Most Important: 1
18.a.7	UKRI Funded facility	4

18.a.i	In what areas would you benefit from establishing new partnerships in terms of access to equipment or skills? Please select all the apply.	
18.a.i.1	Ageing techniques	
18.a.i.1.a	Benefit through Access to Equipment	
18.a.i.1.b	Benefit through Access to Skills	
18.a.i.2	Biological analysis (inc DNA)	
18.a.i.2.a	Benefit through Access to Equipment	
18.a.i.2.b	Benefit through Access to Skills	
18.a.i.3	Conservation techniques and preparation methods	
18.a.i.3.a	Benefit through Access to Equipment	
18.a.i.3.b	Benefit through Access to Skills	
18.a.i.4	Dating	
18.a.i.4.a	Benefit through Access to Equipment	
18.a.i.4.b	Benefit through Access to Skills	
18.a.i.5	Environmental Monitoring	
18.a.i.5.a	Benefit through Access to Equipment	
18.a.i.5.b	Benefit through Access to Skills	
18.a.i.6	Imaging (multiscale and multispectral)	
18.a.i.6.a	Benefit through Access to Equipment	
18.a.i.6.b	Benefit through Access to Skills	
18.a.i.7	Ion Beam analysis techniques	
18.a.i.7.a	Benefit through Access to Equipment	
18.a.i.7.b	Benefit through Access to Skills	
18.a.i.8	Mass Spectrometries	
18.a.i.8.a	Benefit through Access to Equipment	
18.a.i.8.b	Benefit through Access to Skills	
18.a.i.9	Microscopies	
18.a.i.9.a	Benefit through Access to Equipment	
18.a.i.9.b	Benefit through Access to Skills	
18.a.i.10	Molecular analysis	
18.a.i.10.a	Benefit through Access to Equipment	Please select all that apply
18.a.i.10.b	Benefit through Access to Skills	Please select all that apply
18.a.i.11	Molecular spectroscopies	

18.a.i.11.a	Benefit through Access to Equipment	
18.a.i.11.b	Benefit through Access to Skills	
18.a.i.12	Neutron techniques	
18.a.i.12.a	Benefit through Access to Equipment	
18.a.i.12.b	Benefit through Access to Skills	Please select all that apply
18.a.i.13	Optical spectroscopies	
18.a.i.13.a	Benefit through Access to Equipment	
18.a.i.13.b	Benefit through Access to Skills	
18.a.i.14	Physical characterization	
18.a.i.14.a	Benefit through Access to Equipment	
18.a.i.14.b	Benefit through Access to Skills	
18.a.i.15	Thermal characterization	
18.a.i.15.a	Benefit through Access to Equipment	
18.a.i.15.b	Benefit through Access to Skills	
18.a.i.16	X-ray techniques	
18.a.i.16.a	Benefit through Access to Equipment	
18.a.i.16.b	Benefit through Access to Skills	
18.a.i.17	Isotopic Analysis	
18.a.i.17.a	Benefit through Access to Equipment	
18.a.i.17.b	Benefit through Access to Skills	
18.a.i.18	Point analysis (inc Raman, XRF)	
18.a.i.18.a	Benefit through Access to Equipment	
18.a.i.18.b	Benefit through Access to Skills	
18.a.i.19	Multi/hyper spectral imaging/mapping	
18.a.i.19.a	Benefit through Access to Equipment	
18.a.i.19.b	Benefit through Access to Skills	Please select all that apply
18.a.i.20	2D/3D analysis (inc laser scanning, tomography, microscopy)	
18.a.i.20.a	Benefit through Access to Equipment	Please select all that apply
18.a.i.20.b	Benefit through Access to Skills	Please select all that apply
18.a.i.21	Remote Sensing (inc geophysics, LiDAR, UAV)	
18.a.i.21.a	Benefit through Access to Equipment	Please select all that apply
18.a.i.21.b	Benefit through Access to Skills	Please select all that apply

18.a.ii

What would be the minimum amount of investment required to enable you to form your desired partnerships? Please select the most appropriate cost range.

£250,000 to £500,000

19 What additional heritage science skills or equipment do you benefit from by working in partnerships? Please select all that apply

19.1 Ageing techniques

19.1.a Benefit through Access to Equipment

19.1.b Benefit through Access to Skills

19.2 Biological analysis (inc DNA)

19.2.a Benefit through Access to Equipment

19.2.b Benefit through Access to Skills

19.3 Conservation techniques and preparation methods

19.3.a Benefit through Access to Equipment

19.3.b Benefit through Access to Skills

19.4 Dating

19.4.a Benefit through Access to Equipment

19.4.b Benefit through Access to Skills

19.5 Environmental Monitoring

19.5.a Benefit through Access to Equipment

19.5.b Benefit through Access to Skills

19.6 Imaging (multiscale and multispectral)

19.6.a Benefit through Access to Equipment

19.6.b Benefit through Access to Skills

19.7 Ion Beam analysis techniques

19.7.a Benefit through Access to Equipment

19.7.b Benefit through Access to Skills

19.8 Mass Spectrometries

19.8.a Benefit through Access to Equipment

19.8.b Benefit through Access to Skills

19.9 Microscopies

19.9.a Benefit through Access to Equipment

19.9.b Benefit through Access to Skills

19.10 Molecular analysis

19.10.a	Benefit through Access to Equipment	
19.10.b	Benefit through Access to Skills	
19.11	Molecular spectroscopies	
19.11.a	Benefit through Access to Equipment	
19.11.b	Benefit through Access to Skills	
19.12	Neutron techniques	
19.12.a	Benefit through Access to Equipment	
19.12.b	Benefit through Access to Skills	
19.13	Optical spectroscopies	
19.13.a	Benefit through Access to Equipment	
19.13.b	Benefit through Access to Skills	
19.14	Physical characterization	
19.14.a	Benefit through Access to Equipment	
19.14.b	Benefit through Access to Skills	
19.15	Thermal characterization	
19.15.a	Benefit through Access to Equipment	
19.15.b	Benefit through Access to Skills	
19.16	X-ray techniques	
19.16.a	Benefit through Access to Equipment	
19.16.b	Benefit through Access to Skills	
19.17	Isotopic Analysis	
19.17.a	Benefit through Access to Equipment	
19.17.b	Benefit through Access to Skills	
19.18	Point analysis (inc Raman, XRF)	
19.18.a	Benefit through Access to Equipment	
19.18.b	Benefit through Access to Skills	
19.19	Multi/hyper spectral imaging/mapping	
19.19.a	Benefit through Access to Equipment	
19.19.b	Benefit through Access to Skills	
19.20	2D/3D analysis (inc laser scanning, tomography, microscopy)	
19.20.a	Benefit through Access to Equipment	
19.20.b	Benefit through Access to Skills	

19.21	Remote Sensing (inc geophysics, LiDAR, UAV)	
19.21.a	Benefit through Access to Equipment	
19.21.b	Benefit through Access to Skills	

20	Please list the organisations with whom you already work in partnership on heritage science projects (i.e. not on a purely contractual or commercial basis). Please separate entries with a semi-colon.	
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21	How might you prioritise the use of additional funding to strengthen your partnership working?	
21.1	Invest in new partnerships	2
21.2	Dedicate more staff or equipment time to existing partnerships	Highest Priority: 1
21.3	Training for staff skills	3
21.4	Public outreach	4
21.5	Build joint capacity for new skills	5
21.6	Build joint capacity through new equipment	7
21.7	Technological innovation/R&D	6
21.8	Knowledge Exchange (KE)	Lowest Priority: 8

22	What would be the minimum amount of investment required to meet these aims? Please select the most appropriate cost range.	£10,000 to £100,000
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23	Access to collections of material for study is central to the functioning of the heritage science ecosystem. This question is designed to establish whether you hold or manage access to any of the following types of collection, or would benefit from enhanced access to them. Please select all that apply.	
23.1	Fixed (tangible) Cultural Heritage	
23.1.a	My organisation holds these scientific collection types	
23.1.b	My organisation would benefit from enhanced access to these scientific collection types	
23.2	Moveable (tangible) Cultural Heritage	
23.2.a	My organisation holds these scientific collection types	
23.2.b	My organisation would benefit from enhanced access to these scientific collection types	
23.3	Natural Heritage	
23.3.a	My organisation holds these scientific collection types	Please Select

23.3.b	My organisation would benefit from enhanced access to these scientific collection types	Please Select
23.4	Intangible Heritage	
23.4.a	My organisation holds these scientific collection types	
23.4.b	My organisation would benefit from enhanced access to these scientific collection types	
23.a	Other please specify:	

24	Would you like to be consulted around improving the connectivity of physical and digital scientific collections and data?	Yes
24.a	Contact Name	Sarah Burgess
24.b	Role or Position	Senior Investment Manager
24.c	Contact Email Address	infrastructure@ahrc.ukri.org

25	Would you like to express an interest in the new UK Heritage Science Infrastructure?	Yes and I will provide my contact details so I can be kept informed
25.a	Contact Name	Sarah Burgess
25.b	Role or Position	Senior Investment Manager
25.c	Contact Email Address	infrastructure@ahrc.ukri.org