

Geological Survey Ireland & the Department of Housing, Local Government and Heritage Targeted Research Project - Terms and Conditions, FAQs and Application Template

Call for applications for research projects in:

Understanding the effects of:

Topic 1: Excessive amounts of pyrite and/or muscovite mica in concrete blocks

Topic 2: Excessive and/or reactive pyrite in sub floor fill

Objectives of the GSI & DHLGH Targeted Research Project

Geological Survey Ireland (GSI) is a division of the Department of the Environment, Climate and Communications. GSI, in conjunction with the Department of Housing, Local Government and Heritage is inviting applications for research in response to legacy issues relating to:

- (i) defective concrete blocks containing excessive amounts of pyrite and/or excessive amounts of muscovite mica
- (ii) excessive and reactive pyrite in sub floor hardcore material.

This research will support evidence-based decision making for policy-makers and standardisation bodies.

In order to reduce the level of unknown risks which may be present in structures affected by these deleterious materials, this research is intended to assist the technical advancement of relevant standards.

Up to four (4) separate projects may be funded to a maximum of €50,000 each. Applicants may apply for more than one project. Successful projects must meet objectives and criteria defined.

Background and aims of the research programme

Budget 2021 provides funding of €40 million to fund the operation of the pyrite remediation scheme¹ and the defective concrete blocks grant scheme².

¹ The Pyrite Resolution Act 2013 provides the statutory framework for the establishment of the Pyrite Resolution Board and for the making of a pyrite remediation scheme to be implemented by the Board with support from the Housing Agency. The provisions of the Act apply to dwellings affected by significant damage attributable to pyritic heave consequent on the presence of reactive pyrite in the subfloor hardcore material.

² The Defective Concrete Blocks Grant Scheme is a grant scheme of financial assistance to support affected homeowners to carry out the necessary remediation works to dwellings that have been damaged due to defective concrete blocks.

In order to gain a greater understanding of the effects of deleterious materials in construction products³ (e.g. concrete blocks and sub floor hardcore) to avoid future adverse effects in buildings and to support technical advancement of standards relating to these schemes, GSI and DHLGH are calling for research relating to these defects.

The successful applicant(s) should be familiar with the relevant standards relating to concrete blocks and sub floor hardcore which include (non-exhaustive list);

- I.S. 465:2018+A1:2020 Assessment, testing and categorisation of damaged buildings incorporating concrete blocks containing certain deleterious materials
- I.S. 398-1:2017 Reactive pyrite in sub-floor hardcore material – Part 1: Testing and categorization protocol
- I.S. 398-2:2013 Reactive pyrite in sub-floor hardcore material – Part 2: Methodology for remediation works
- SR 325:2018+A2:2018 Recommendations for the design of masonry structures in Ireland to Eurocode 6
- SR 16:2016 Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for Concrete
- SR 21:2014+A1:2016 Guidance on the use of I.S. EN 13242:2002+A1:2007 - Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction
- I.S. EN 771-3:2011+A1:2015 Specification for masonry units - Aggregate concrete masonry units (Dense and light-weight aggregates)

The NSAI Concrete Blocks Committee (NSAI/TC 063) developed I.S. 465 “Assessment, testing and categorisation of damage buildings incorporating concrete blocks containing certain deleterious materials” which was published in November 2018. I.S. 465 was developed for use by those who intend to provide assessment and testing services for dwellings that are suspected of being affected by defective concrete blocks and may be used to assess and categorise the damage in such dwellings.

The I.S. 465 protocol refers to a number of technical options for remediation of affected dwellings, which were originally developed by the Expert Panel on Concrete Blocks. The technical options for remediation relating to excessive levels of free muscovite mica are correlated to the susceptibility for further deterioration of the concrete blocks in future.

The NSAI Committee (NSAI/TC 058) developed I.S. 398 “Reactive pyrite in sub-floor hardcore material” which has two parts I.S. 398-1 which covers Testing and Categorisation and I.S. 398-2 which covers the Methodology for remediation works. I.S. 398 was developed for use by those who intend to provide assessment and testing services for dwellings that are suspected of being affected by defective concrete blocks.

It is intended that the data and analysis undertaken as part of this research, and the research outputs, will improve the understanding of how the damage associated with the defective materials is manifested. The findings should improve the knowledge base to allow the development of future iterations of relevant standards relating to concrete blocks and/or sub floor hardcore.

³ [Report of the Expert Panel on Concrete Blocks](#)

GSI and DHLGH are now calling for applications to specifically address the following research topic:

Understanding the effects of;

- i. *excessive amounts of pyrite and/or muscovite mica in concrete blocks;*
- ii. *excessive and/or reactive pyrite in sub floor hardcore material*

Proposals should:

- Include a description of the current state-of the art regarding damage caused by the presence of these deleterious materials, and the expected advancements during the project
- Provide detailed proposals of any laboratory or field work which the proposal intends to utilise, this should include a synopsis of the purpose of the proposed work and highlight how the learning outcomes will contribute to the aims of the research and project impacts;

The findings from this research should provide a further evidential basis to enable technical advancement of the relevant standards.

Supporting Data

Applicants are notified that a number of I.S. 465 Final Reports⁴ (redacted of any personal information in accordance with GDPR requirements) from consenting applicants/engineers to the Defective Concrete Block remediation schemes, which are administered by Mayo and Donegal County Councils, may be made available to successful applicants.

Applicants should provide evidence that any other datasets, which they may rely on, are available and accessible (either reference open databases, or provide a statement of ownership or letter from the data owner to say it will be made available). For GSI hosted data, contact research@gsi.ie prior to submission to ensure availability.

Duration of project

The Project may be up to a maximum of 18 months duration. The duration of the project proposed must be appropriate for the project described. Projects are expected to start between May and August 2021.

Definitions

The Project- The project is the overall research project as proposed by the Applicant. It should be of sufficient scale to deliver the research outputs and include nominated staff positions (e.g. Postdoctoral Researchers, research assistants) as appropriate for the work.

Applicant – the Applicant is the person responsible for submitting, leading and managing the project. They must be employed in the host organisation for the duration of the project (their salary costs may be charged to the Project) and will act as the primary point of contact. They must hold a qualification/have relevant experience in the aspect of the work to be undertaken (this must be demonstrated in their CV).

Collaborators – Collaborators have a specific role in the project but do not receive funding. They may be providing expertise, data etc. as appropriate to support the project.

⁴ This may contain a Chartered Engineers Building Condition Assessment detailing the extent of visual damage to a dwelling and a professional Geologist/Chartered Geotechnical Engineers report on the block sampling and laboratory analysis of core samples taken from the dwelling.

Host organisation – this must be a registered company or Higher Education Institute in Ireland⁵. Valid tax clearance certificates must be supplied on request.

Authorised person – the application must be signed by the Research Office/legally authorised official of the host organisation. The signature indicates the organisation's willingness and ability to host the award in terms of financial, human and physical resources required.

Eligibility

All criteria listed in the definitions must be adhered to.

CVs for the Applicant and each Collaborator must be submitted with the proposal and must demonstrate the ability of each to carry out their responsibilities within the project.

Researcher profile and CVs

The Applicant must attach a CV which should be no longer than 4 pages and must include;

- Contact details
- Recent employment history
- Academic qualifications or equivalent experience
- Publications
- Other information relevant to the proposal*

Collaborators must attach a CV which should be no longer than 2 pages and must include;

- Contact details
- Recent employment history
- Academic qualifications or equivalent experience
- Key Publications
- Other information relevant to the proposal*

**For all information regarding funding secured to date;*

- *You must clearly state your role in any project listed (Lead/PI/Partner)*
- *If you were an unfunded collaborator this can be included but it must be clearly stated you were not funded.*
- *Any funding awarded/decision pending must clearly state how much funding has been/may be awarded to the Applicant and not the total value of the project to the whole consortium or institute.*

Misrepresentation of research grants awarded/pending is considered a serious breach of ethics and terms and conditions. Any misleading information found in applications for funding will result in the application being returned without review. Information provided may be queried with other named funding agencies if necessary.

Submission

The call comprises a one stage application process. Full Proposals must be submitted by email before the call deadline. Any applications not adhering to submission and formatting rules, or received after the deadline, will be deemed ineligible and will not be reviewed.

⁵ As recognised by the HEA <https://hea.ie/higher-education-institutions/?v=1> plus Dublin Institute for Advanced Studies. For any clarification please contact research@gsi.ie

**Proposals must be submitted via email to research@gsi.ie
by 1pm, Thursday, April 1st 2021.**

For details of the application form see Appendix 1. The research project application form, CVs and relevant letters of support must be combined to **one single pdf** for submission. The file must be no bigger than 5MB.

Format and Layout

Text font in the file submitted should be no smaller than Arial 11 with page margins no less than 2.5cm (do not alter the layout of the template file). All word limits in the application template must be adhered to. Only PDF files will be accepted. Any pages beyond the limit will be excluded from review.

Budgets

All values must be in presented Euro. Maximum allowable budget is €50,000 (including up to 15% contribution to indirect costs).

Eligible costs

- Total salary costs of the team members (including all pension, taxes etc.)
- Consumables (e.g. access fees, lab consumables, consumable items for fieldwork)
- Software licenses
- Publication fees
- Travel (including fieldwork travel costs)
- Contribution to cost of summer student
- Indirect costs (maximum 15% of direct costs)

Examples of non-eligible costs (not exhaustive)

- Protective clothing
- Salary/staff costs for other staff in the Host or partner organisations (including Mentors)
- Maintenance contracts
- Office equipment/furniture
- Durable equipment

If there are any queries regarding eligible and non-eligible costs please contact research@gsi.ie *before* submitting your proposal.

Financial reports signed by the Host Organisation finance office/financial controller will be required as per the reporting guidelines. Payments will only be made once these are received and approved by GSI and DHLGH.

Projects can be co-funded by cash/in-kind contributions from partner organisations though this is not a requirement; in such cases, the total cost of the project including the partner contributions and GSI funds requested must be included.

In-kind contributions can include personnel time, access to facilities, access to existing data etc.

Budget Justification

This section should clearly justify the planned expenditure including expected timings.

Reporting

The project must be completed within the designated time. Interim reviews will be scheduled before the project starts. These will include written activity and financial reports. A final report must be

submitted at the end of the project. Failure to submit these reports on time will result in payments being withheld and/or exclusion from subsequent GSI calls. Reporting templates will be provided.

As part of the reporting procedures, successful applicants may be asked to present their results (oral or poster presentation) at a GSI/ DHLGH event.

If the interim reports indicate that the project is in line with requirements in the contract, GSI reserves the right to withdraw funding.

Project information

Project description

This section is a maximum of 3000 words excluding figures and references and should comprise:

- (i) Strategic context and rationale for the project including background information, state of the art and reasons for addressing the issue now. The projects should also clearly demonstrate how the results of the research will support evidence-based decision making for policy-makers and standardisation bodies.
- (ii) Objectives and scientific/engineering targets beyond the state of the art. This should outline how the project will expand our knowledge beyond current understanding and clearly outline the objective of the planned work.
- (iii) Methodology & Implementation plan should include the approach to be used along with timelines, milestones for the project and any information relevant to the efficient management of the project.
- (iv) Outputs. The outputs should be well defined, ambitious and realistic and assist the technical advancement of relevant standards. They should link clearly to the milestones and timing of the project as well as the budget. The outputs should link clearly to the relevant standards. Details of outputs must be provided, examples of potential outputs include e.g.
 - Results and databases from physical testing,
 - Maps and digital data set(s),
 - Development of new methods, equipment, techniques, technology or cross-disciplinary applications, and
 - Presentations at international conferences and publications in high impact journals.

Expected impact (max. 1000 words)

The outputs of the project will be expected to assist the technical advancement of relevant standards and also to support evidence-based decision making for policy-makers and standardisation bodies.

Details of how this can be achieved must be included.

This section should also comprise any additional impacts; positive impacts on two or more of the following should be described, clearly show how the project will impact these areas and whether the expected impact is short, medium or long term.

- Scientific discovery,
- Development of new assessment methodology/toolkits,
- Development of new software/prototypes, and/or
- Significant contribution to policy and governance.

Communication and dissemination plan

Dissemination of the project outputs are expected as standard and a communication plan should be clearly described including timing of known conferences, events, outreach activities, etc.

Review process and criteria

Once received, all applications will be checked for eligibility. Projects that are deemed ineligible, beyond the scope of the call, or not responding to project requirements will not be reviewed. Eligible applications will be reviewed by experts and assessed under the following criteria;

- Quality of Scientific/Engineering project described (25%)
- Impact (40%)
- Quality of the proposed team including Applicant, Collaborators and their contribution (25%)
- Implementation, management plan and value for money (10%)

Please remember, the review panel may include international experts who may be unfamiliar with specific Irish geology, acronyms etc.

Applicants may not contact GSI or DHLGH staff to solicit information, lobby or discuss potential project applications. All queries must be directed to the GSI Research Manager research@gsi.ie. Applicants breaching this rule will be deemed ineligible.

Ethics

All proposals are expected to adhere to standard ethics rules (e.g., IAH, IAPG or IGI ethics guidelines, national rules and procedures). Where organisational ethics guidelines are in place, the Applicant is expected to adhere to their ethics committee guidelines.

Open research policy

Geological Survey Ireland, the Department of Communications, Climate Action and Environment and the Department of Housing, Local Government and Heritage support the National Open Research Forum policies. Applicants are expected to follow the National Framework on the Transition to an Open Research Environment, including open access to publications and data.

Non compliance

Where proposals or awards are found to be non-compliant as per these Terms and Conditions or in breach of Contract, projects will be deemed ineligible (at initial review stage) or funding may be withdrawn.

Confidentiality

All applications and subsequent correspondence with applicants will be treated as confidential and will follow [GDPR regulations](#). By submitting your application you are agreeing to GSI's GDPR policy.

Acknowledgement

Geological Survey Ireland and the Department of Housing, Local Government and Heritage must be clearly acknowledged in all activities and outputs including publications, conference presentations, reports, events etc. High resolution image files of the relevant logos will be made available and must be included.

All dissemination and communication activities must be recorded and included in the final report.

Intellectual property and data management

Intellectual Property (IP) will remain with the researcher, however, where commercial product(s)/service(s) result from GSI and DHLGH Research funding, the product/service will be provided free of charge to the GSI and/or the DHLGH. Where data is collected as part of a GSI/DHLGH

funded project, a copy of the raw data must be provided to the GSI and/or the DHLGH and, where relevant, standard data formats should be used (e.g., INSPIRE). Specific terms and conditions relating to data use and data storage will be determined before the start of the project on a case by case basis.

Programme management

Any queries regarding the application process or project description should be submitted by email to research@gsi.ie

APPENDIX 1 (word version available as a separate file)



Rialtas na hÉireann
Government of Ireland

For official use only

Date received:

Ref. No.:

Eligibility check:

Applicant Name	
Applicant Title	
Email	
Phone number	

Organisation name	
Organisation type:	☐ HEI ☐ Private Sector
Company Registration No. (if applicable)	
Department/section	
Address	

Project Title	
Total financial support requested from GSI	€

Declaration

I declare that the information provided is accurate and correct. I agree that the Geological Survey Ireland Research Programme management may make any enquires it considers necessary to verify the information provided herein. I have read, and agree to, the Geological Survey Ireland Terms and Conditions for this call.

Signature of Lead Applicant:

Date:

Approval of Authorised person:
(For HEI's, Research Office stamp)

1. Partner information – please copy table as needed:

Collaborator name	
Role in the project	
Organisation name	
Organisation type:	☐ HEI ☐ Private Sector
Company Registration No. (if applicable)	
Department/section	
Address	

Collaborator name	
Organisation name	
Organisation type:	☐ HEI ☐ Private Sector
Company Registration No. (if applicable)	
Department/section	
Address	

2. Project information:

Title of project	
Keywords (<i>max 10 words</i>)	
Duration (<i>max 36 months</i>)	

Abstract/short description (*max 200 words*):

Project Description (*max 3000 words, excluding figures and headings*):

(i) Strategic context and rationale

(ii) Objectives and scientific/engineering targets beyond the state of the art

(iii) Methodology & Implementation plan

(iv) Outputs (please provide a short description and complete the table below)

3. Project Deliverables

Task No.	Deliverable description	Expected delivery
1	e.g.: Beta version of modelling software	e.g.: month 9

Impact of the project outputs (max 1000 words):

References:

4. Project Budget *(double click on table below to activate. Maximum GSI contribution is €50,000. Indirect costs cannot exceed 15% of the total direct costs).*

Item	€	
Personnel costs	0	
Student Fees	0	
Consumables	0	
Travel (incl. fieldwork)	0	
Other (please specify)	0	
Total project cost	0	
Contribution (cash/in-kind)	0	
Total requested from GSI	0	

Budget justification:

Ethics and gender considerations	Delete as appropriate
Ethics – all relevant ethical implications have been considered and will be addressed within the organisation. Please refer to the IGI code of Ethics (http://igi.ie/assets/files/Codes%20and%20Guidelines/Ethics%20Code.pdf)	Yes/no
Gender – due consideration has been given to gender balance within the proposed research team. Please refer to the following as appropriate for your organisation - HEA National Review of Gender Equality in Irish Higher Education Institutions or (http://www.heai.ie/sites/default/files/hea_review_of_gender_equality_in_irish_higher_education.pdf) - Gender Equality in Ireland (http://www.genderequality.ie/en/GE/Pages/Employment)	Yes/no

Additional documentation

Please attach the following documents:

- CV of Lead Applicant (max 4 pages). Evidence of formal career breaks, if applicable, (e.g. parental leave) can be included in addition to the cv
- CV(s) of Collaborators if applicable (max 2 pages)
- Letter(s) of support for any team members or collaborator providing in-kind or cash contributions

Frequently Asked Questions

1. **Are salaries eligible costs?**
Personnel costs for the researchers carrying out the research are eligible. The total cost should include all pensions and PRSI contributions but not indirect costs (these are listed separately in the budget). HEI based researcher salary costs should be in-line with IUA salary scales (<https://www.iua.ie/for-researchers/researcher-salary-scales-career-framework/>). A contribution to stipends for summer students is allowable but must be in line with all Host Organisation HR practices.
2. **Are overheads/indirect costs an eligible cost?**
Yes, up to a maximum of 15% of total direct costs
3. **Can researchers outside Ireland be collaborators/partners?**
Yes, there is no limit to the number or type of collaborator but they cannot receive funding.
4. **Is the researcher interviewed by GS/ reviewers?**
No, the Applicant is expected to provide evidence (e.g. in their CV) of their suitability to deliver this proposed project.
5. **Can the award be moved if the Applicant changes Institute?**
Yes, but only with the agreement of both Host Organisations and the GSI. The new Host Organisation must also fulfil the criteria as per the Terms and Conditions.
6. **Are agencies (e.g. Teagasc, EPA) or companies eligible to host the project?**
No, though they may be unfunded partners if appropriate.
7. **Will my project be assessed more favourably if it has external co-funding?**
No. Assessors will be asked to consider the overall project proposed and whether resources are appropriate.
8. **Is VAT an allowable cost in the budget for items such as consumables?**
Yes. However, VAT is not paid on research activities.
9. **Is a computer considered durable equipment (and therefore not an eligible cost)?**
If the Host Organisation considers computers a consumable or assigns a lifespan of less than one year, then it is an eligible cost.
10. **What are 'references' in the template?**
These are any publications, papers, published documents etc. that you have referred to in your text and project description, not personal statements from referees.