



**Security of Supply of Mineral Resources
Announcement of Opportunity – Call for Research Proposals**

Call open: 22nd May 2014

Closing date: 16:00 GMT on 17th July 2014

Summary

Proposals are invited for submission to the Security of Supply of Mineral Resources research programme (SoS Minerals).

This call is for Large grant proposals to address the two scientific objectives of the programme:

1. Understand E-tech element cycling and concentration in natural systems
2. Understand how to predict and mitigate the environmental effects of extraction and recovery of E-tech elements.

The focus of the Programme is on the following E-tech elements: cobalt, indium, gallium, heavy rare earth elements, neodymium, selenium and tellurium.

Proposals are invited from holders of SoS Minerals Catalyst Grants only.

The closing date for proposals is 16:00 GMT 17th July 2014

Background

The consumption of most minerals and related metals has increased steadily since World War II, and it is likely that demand will continue to grow in response to the burgeoning global population and the inexorable spread of prosperity across the world especially in the BRIC economies. At the same time, global action to protect the environment and to mitigate and adapt to increased atmospheric CO₂ is demanding significant changes in the way we generate and use energy. These include an increase in the amount of energy produced from renewable resources, including wind and solar; a growth in the use of electric and hybrid vehicles; and increasing energy efficiency of electronics in both industrial and domestic use. However, the environmental technologies and applications that will allow for cleaner energy and more efficient energy usage depend on a range of raw materials (E-tech elements, e.g. cobalt, indium, gallium, heavy rare earth elements, neodymium, selenium and tellurium) that are primarily provided by mining. This initiative will provide the research capacity and evidence base to reduce, not increase, supply risk of these minerals and elements, governed by the imperative to decrease environmental impact.

The variety and amount of E-tech elements needed in the future is difficult to predict accurately, given rapid developments of environmental technologies, but already some elements are in short or disrupted supply for various reasons: scarcity at economically recoverable grades; difficulty of recovery; environmental impacts of mining; political/strategic control of exports; and rapid growth in demand. Furthermore, the EU is almost wholly dependent on imported supplies, from a small number of sources, and this is currently compounded by low substitutability and recycling rates (commonly <1%). Unlike the major industrial metals, such as iron and copper, only in the last two decades have widespread applications for many of the E-tech elements become important.

Historically, therefore, less attention has been paid to their exploration, mining, processing, recycling and substitution.

The global security of supply of E-tech elements can be significantly improved by locating new resources, better understanding the abundance and distribution of E-tech elements in existing ore deposits and by improving the processes that recover them from primary ore. Recovery of the E-tech elements will require new mines, or new processes at existing mines, and this will generate additional environmental impacts, including greenhouse gas emissions. Thus, in order for the E-tech elements to be environmentally beneficial, in production as well as use, the full impacts of their exploitation must be understood. In many cases, E-tech elements are by-products of more abundant commodities within an ore body; therefore, reducing the environmental impact of extracting the entire ore body is needed.

In order to maintain a secure, environmentally and socially sustainable supply of E-tech elements, research is needed now to improve our understanding of how they are transported, concentrated and deposited into potentially exploitable resources. This will lead to a broader and larger resource base, resulting in a greater and more flexible supply of raw materials. In addition, research is needed to quantify and mitigate the environmental impacts of the exploitation of new and existing resources of E-tech elements, both as primary and by-products. Although the technologies they support may be environmentally benign, the production of those technologies may contain significant “embedded” negative environmental impacts. Improving extraction and processing is vital to the sustainability of environmental technologies.

To tackle the challenges presented, the SoS Minerals Expert Group developed two overarching scientific goals:

1. Understand E-tech element cycling and concentration in natural systems;
2. Understand how to predict and mitigate the environmental effects of extraction and recovery of E-tech elements.

The programme will deliver evidence that will inform decision makers on ways to minimise the impact on the environment of exploring for and exploiting E-tech element resources, as well as ameliorating the extraction process. This will be achieved through coordinated research projects targeting novel research into high priority E-tech elements, their environmental context and wider implications of their extraction and recovery. The programme will develop an interdisciplinary community building on UK strengths, linking to industry and related international initiatives.

Strategic Context

Environmental technologies are an attractive route to reducing carbon dioxide emissions to the atmosphere and developing the global green economy. However, these new technologies are significantly and rapidly increasing our use of a range of elements – the E-tech elements – which, coupled with limited availability of material for recycling, are generating a new set of technological, commercial, political and environmental challenges concerning their supply. These challenges are recognised to be international in dimension and have generated a number of high-level investigations into the relationship between economic importance of an element or mineral and its vulnerability to supply disruption.

These studies have identified a range of elements/minerals that may be at risk of supply disruption. These have been variably termed critical/strategic metals/minerals/materials. Though there may be some debate over what is the correct terminology to use and the preferred methodology for assessing supply risks, all reports identify these as a set of elements that include the lanthanides (Rare Earth Elements), some speciality and transition metals, plus several semi-metals in groups IV, V and VI of the periodic table.

On a broader scale, refining ores generates a globally important carbon footprint, e.g. over 4% of global greenhouse gas emissions arise from iron ore production and refining. Innovative and cross-disciplinary science is needed to address the environmental challenges that will result from increasing mineral exploitation in a low-carbon context. The SoS Minerals programme will build in the rising demand for E-tech elements into strategies to foster the environmental optimisation of extraction methods to limit the risks of a consequent rise in CO₂ emissions. It would be self-defeating if winning the elements cost more environmentally than their subsequent utility.

Innovation and cross-disciplinary science is needed to address the environmental challenges that will result from increasing mineral exploitation in a low-carbon context. NERC's SoS Minerals programme has been developed to elucidate and meet these challenges.

Transport and concentration of E-tech elements in the Earth's crust have not received the attention of the major industrial metals: their geoscientific research base is relatively low, and the environmental impacts of their exploitation poorly known. In addition, reduction of environmental footprint, including becoming more energy and resource efficient, is a key aim for the wider mining community.

The SoS Minerals programme was commissioned to deliver research to address some of the key challenges within the NERC Sustainable Use of Natural Resources (SUNR) strategic theme, one of the seven science themes within the previous NERC Strategy 'Next Generation Science for Planet Earth' (2007-2012). For the SUNR theme, the strategic objective was to provide the science to optimise the use of renewable and non-renewable natural resources whilst living within the Earth's environmental limits. To deliver this, investment in science was targeted to bring together and advance understanding of the entirety of processes and consequent outcomes of natural resource use on terrestrial, freshwater and marine systems and on feedbacks to the atmosphere.

The first phase of the SoS Minerals programme was funded jointly by NERC and EPSRC. It funded Catalyst Grants and the Mineral Resources Network (run by the Environmental Sustainability Knowledge Transfer Network). The second phase will fund up to £7 million in Research Grants in the UK. In addition, for projects that are developed with researchers in São Paulo there will be matching funds, available from the São Paulo Research Foundation (FAPESP), to fund the Brazilian component of the project. The research will involve interdisciplinary teams, working in partnership with industry and enabling international exchange of research ideas, personnel and activities. The direct involvement and contribution of industrial partners will be a requirement.

Scope of the call

Up to £7m (80% FEC) is available for this call from NERC and EPSRC to fund 3-4 projects. There will be matching funds available from FAPESP for bilateral research undertaken with researchers in São Paulo. The NERC and EPSRC funding contribution will be 80% FEC. Indexation at the prevailing rate will be applied at the time of award. FAPESP will match funds, excluding the amount directed to the payment of salaries on the UK side and considering the balance of the research effort on both sides. Payment of salaries is a counterpart of the Higher Education and Research Institutions in the State of São Paulo.

All applications must address the science priorities and **both** of the goals stated in the programme's Science and Implementation plan¹:

¹ See the full Science and Implementation Plan under 'Background & objectives' at <http://www.nerc.ac.uk/research/funded/programmes/minerals/>

1. Understand E-tech element cycling and concentration in natural systems.
2. Understand how to predict and mitigate the environmental effects of extraction and recovery of E-tech elements.

All applications must be **interdisciplinary** and must involve at least one **project partner from industry**. Each partner must make a significant financial or in-kind contribution and applications must include a letter of support from each project partner, specifying the contribution.

Proposals may request funding for up to 4 years.

Eligibility

This call is only open to SoS Mineral Resources Catalyst Grant holders. NERC reserves the right to open a second call to the wider community if the applications do not meet the excellence and fit to scheme criteria or do not cover the scope of the programme satisfactorily.

Individuals are limited to involvement in no more than two proposals submitted to this call; only one of these may be as lead Principal Investigator.

International collaboration

In addition to any individual international collaborations secured during the catalyst phase of the programme, applicants should consider international partnerships through, for example, working with researchers funded by CSIRO, Australia and with Brazilian researchers through the RCUK lead agency agreement with FAPESP.

FAPESP

Collaborative proposals between UK and Brazilian (São Paulo) researchers through the lead agency agreement RCUK has with FAPESP will be accepted on this call. To FAPESP, submissions must fall in the realms of the Thematic Project Awards conditions (find examples [here](#)), given the scope of this call. Eligible Brazilian researchers must work in a higher education or research organisation in the State of São Paulo and fit into the Thematic Project eligibility criteria. FAPESP does not fund salaries. You should check the eligibility of costs and researchers for Thematic Projects ([here](#) - in Portuguese only) before applying.

The conditions for the lead agency agreement may be found at:

<http://www.rcuk.ac.uk/international/funding/collaboration/rcukfapespmou/or>

<http://www.fapesp.br/en/5339>

(See the **Application Process** section for how to apply with FAPESP collaborators.)

National Capability

NERC has significant infrastructure and expertise in its National Capability². Applicants must explore whether their proposal has links or relevance to any of the NERC Research Centres, Services and Facilities. From 2013 onwards, use of NERC Facilities in Research Grants must be formally costed in the application, in consultation with the relevant Facilities.

² <http://www.nerc.ac.uk/research/sites/facilities/> and <http://www.nerc.ac.uk/research/sites/centres/>

Capital Equipment costs

The threshold for individual items to be classed as equipment is £10,000 (inclusive of VAT). For items of equipment costing between £10,000 and the OJEU threshold value (for Schedule 1 Services), additional information is required in the Justification of Resources, including evidence of an evaluation of the use of existing relevant capital assets. Proposals requesting single items of equipment costing more than the OJEU threshold value (for Schedule 1 Services) must be accompanied by a business case (up to 2 sides of A4 outlining the strategic need for the equipment). All applicants intending to include a business case for equipment in a research grant proposal must notify NERC at least 1 month prior to proposal submission. The current OJEU threshold value (for Schedule 1 Services) at the time of application applies and can be found at: <http://www.ojeu.eu/Thresholds.aspx>. The thresholds apply to individually capitalise-able assets, rather than by accumulating the value of a number of assets, except where individual assets are clearly intended to be used together as a combined asset. These thresholds apply during the application process as the trigger to determine which application process needs to be followed. They do not impact the procurement process when organisations will need to conform to the OJEU tendering limits that apply to their organisation.

Research Organisations are required to make a contribution towards the cost of any equipment and this is expected to be at least 50% of the full cost. Proposals should cite the full cost of the equipment, confirm the % being required from NERC and provide confirmation that the remaining funds have been secured in the Justification of Resources or business case. The previous situation, where equipment valued up to £50,000 was funded at 80%, with any equipment above £50,000 funded at 100%, no longer applies.

The requirement for additional justification or a business case will not apply to equipment to be used for instrument development. A proposal or group of proposals forming a single project will be classed as instrument development where it is wholly or mainly focussed on creating a novel instrument, or will substantially improve research capability not available using any existing instrument, or will substantially improve research capability beyond what currently exists, in a way that opens up significant new scientific opportunities. Instrument development might involve the construction of a wholly new instrument from its basic components or it might involve substantial modification of an existing instrument. Finally it might involve the integration of two or more existing instruments into a new combined one. In this latter case the proposed integration would need to be technically non-trivial and lead to a capability significantly beyond that of using the component instruments independently. The expectation is for the Research Organisation to contribute at least 50% of the cost, NERC will consider funding up to 100% of instrument development where the potential for Research Organisations to contribute to the costs of instrument development is limited.

The procurement of equipment, consumables and services, including maintenance, must comply with all relevant national and EU legislation and the Research Organisation's own financial policy and procedures. Accepted best practise in the higher education sector must be observed. For all equipment and services where the contract value is more than £25,000 (excluding VAT), professionally qualified procurement staff must be consulted before the procurement process begins and, where appropriate, at the market research stage. They must approve the order/contract

before it is placed with a supplier. Additional documentary evidence for the estimated cost (e.g. supplier's written quote, specialist advice) should be included. For all items of equipment requested with a value over the OJEU threshold value, three equipment quotations must be provided. Where you believe that there are less than three potential suppliers for an item you should explain this in the Justification of Resources attachment and upload 2 blank documents as equipment quotes. For items of equipment which cost less than the OJEU threshold but more than £25k, at least one quotation and up to three can be uploaded.

Data Management

The Research Councils believe that data generated from the research they fund is a valuable long-term, public-good resource³. To ensure the data can be fully exploited in support of the activities that they were collected for, and to enable them to be available for effective, longer-term, post-programme exploitation, it is Research Council policy that data must be managed effectively from the time of generation onwards. Grant-holders are also required to lodge with NERC a copy of the data resulting from the supported research when it is completed, together with documentation/metadata describing these data.

Applicants are required to submit an outline data management plan as part of the case for support, to identify the data sets likely to be made available to NERC Data Centres for archiving and reuse at the end of the grant. Guidance on completing this is available at <http://www.nerc.ac.uk/research/sites/data/>

There will be no charge to the project for a NERC Data Centre to accept and manage the agreed data sets at the end of the grant. But any in-project data management activities should be costed and included within the proposal.

The delivery of the overall programme objectives necessitates effective exchange of data between the teams involved and this will be facilitated by the National Geosciences Data Centre. Well-defined protocols for the exchange of data will therefore be required at the start of the programme, with agreement on data formats and timely delivery by Principal Investigators.

Studentships

All proposals must include 4-5 Associated Studentships. NERC will fund 50% of each studentship and applicants must include these costs as part of their total requested funds. The remaining 50% must be match-funded through industrial partners or other appropriate funders (not Research Council training grants such as Doctoral Training Partnerships or Centres for Doctoral Training) and applicants must include details of these arrangements in the proposal (on the Je-S proforma), along with details of the training and supervision to be provided.

Studentships do not need to address both goals of the programme. Each studentship should constitute a distinct project providing added value to the parent large grant. The main large grant research should still be viable without the studentships and should have distinct objectives that are not reliant on any of the requested studentships.

The student is expected to be able to develop novel research ideas while benefiting from working in a group environment and as part of a student cohort. NERC will not accept proposals where a

³ <http://www.nerc.ac.uk/research/sites/data/policy/>

student is the only dedicated research/staff member on a grant, including individual component grants of joint proposals.

An Associated Studentship includes the student's maintenance grant and university fees. These must be requested on the proposal form as an Exceptions cost and will be paid at 100% fEC. All students must receive the minimum research council stipend (<http://www.rcuk.ac.uk/skills/training/>) but we would encourage this figure to be increased from other funding sources. Additional costs should be requested for items such as fieldwork expenses, conferences and consumables, as Directly Incurred costs and will be paid at 80% fEC. Applicants may request funding for up to 42 months. No further funding is available for associated studentships beyond that requested on the grant.

All studentships must meet the following NERC Success Criteria:

- *Research excellence*: the training and training environment must include scientifically excellent and original research within NERC's remit.
- *Training excellence*: students are managed as a cohesive group and acquire both research and transferable skills. There is a strong and active community of students that are able – and encouraged – to integrate, work and learn together.
- *Multidisciplinary training environments*: the training is embedded in multidisciplinary training environments to enrich the student experience and to encourage the knowledge-sharing and interconnectivity, which benefits research within the environmental sciences. This does not mean that individual PhD topics are required to be multidisciplinary.
- *Excellent students*: attracting the right student. NERC funding goes to the right of 'best-fit' student: the individual whose previous training, experience and skills best suit the type of training being undertaken.

Applicants should demonstrate within their proposal how these success criteria will be met.

As part of the programme there will be summer schools and/or training events for PhD students to enhance the training experience and encourage knowledge exchange. Applicants must plan to host at least one summer school for the entire student cohort within the Minerals programme, and allocate appropriate resources within their proposal to support such training as well as the development activities of their own studentships (including attendance at annual summer schools held by other consortia). All costs requested by each project to run summer schools should be justified and claimed within the project budget.

The aim of these activities is to support an effective and active cohort of students benefitting from training associated with working in this large integrated programme, and also from generic doctoral training within their host institutions. Applicants are therefore also encouraged to seek and identify additional studentships, funded from outside the programme, to augment the student cohort associated with the programme. The Science Coordination Team (see **Reporting, Governance and Programme integration** section below) will be responsible for overseeing the student cohort and ensuring that students do not become isolated. It will also be the Science Coordination Team's responsibility to coordinate summer schools to avoid duplication or clashes of activities.

Reporting, Governance and Programme Integration

All successful applicants will be expected to interact with the programmes' Science Coordination Team (SCT) and the Minerals Network throughout their projects and to be involved in programme-level activities. There will be regular programme-level meetings during the term of the grants (a kick-off meeting at the beginning of the grants, annual progress meetings over the active years of the grants, summer schools (one run by each consortium) for the entire student cohort and a finale at the end of the grants). The SCT will organise the kick-off meeting, finale and the annual progress meetings but applicants will organise the summer schools. Applicants should allocate funds in their

proposals for travel and subsistence to all of these meetings and for organising and holding one summer school for all students funded through the SoS Minerals Programme.

All proposals must include milestones and deliverables to ensure that the SCT can monitor project progress and programme delivery. The SCT will request regular project updates, including information about studentships and partnerships to enable programme reporting.

In order for NERC to manage performance against its Strategic Objectives and Delivery Plan and report to the Department for Business, Innovation and Skills (BIS) and NERC Council, suppliers of strategic research are required to report regularly on the outputs and outcomes they have been commissioned to deliver. The PI will therefore be required to:

- keep their outputs and outcomes updated through inputs to the RCUK Research Outcomes System (ROS)
- complete additional reporting requested by the SCT and Programme Executive Board (PEB) – for example, reports on progress against milestones and deliverables.

Knowledge Exchange and Impact

Knowledge Exchange (KE) is vital to ensure that environmental research has wide benefits for society, and should be an integral part of any research. All proposals are required to identify their impact activities through the Pathways to Impact section, with associated delivery costs. The plan should identify those who may benefit from or make use of the research, how they might benefit or make use of the research, and methods for disseminating data, knowledge and skills in the most effective and appropriate manner.

The SCT will be responsible for impact activities at the programme level, and projects should consider how their proposal might contribute to impact at this level.

Consortium agreements

Principal Investigators from funded proposals will be required to submit a consortium agreement within six months of receiving the award letter. The agreement must be signed by all partners and must detail how and when data and other outputs arising from publically funded research will be made publically available.

Application Process

Closing date: 16:00 GMT 17th July 2014

The format for grant applications is the same as the NERC's 'Large Grants proposals' under the Discovery Science funding mode and applicants should refer to details in the NERC Grants Handbook before applying⁴.

Full proposal applications must be submitted using the Research Councils' Joint Electronic Submission system (Je-S).

To use the Je-S system, the applicant's Research Organisation must be registered as a Je-S user. Full details are available on the [Je-S website](#). Further information can also be obtained by contacting the Je-S Helpdesk by email at JeSHelp@rcuk.ac.uk or by telephone on 01793 444164.

⁴ <http://www.nerc.ac.uk/funding/application/howtoapply/forms/grantshandbook.pdf>

Applicants must ensure that their application is received by NERC by 16:00 GMT on the closing date. Applicants must therefore leave enough time for their application to pass through their organisation's Je-S submission route before this date. Any application that is received after the closing date, is incomplete, or does not meet the eligibility criteria as outlined in this document, will be returned to the applicant and will not be considered.

All attachments submitted through the Je-S system, including the Case for Support, must be completed in single-spaced typescript of minimum **font size 11 point, Arial font**; with margins of at least 2cm. References can be presented in a smaller font size provided it is sufficiently clear to ensure good quality reproductions. Applicants referring to websites should note that referees may choose not to use them.

Note that on submission to council all non PDF documents are converted to PDF and the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document. Additionally where non-standard fonts are present, and even if the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (scientific notation, diagrams etc), the document should be converted to PDF prior to attaching it to the proposal

Proposals involving multiple research organisations may be submitted as joint proposals and there is no limit on the number of components. NERC will expect the lead institution to act as co-ordinator

Each component of each application should include the documents detailed below.

1. **The Proposal Form** – the proforma provided in Je-S (see the grants handbook⁵ for details of which parts of the form are completed for all components and which only need to be submitted by the lead component of the proposal).

2. **CV** – a CV should be attached for named research staff (including Principal investigator, Co-Investigators, Researcher co-investigators and Visiting researchers, up to 2 sides A4 each).

3. **Facility Form** - for use of NERC facilities (Ship-time/Marine Equipment, Antarctic Logistic Support, HPC use over 38MAU in one year.)

4. **Technical Assessment** – for use of other NERC facilities, to include a quote from the relevant facility. See the following link for a list of facilities for when this form is required.
<http://www.nerc.ac.uk/research/sites/facilities/apply/facilities-requiring-technical-assessment.pdf>

5. **Equipment** – Any equipment costing over £25,000 must be supported by three quotations and, for equipment over the OJEU limit, a business case (up to 2 sides A4) must also be submitted.

The **lead** component of the proposal should also submit the documents listed below.

6. **Case for Support**, which comprises 3 parts:

PART A – a common **Previous Track Record** (up to 3 sides of A4 in total across all research organisations involved) to cover the following points:

- provide a summary of the results and conclusions of recent work in the technological/scientific area that is covered by the proposal, including reference to both

NERC and non-NERC funded work and giving details of any relevant past collaborative work with other beneficiaries;

- indicate where your previous work has contributed to the UK's competitiveness or to improving the quality of life;
- outline the specific expertise available for the research at the host organisation and that of any associated organisations and beneficiaries.

PART B – a common **Description of the Proposed Research** (up to 16 sides of A4 including any necessary tables, figures and references) to cover the following points:

- title of proposal;
- the principal aims and objectives and how they fit the objectives of the programme as described in the Science and Implementation plan;
- interdisciplinary collaborations and industrial partnerships involved in the project, end user and stakeholder engagement and how all these associations will contribute to achieving the objectives.

PART C - a description of the proposed **Management Structure and Plan**, including participant responsibilities and scheduling chart (up to 2 sides A4).

7. Outline Data Management Plan (up to 1 side A4). (See Data Management section above; to include any relevant costings. Note that the Outline plan should now be submitted as a separate document of the type 'Data Management Plan', rather than as part of the case for support.)

8. Justification of Resources (up to 4 sides of A4 in total, covering all research organisations involved).

9. Pathways to Impact – up to 2 sides A4 addressing:

- which users/stakeholders will benefit from the proposed research strategy developed by the partnership/network; and what benefits would be delivered;
- how they might benefit and/or make use of the research;
- methods for disseminating and translating the outputs of the partnership/network activities and proposed research strategy to target audiences and stakeholders.
- suggestions for programme-level impact activities that can be implemented by SCT

10. Project Partner Letter(s) of Support – a letter of support should be included for each named project partner (dated within last 6 months, up to 2 sides A4 each). (Select 'Project Partner Letter of Support' in Je-S; other letters of support are not required).

11. Proposal Cover Letter – This is not mandatory and will not be seen by reviewers. It can be used to flag up any significant issues to NERC.

12. Non UK Components - FAPESP

The application should be submitted to NERC as a single proposal through Je-S but costs being requested from FAPESP should not be entered into the finance fields on the Je-S form. Instead, the Brazilian researchers must complete a FAPESP proposal form and consolidated costs form which the UK PI should then submit to NERC as 'other attachments' with the proposal through Je-S. NERC will then forward the entire proposal to FAPESP after the closing date. They will check the eligibility of Brazilian researchers, confirm the availability of funds should the proposal be recommended for

funding and supply NERC with the names of potential peer reviewers. The forms are available on the FAPESP website: <http://www.fapesp.br/en/5339>.

Assessment process

Full proposals will be internationally peer-reviewed and final funding recommendations made by a moderating panel, consisting of independent experts and members of the NERC Peer Review College. Applicants will be given the opportunity to provide a written response to peer review comments prior to the moderating panel and will be invited for an interview and presentation as part of the panel meeting.

The assessment criteria to be used for the full proposals will be as follows:

- Research Excellence
- Fit to Programme Requirements

Pathways to Impact plans will be considered by the moderating panel and graded as either 'Acceptable' or 'Unacceptable'. If the Pathways to Impact plan of a fundable proposal receives an 'Unacceptable' grade, the plan will have to be revised.

Feedback on proposals will be available on request.

Indicative Timetable:

Research Grant AO published	22 nd May 2014
Closing date for applications	16:00 GMT 17 th July 2014
Peer review	18 th July – 26 th Sept 2014
PI responses	1-17 th October 2014
Moderating Panel and interviews	10-14 th November 2014 (2 days)
Grants offered	December 2014
Grants start	March 2015
Studentships start	October 2015
Grants End	March 2019

Contacts

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