



MINISTRY OF HIGHER EDUCATION



Science and  
Technology  
Facilities Council

ISIS Neutron and  
Muon Source

**INTERNATIONAL SCIENCE PARTNERSHIPS FUND (ISPF):  
USE OF THE ISIS NEUTRON & MUON SOURCE, UK 2024**

**SUMMARY**

Malaysia's Ministry of Higher Education (MOHE) and the United Kingdom's Science and Technology Facilities Council (STFC) invite applications for the Use of the ISIS Neutron and Muon Source (ISIS). The aim of the programme is to support Malaysian researcher needs, both in terms of learning about and using neutron and muon methods, and in applying these to science areas.

Applications are sought from teams comprising researchers from Malaysia eligible to hold MOHE grants. MOHE will fund the Malaysian component of the successful projects; (domestic) travel, accommodation, and subsistence costs for visits to ISIS for experiments will be funded by the UK ISPF award. Each experiment will be assigned an ISIS scientist who can advise on sample preparation, and who will help to run the experiment and analyse the data. ISIS scientists can give advice on proposals and on which instrument is best to use for a particular investigation. Researchers normally stay in on-site accommodation at the Rutherford Appleton Laboratory during their experiment time.

The programme will run for **2 years**. Application is open to all active academics in Malaysian public universities. Applicants must be Malaysian citizens and hold a permanent or fixed-term contract. Contact between the Malaysian PI and an ISIS scientist is highly encouraged prior to the application. This contact should lead to a clearly defined and mutually beneficial research project proposal. However, **please note that MOHE will not assist in locating an ISIS scientist**. Advice on finding a relevant ISIS scientist can be provided by the ISIS User Office ([isisuo@stfc.ac.uk](mailto:isisuo@stfc.ac.uk)).

Science case should be submitted no later than **23.00 GMT/15:00 MYT on 27 February 2024**. Applicants should note that submission of the Science Case is a requirement of this call and full applications will only be accepted from those teams who submit a completed Science Case prior to the deadline.

A full ISIS proposal form will be required for shortlisted applicants. The ISIS online proposal system can be found here: <https://www.isis.stfc.ac.uk/Pages/Apply-for-beamtime.aspx>. The closing date for full applications to ISIS is 23.00 GMT/15:00 MYT on 17 April 2024. Researchers who are new to ISIS will need to create an account in the system. Applications not submitted before the deadline will not be received or considered.

## **1. BACKGROUND OF THE FUNDERS**

### **Science and Technology Facilities Council, UK (STFC) and the ISIS Neutron and Muon Source**

The Science and Technology Facilities Council (STFC) is a multi-disciplinary science organisation. STFC provides access for the research community to world-leading, large-scale facilities across a range of physical and life sciences, including the ISIS Neutron and Muon Source.

The ISIS Neutron and Muon Source is based at the STFC Rutherford Appleton Laboratory in Oxfordshire, UK. ISIS produces beams of neutrons and muons that allow scientists to study materials at the atomic and molecular level using a suite of instruments. Our mission is for neutrons and muons to advance knowledge and improve lives. Our vision is that ISIS will lead the way in the innovative development and exploitation of neutron and muon sources, science, instrumentation, and technology. For some recent examples, see our [Science Highlights](#). ISIS supports a community of over 3000 scientists using neutrons and muons for research in physics, chemistry, materials science, geology, engineering, and biology.

### **Ministry of Higher Education, Malaysia (MOHE)**

Ministry of Higher Education (MOHE) is the Malaysian Ministry whose integral role is creating a higher education ecosystem with the finest Public Universities (UA), Private Higher Educational Institutions (PHEIS), Polytechnics and Community Colleges. These institutions are the main components in the national education ecosystem and training to generate first-rate thinkers, scholars, masters, skilled and semi-skilled manpower in accordance with their respective roles.

The Department of Higher Education (DOHE), a government Department under MOHE overseeing higher education matters in Malaysia has decided to join in as additional funding agency. DOHE is the key Department responsible in developing policy and programmes in pushing the Malaysian higher education excellence. DOHE is also responsible in strategizing and realizing the initiative to strengthen Malaysia's research capacity through various programmes. Since 2007, DOHE has introduced programmes to develop and strengthen research foundation in Malaysia. DOHE is now pursuing international collaboration to intensify research and innovation.

## **2. OBJECTIVES AND SCOPE**

The Science and Technology Facilities Council (STFC) – ISIS and the Malaysian Ministry of Higher Education (MOHE) are pleased to announce a call to fund high quality research projects focused on the use of the ISIS Neutron and Muon Source (ISIS) in the United Kingdom.

The call will be funded through the UK's International Science Partnerships Fund (ISPF) and Malaysia Partnerships and Alliances in Research (MyPAiR).

The ISPF Fund is a joint initiative established to develop and support the research and innovation collaboration between UK and Malaysia. The Fund uses the UK and Malaysia's strengths in research and innovation to support greater scientific research capacity in Malaysia and build partnerships between UK and Malaysian institutions.

## **3. THEMATIC/PRIORITY AREA**

The development of interdisciplinary collaborations and projects which address research in within the topics listed below will be particularly welcomed:

- i. Energy;**
- ii. Water and Food;**
- iii. Agriculture and Forestry; and**
- iv. Environment and Biodiversity.**

## **4. FUNDING AVAILABLE**

### **Funding from STFC**

STFC will fund the costs related to travel and subsistence for the experiments, totalling £280,000. This will be disbursed in two windows: June 2024 – March 2025 (£125,000), and April 2025 to March 2026 (£155,000). Two researchers can receive funding for each experiment for economy airfare, local travel costs, accommodation costs at the Lab's visitor accommodation (Ridgeway House at Rutherford Appleton Laboratory - RAL) and a per-diem for food for use in the RAL restaurant for breakfast, lunch, and dinner.

**(To note that, in addition to this joint call with MOHE, ISIS will fund additional projects for Malaysian researchers to use the facility which will not have additional MOHE funding, through its ISPF award).**

## **Funding from MOHE**

MOHE will fund costs that are **not borne by STFC for up to five projects**. Malaysian applicants may apply up to **MYR200,000.00** for each project. Applicants are not required to submit the request for funding at Science Case submission. However, requested funding will be required from successful science cases when full proposal is submitted.

## **MOHE Funding Guidance**

### **Eligible Costs**

#### **Vote 11000 Stipend for Graduate Research Assistant (GRA)**

Allowance to fund Graduate Research Assistant (GRA) full-time research mode only. Allowance and stipend shall not exceed **RM2,300 for Master's student** or **MYR2,800 for PhD student**. Deduction of GRA allowance for the purpose payment of contributions to the Employees Provident Fund (EPF) and the Social Security Organization (SOCSSO) are not allowed. Staff costs are not eligible costs.

#### **Vote 21000 Travelling and Transportation**

This includes all domestic travelling and transportation relevant to the project. Travelling to ISIS will be covered by STFC. Travelling abroad is only permitted for site work and attending conference/seminar/workshop /attachment relevant to the project. Travelling abroad is subject to grant sufficiency. Only Principal Investigator (PI) and members are allowed to travel abroad. The total expenditure for Travelling and Transportation shall not exceed 40% of the total project allocation. However, travelling for the purpose of attending conference/seminar/workshop/attachment must not exceed 20% of the total project allocation.

#### **Vote 27000 Research Supplies & Materials**

The expenditure may include supplies and materials relevant to the project.

#### **Vote 28000 Minor Repairs and Renovation**

The expenditure may include minor repair and renovation on premises, laboratory, equipment, or others relevant to the project. Maintenance cost for existing equipment is allowed during the project implementation period. Upon project completion, such maintenance cost shall not be borne under the grant.

#### **Vote 29000 Consultancies and Other Services**

The expenditure may include services relevant to the project including printing, hospitality, honorarium, professional services, consultancies, computer usage, data processing and others.

## 5. ELIGIBILITY

### MOHE Eligible Applicants

- 5.1. Organisations eligible to apply are **Public Universities** in Malaysia.
- 5.2. The Malaysian Principal Investigator (PI) must have been awarded a doctorate at the time of application. Applicants working towards a PhD, post doctorate training, or awaiting the outcome of their viva/submission of corrections are not eligible to apply.
- 5.3. Applicants must be a **Malaysian citizen academician** and hold a permanent or fixed-term contract in an eligible university or higher learning institute in Malaysia. Applicants with fixed terms contracts finishing before their grant end-date must secure confirmation from their Head of Department, stating that their contract will be extended to cover the duration of the award if their application is successful.
- 5.4. Contact between the Malaysian PI and ISIS scientist prior to the application is essential. This contact should lead to a clearly defined and mutually beneficial research project proposal. Please note that **MOHE will not be able to assist in locating an ISIS scientist.**
- 5.5. The Malaysian applicant's employing organisation must be willing to agree to administer the grant.
- 5.6. Malaysian applicants will need to adhere to MOHE progress and outcomes monitoring requirements.

## 6. HOW TO APPLY

### 6.1. Submitting Science Case

6.1.1. Researchers who wish to apply should fill out the Science Case template (2 pages) as attached. A complete Science Case template should be included along with the cover sheet. This Science Case template should be submitted before or on **27 February 2024** via the following email:

- danakhas.bkpi@mohe.gov.my
- ISIS User Office (isisuo@stfc.ac.uk)

6.1.2. For information, this Science Case will be evaluated by STFC and ISIS. Shortlisted applications will be requested to submit a full application via the ISIS application system. Shortlisted applicants will be notified to fill in the application after the initial screening and evaluation is carried out by STFC.

## 6.2. Submitting proposal

6.2.1. A full ISIS proposal form will be required for shortlisted proposals. The ISIS online proposal system can be found here:  
<https://www.isis.stfc.ac.uk/Pages/Apply-for-beamtime.aspx>.

6.2.2. Researchers who are new to ISIS will need to create an account in the system.

6.2.3. Proposal submission should also copied to MOHE:

- Submission via email [danakhas.bkpi@mohe.gov.my](mailto:danakhas.bkpi@mohe.gov.my)
- Enclosed together MOHE Cost Proforma (details of budget applied)

## 6.3. Key dates

Month	Detail of Activity
Jan 2024	Launch Call ( <b>Date: 15 January 2024</b> )
Feb 2024	Deadline for Science Case submission: <b>27 Feb 2024</b>
March 2024	Science Case review completed: <b>7 March 2024</b>
Mid March 2024	Notification <b>by 11 March 2024</b> to successful applicants to develop a full proposal: <ul style="list-style-type: none"> <li>- To fill ISIS online proposal system.</li> <li>- To prepare for MOHE proposal submission through email</li> </ul>
April 2024	<b>17 Apr 2024</b> <ul style="list-style-type: none"> <li>- Deadline for applicants to submit ISIS proposals to STFC</li> <li>- Applicants to simultaneously submit proposals to MOHE's secretariat email</li> </ul>
May 2024	<b>24 May 2024</b> <ul style="list-style-type: none"> <li>- ISIS technical assessment completed</li> <li>- MOHE scientific assessment completed</li> </ul>
June 2024	<b>4 June 2024</b> <ul style="list-style-type: none"> <li>- Results consolidated between ISIS and MOHE assessments.</li> <li>- Final selection of experiments to be supported made</li> </ul>

<b>Month</b>	<b>Detail of Activity</b>
Mid June 2024	Results sent to Malaysian applicants
September 2024 onwards	Experiments carried out at ISIS.

6.3.1. When preparing an application for this call, please take account of the closing date. Your completed proposal together with other relevant documents, should be submitted by the specified closing date. If you miss the call deadline then MOHE & STFC will not accept your proposal.

## **7. WEBINAR ON ISIS BEAMTIME APPLICATION**

Further details of the Programme can be found on the [ISIS website](#). A set of webinars for Malaysian researchers has been organised for early 2024, with further details on the ISIS website link above.

<b>22 January 2024</b>	<b>Webinar:</b> Introduction to the ISIS Neutron & Muon Source
<b>5 February 2024</b>	<b>Webinar:</b> Science at the ISIS Neutron & Muon Source: 1
<b>14 February 2024</b>	<b>Webinar:</b> Science at the ISIS Neutron & Muon Source: 2
<b>1 March 2024</b>	ISIS proposal call opens
<b>15 March 2024</b>	<b>Webinar:</b> Proposal writing and submission for the ISIS Neutron and Muon Source
<b>17 April 2024</b>	ISIS proposal call closes
<b>Early June 2024</b>	ISIS proposal peer review panel meetings
<b>1 September 2024</b>	ISIS proposal call opens
<b>16 October 2024</b>	ISIS proposal call closes

## **8. CONTACTS AND GUIDANCE**

Any enquiries related to this call should be directed to:

### **STFC-ISIS**

Dr. Philip King  
Associate Director, Partnerships and Programmes  
ISIS Neutron and Muon Source

Email: [philip.king@stfc.ac.uk](mailto:philip.king@stfc.ac.uk)

### **MOHE**

Ms. Nor Amira Farhana Ahmad Zailani  
Administrative Officer  
Department of Higher Education

Email: [amira.zailani@mohe.gov.my](mailto:amira.zailani@mohe.gov.my)



## Science Case for ISIS Beamtime Proposal - Template

### **[General Instructions on format:**

- *The case must be no longer than two sides of A4.*
- *It will be reduced in size by 70% - we recommend that you use font size 11 or above so that your text is clear after reproduction.*
- *Please remember the 70% size reduction when producing your figures and their captions and axes labels.*
- *Proposals are reproduced in black and white for FAP hardcopies – please bear this in mind when producing figures.*

### **Structure of the Science Case:**

*Please consider the following headings when writing your case. These headings are a guide to what is expected within the case.*

#### **1. Background and Context**

*You may wish to include:*

- *A short description of the general science area and why it is interesting and timely. What is the wider relevance or impact of your work? Keep in mind that not all review panel members are experts in the field.*
- *How this proposal fits into your wider research programme*

#### **2. Proposed experiment**

*Please include:*

- *The aims of the experiment – what do you hope to learn, what outcomes you expect, why these are important.*
- *Why neutrons or muons are needed – what unique information will they give you that you can't get from other techniques.*
- *Results from any modelling or simulations you have performed.*
- *How you will analyse your data to get the information which you need.*

#### **3. Summary of previous beamtime or characterisation**

- *If you have used other techniques to characterise your samples, summarise these results to demonstrate the quality of your samples.*
- *For continuation experiments that have already had neutron or muon time, summarise the main results from these.*

#### **4. Justification of beamtime request**

- *Say why you have requested the specific instrument.*
- *Justify the length of time you have requested – break the experiment down into the measurements you expect to do, the samples you will study, and any setup time required.*



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## CALL FOR PROPOSALS: USE OF THE ISIS NEUTRON & MUON SOURCE, UK ISPF-STFC FUND 2024

Please complete the information requested below and submit this form with your 2-page science case as a single pdf file to [isisuo@stfc.ac.uk](mailto:isisuo@stfc.ac.uk) and [danakhas.bkpi@mohe.gov.my](mailto:danakhas.bkpi@mohe.gov.my) by **27 February 2024**.

### *Applicants*

Title	First Name	Family Name	Institution	Department	Email address

Please indicate which applicant is the Principal Investigator and which applicant is the main contact applicant (if different from the Principal Investigator).

### *Experiment details*

Title of experiment	
Name of ISIS scientist you have contacted	
ISIS instrument	
No. days requested (if known)	
Sample conditions (temp, pressure or field range, or other conditions required)	
Is your sample available or does it need to be made?	
Sample mass available	

A full ISIS proposal form will be required for successful proposals. The ISIS online proposal system can be found here: <https://users.facilities.rl.ac.uk/auth/Login.aspx?service=>. Researchers who are new to ISIS will need to create an account in the system.