

Malaysia – Japan Joint Call for Proposals:

MSE x NEXUS Research Collaboration

Academy of Sciences Malaysia (ASM) and

Japan Science and Technology Agency (JST)

2025

Summary:

Call announcement:	28 th April 2025
Deadline for submission:	27 th June 2025 at 12:00 pm (JST) 27 th June 2025 at 11:00 am (MYT)
Selection results announcement:	December 2025
Start of projects:	January 2026
Funding per project:	(Japan-side: per project) Direct Expenses: Up to 24 million yen Indirect Expenses: 30% of Direct Expenses (added in addition to the Direct Expenses) (Malaysia-side: per project) RM 1,000,000
Maximum duration of the projects:	3 years (36 months)
The number of the projects:	Up to five
Eligibility:	Researchers who belong to the Malaysia research institution and researchers who belong to the Japanese research institution
Submission:	To JST via e-Rad; To ASM via: Online Application Form
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1. Introduction

Working together, Japan Science and Technology Agency (JST) and Academy of Sciences Malaysia (ASM) aim to promote and strengthen collaboration between researchers from Japan and Malaysia. Under this scope, JST and ASM launch this Call for Proposals for research, jointly conceived and to be jointly implemented by researchers in Malaysia and Japan.

The two agencies will jointly fund up to five research projects in this call.

JST and ASM are supporting joint projects through strategic project support measures

in order to promote cooperation between Japan and Malaysia. On the Japan-side, this funding measure is carried out under the program called NEXUS (**N**etworked **E**xchange, **U**nited **S**trength for Stronger Partnerships between Japan and ASEAN). On Malaysia-side, this funding measure is carried out under Malaysia Science Endowment (MSE). This measure is aimed at promoting joint research projects of mutual interest and thus contributing to intensified scientific and technological cooperation with each country. The program is collectively referred to as ‘MSE x NEXUS’ Research Collaboration.

At Japan-side, the aim of this program is to build a “Complementary and Sustainable Research Ecosystem” with ASEAN Member States, facilitating mutual growth as co-creating partners by enhancing sustainable research cooperation, grounded in longstanding initiatives such as international collaborative research and the exchange of research personnel.

At Malaysia side, Malaysia Science Endowment (MSE) is a new national alternative and sustainable funding model approach that aims to strengthen the Research, Development, Innovation, Commercialisation & Economy (RDICE) ecosystem and reduce reliance on government funding for R&D by promoting collaborations with industries and international partners through matching funds. MSE x NEXUS Research Collaboration serves to forge collaborative research and development through exchange of scientific knowledge. MSE x NEXUS Research Collaboration aims to strengthen collaborative research and development and implement research into society to solve social problems through exchange of scientific knowledge.

Both Japan and Malaysia have committed to achieving carbon neutrality by 2050. Green Technology is crucial to reaching these goals, as it encompasses various advanced technologies and innovations. This research collaboration aims to foster synergies between Japanese and Malaysian science and technology, promoting mutual growth and contributing to carbon neutrality and net zero targets. In this joint call, the JST and ASM are looking to support research within the following subtopics within the fields of ‘Green technology’.

2. Research Fields

Research Fields: Green Technology

Subtopics:

- (i) Renewable Energy & Energy Efficiency
- (ii) Hydrogen
- (iii) Carbon Capture Utilisation & Storage (CCUS)
- (iv) Green Mobility
- (v) Circular Economy

3. Researcher Eligibility

Two identical copies of a proposal must be submitted to both JST and ASM. Detailed information on project proposals and submission guidelines can be found in the sections below.

Please note that proposals received by the ASM and not submitted to JST (and vice versa) will automatically be considered ineligible.

When submitting your application through both the JST and ASM online submission systems, you will also need to enter some details online. Therefore, applicants are advised to start submitting their applications at least one week before the deadline of this Joint Call for Proposals. Applications that are submitted after the deadline will not be taken into consideration.

3.1 Eligible researchers for JST support:

If a research proposal is selected, the research project must maintain its qualified status as per the submission requirements for the entire duration of the period of research. If the research project fails to meet the requirements during the research period, the research project will in principle be completely or partially suspended (i.e. be terminated early).

- Any independent researcher personally affiliated with (and actively conducting research at) a 'Domestic Japanese research institution', where they will organize and pursue the proposed research, is eligible to apply. (The nationalities of research project applicants are not considered.)
 - 'Domestic Japanese research institution' refers to universities, independent administrative institutions, national/public testing and Research Institutions, specially authorized corporations, public-service corporations, and enterprises, etc. that satisfy requirements predetermined by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT). Please refer to the MEXT homepage for more information:
https://www.mext.go.jp/a_menu/kansa/houkoku/1324571.htm
- The Japanese applicants must also complete a research ethics training program conducted by the research institute with which the Principal Investigator (PI) is affiliated, and then declare the completion of the program to JST. If it is very difficult for the Japanese PI to undertake a program provided by his or her affiliated institute, they should contact JST. Please note that unless applicants complete a research ethics program, his / her application will be deemed ineligible. For more details, please refer to the call announcement page linked from the JST homepage.
- Japanese applicants will have to register their applications on the Cross-Ministerial R&D Management System (e-Rad: <https://www.e-rad.go.jp/index.html>).
- Please also refer to the Application Guidelines Appendix (for Japan-side PIs).

3.2 Eligible researchers for ASM support:

- Open to academic staff or researchers at Public Institutions of Higher Education (IPTA) and Private Institutions of Higher Education (IPTS).
- All Principal Investigators (PI) (academic staff (Professor, Associate Professor or Senior Lecturer) permanent/contract) must be Malaysian citizens or permanent residents of Malaysia.
- The PI, who is not a Malaysian citizen, is allowed to apply on the condition that he/

she must have a co-PI who must be a Malaysian citizen in the same field of expertise and from the same Institution.

- Applicants are only allowed to be PI for one project only. Therefore, only one application can be submitted in each phase.
- Malaysian PIs are required to obtain a signed approval or supporting letter from their affiliated institution as part of the submission process and attach as part of the [Online Application Form](#).

4. Characteristics of Proposals under this call

4.1 Proposal for JST

- Joint proposals must be written in English and must comply with instructions in the Joint Application Form. Identical copies of the proposal must be submitted to JST and ASM, respectively. In addition, Japan-based PIs must also submit the Japanese application form (appendix for Japan-side PIs) in Japanese.

4.2 Proposal for ASM

- Joint proposals must be written in English and must comply with instructions provided in the Joint Application Form. Identical copies of the proposals must be submitted to both ASM and JST, respectively.
- The research proposed must be Technology Readiness Level (TRL) 3 and/or above (Refer to Appendix 1).
- Proposals should emphasize transdisciplinary research, with involvement from multiple disciplines being advantageous.
- Collaboration with industry, Civil Society Organisation (CSO) or communities is mandatory, and having multiple collaborations is advantageous.
- Proposal must justify alignment with at least (1) ONE of the (10) TEN Socioeconomic Drivers of 10-10 MySTIE below:
 - (1) Energy
 - (2) Business and Financial Services
 - (3) Culture, Arts and Tourism
 - (4) Medical and Healthcare
 - (5) Smart Technology and Systems (Next Generation Engineering and Manufacturing)
 - (6) Smart Cities and Transportation
 - (7) Water and Food
 - (8) Agriculture and Forestry
 - (9) Education
 - (10) Environment and Biodiversity

5. Amount of Funding

5.1. Amount of Funding by JST:

- JST will support each Japan-based team up to 24 million Japanese Yen as direct expenses for 36 months.
- In addition to direct expenses, the overhead cost of 30% of Direct expenses will be added as Indirect expenses separately.
- The budget for a project may differ each year, depending on the content of activities.
- The amounts will be adjusted each year due to the budgetary limitations for this program.

5.2. Amount of Funding by ASM:

- The Malaysia Science Endowment will provide funding of up to RM 1,000,000 per project.
- This funding will be disbursed across three milestones over the course of 36 months.
- The funding will be distributed according to a 40:40:20 fund disbursement ratio. This means that 40% of the total funding will be disbursed at each of the first two milestones, and the remaining 20% will be disbursed at the final milestone with reported milestone progressions (Table 1).
- To receive the next tranche of funding after first disbursement, researchers must submit a financial report and milestone update for the previous milestone. These reports should be provided annually, with updates submitted within a standard timeline that will be updated.
- The funding support provided by ASM will cover a period of 36 months, during which researchers are expected to achieve specific milestones and deliverables outlined in their project proposals.

Project Duration	Start of Project	12 months	24 months	36 months
Disbursement (%)	40%	40%	20%	0%
Milestone Progressions (%)	0%	10-20%	40 – 60%	80 – 100%

Table 1

6. Eligible costs

6.1. Eligible costs for JST:

(1) Direct expenses

Direct expenses are expenses directly used for research purposes at the awarded research institution, and can be used for the following:

- Equipment costs (equipment and consumables)
- Travel costs
In principle, travel costs are incurred in accordance with the guidelines of the awarded research institution. Travel expenses are applicable to travel directly related to the execution of the research, dissemination activities, etc.
- Personnel costs (PI personnel costs and buyout policy may apply)

- Miscellaneous
- In addition to the above, research expenses may include, for example:
 - Expenses for organizing and hosting events for research result dissemination
 - Outsourcing costs (excluding subcontracting)
 - Equipment leasing costs, transportation costs, for equipment used for the research project
 - personnel expenses for administrative staff that coordinate the travel of outgoing researchers, and their personnel-related procedures can be recorded as direct expenses.

(Points of Caution)

Participants are to allocate around 30% of the total direct expenses to exchange activities of young researchers including graduate and undergraduate students who can play an important role in the joint research and who are expected to be internationally active in the future, *e.g., by promoting their international mobility and circulation, such as dispatching them to the partner country or holding workshops, or by providing international research opportunities such as presenting at international conference.*

(2) Indirect expenses

- Indirect expenses go directly to the awarded research institution for the purposes of administrative purposes and must constitute 30% of the direct cost.

6.2. Eligible costs for ASM

EXPENDITURE CODE FOR OVERALL EXPENSES

A. Allowance for Research Assistant (RA)/ Research Officer (RO)/ Graduate Research Assistant (GRA)

- Allowance to fund Research Assistants (RA)/ Research Officer (RO)/ Graduate Research Assistant (GRA) for full-time research mode only.
- The monthly allowance ceiling shall not exceed RM3,200.00 for Ph.D. students and RM3,000.00 for master's students. Hiring of post-doc is allowed within permitted ceiling amount.
- This allowance includes deduction for Employees Provident Fund (EPF) and Social Security Organization (SOCSO).

B. Research-Related Travel, Training, and Exchange Activities

- The total expenditure for travel, transportation, and living expenses shall not exceed 40% of the overall project budget. This includes coverage for exchange activities of our young researchers. Total expenses, including exchange activities, shall not exceed **40%**, capped at RM 200,000.
- Under exchange activities, conferences, trainings, and workshops are allowed with the condition that they must be directly related to the research project purpose and organised by a professional body or university.

- For international travel for the purpose of attending conferences, trainings, or workshops, the purpose must align with the research project. Members of the project (PI, RA, GRA, RO, Member) are allowed to attend.
- The travel destination, transportation, accommodation, and living expenses must be suitable and economical.
- Attending short-term courses, training, or programs (during the research period) to learn specific techniques related to the research project within the country and abroad is allowed with the condition that it aligns with the project purpose.

C. Rental

- Rental is only allowed for buildings, equipment, transportation, computer usage, and other items directly involved in the research.

D. Research Supplies, Materials and Consumables

- Only expenses related to research are allowed.
- Supplies, materials and consumables include items that are used up during the research project. These items are essential for conducting experiments, collecting data, and maintaining the smooth operation of the research activities.
- The total expenditure for consumables should not exceed **30%** of the overall project budget.

E. Minor Repair and Modification

- Only expenses for minor repairs and modifications to buildings, laboratories, equipment, or other related research items are allowed. Each proposal must be accompanied by relevant justification and price quotations.
- Maintenance costs for existing equipment during the project implementation are allowed. After the project is completed, these maintenance costs will no longer be covered by this grant.

F. Specialised Services

- Covers costing for printing, hospitality, honorariums, professional services, consultancy, enumerators, research assistants, data processing, and other services related to the research project.
- The ceiling for payment of article publication fees in indexed journals is only RM10,000.00 per research project.

G. Accessories and Equipment

- Only purchases of specialized equipment and accessories (including upgrading the capabilities of existing equipment) related to the relevant research project are allowed. Each application must be accompanied by justification and relevant price quotations. Price quotations obtained from online sellers (online) such as Shopee, Lazada, and others are not allowed; and
- The amount requested for this vote should not exceed **40%** of the total project amount.

H. Field test/ Pressure test/ User Test Acceptance/ Piloting

- Includes all expenses related to conducting various tests and piloting activities necessary for the research project. These activities are crucial for validating research findings, testing prototypes, and ensuring the feasibility of the project outcomes.
- Preliminary test, Sample test and payment for volunteers/ individuals is allowed.

I. Intellectual Property (IP)

- Covered for registration at Malaysia only, including services like drafting.
- Generated IP from the project for the purpose for (i) Patent and/or (ii) Industry Design

PROHIBITION ON THE USE OF ALLOCATION

Researchers are not allowed to use grant funds for purchases unrelated to the research project. Prohibited purchases include:

- Payment of any form of membership fees to professional bodies/societies, etc.;
- Purchase of reference materials and the like;
- Purchase of ICT equipment and communication devices (such as mobile phones/laptops/printers/cartridges, etc.);
- Payment of utility/telecommunication bills;
- Purchase of office equipment (such as stationery/paper/desk/chair, etc.);
- Purchase of storage equipment (such as external hard drives/pen drives/CDs, etc.);
- Payment for rental of space/facilities at respective institutions;
- Organising conferences, symposiums, workshops and others;
- Exhibitions or innovation competitions;
- Payment for IP maintenance and Patent Cooperation Treaty (PCT) agreement
- Other purchases not directly related to the research project.

NOTE: Any unspent funds from the allocated budget must be returned to the government. This includes, but is not limited to, remaining balances from the categories listed under codes A – I above, and is subject to the terms and conditions set forth at the time of agreement signing with ASM.

7. Submission

The Principal Investigator from Japan must submit the collaborative proposal to JST and the Principal Investigator from Malaysia must submit the joint proposal to ASM.

Identical copies of the proposal must be submitted to JST and ASM, respectively.

7.1. Submission procedure for JST:

Application documents by the Japan-based researcher should be submitted through the online e-Rad platform (<https://www.e-rad.go.jp/>).

7.2. Submission procedure for ASM:

Applicants from the Malaysia-based researcher must submit the joint proposal to ASM through <https://forms.akademisains.gov.my/MSExNEXUS> platform by 27th June 2025 at 11:00 am (MYT).

8. Timeline

Call announcement: 28th April 2025

Deadline of submission: 27th June 2025 at 12:00 pm (JST)
27th June 2025 at 11:00 am (MYT)

Selection results announcement: December 2025

Expected start of granted projects: January 2026

9. Assessment and Selection

9.1. Evaluation Procedure

Independent Committees consisting of experts selected by JST and ASM respectively will evaluate all proposals. Based on the results of the evaluation, JST and ASM will make a common decision regarding funding of selected proposals.

9.2 Criteria for evaluating proposals

The following general evaluation criteria will apply to each proposed proposal:

No.	Evaluation Criteria Assessed	Description
1.	Consistency with the research field of the call	The proposal's alignment with the designated research area of the call and its potential to contribute to advancements in the field.
2.	Capability of Research Leaders	Assessment of the capabilities and expertise of the research leaders involved, including their track record and ability to effectively lead the proposed project and grant amount.
3.	Expected scientific results of the joint research	Evaluation of the expected scientific achievements resulting from collaborative research effort.
4.	Synergy effects of international collaboration	Examination of the potential synergies and added value generated through the collaboration between international partners.
5.	Validity of research plan	Review of the validity and robustness of research plans outlined in the proposal.
6.	Validity of exchange plan	Review of the validity and robustness of exchange activities plans outlined in the proposal.
7.	Expected economic and social impact of joint research nationally and globally.	Consideration of the potential economic and social impacts arising from the outcomes of the joint research initiative.
8.	Feasibility of implementation	Assessment of the practical feasibility of

	(given proposed plan, participants, budget, facilities, means of cooperation, etc.)	implementing the proposed plan, considering factors such as the proposed timeline, budgetary allocations, availability of facilities, and the mechanisms for cooperation among participating entities.
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Following additional criteria will apply to Malaysia-based researchers only:

- ✓ Research that can improve an existing policy, methodology, and solution model and contributes to national strategic agenda;
- ✓ Uniqueness/ Innovation / technological creativity (TRL level)
- ✓ Scalable Potential/Manufacturing Capability
- ✓ Standards and regulatory compliance
- ✓ Cost reduction and optimal use of resources
- ✓ Inclusion of collaborative entities (community/ Industry)

10. Contract between Researchers

10.1 the Japan-based PIs

A contract for cooperative research **MUST** be entered into among institutions with which collaborating researchers are affiliated for implementing actual research collaboration. The contract for cooperative research shall include conclusions of discussions among the institutions which are entitled to intellectual property arising as a result of research collaboration, and the institutions concerned on issues regarding treatment of research information brought by researchers involved for the implementation of research collaboration, of research achievements as a result of research collaboration and of intellectual properties among the concerned institutions. Before the conclusion of the contract, the Japan-based principal investigator must submit the checklist in specified form to JST and then undergo a check by JST. When concluded, JST needs to be promptly notified of the contract. If there is any difficulty in concluding the contract, please consult JST in advance.

10.2 the Malaysia-based Project Leads

- i) Sign a research agreement alongside their respective Research Management Centre (RMC) and the Academy of Science Malaysia (ASM). This agreement would formalise collaborative research efforts, aligning all parties with the research objectives and expectations. With this they will be required to commit to regular updates on research progress by submitting detailed progress reports and financial reports. These reports track project advancement and ensure transparency and accountability in fund utilization.
- ii) In addition to their internal agreements, Malaysia-based Project Leads are required to sign a cooperative research agreement with their Japan-based counterparts as outlined in section 10.1. Once the contract is concluded, ASM needs to be promptly notified. This process ensures that both parties are aware of their roles and responsibilities and that there is a clear understanding of the management of research outputs and intellectual property.

11. Reporting

11.1 the Japan-based PIs

Japan-based PIs shall submit to JST annual research plans for the year ahead and reports on the progress in the past year, and the institution with which the PI is affiliated shall submit an annual financial report. Any key changes to the project team or activities, particularly if they affect the ability to complete the project should be made known to JST immediately.

At the end of the period of support and after completion of the joint research activities, the Japan-based PI shall promptly submit to JST a final report which shall include a financial report and a description of the research activities and outcomes. The report shall include a general summary of the activities of both the Japanese and the Malaysia research teams. If papers describing results of the research activities are presented to academic journals, societies etc., a list of those papers and other related information should be attached to the final report. Detailed instructions for preparation of the final report will be provided to the Japan-based PI during the final year of the project. Completed projects will be duly evaluated and excellent outcomes may be made public.

11.2 the Malaysia-based Project Leads

The management, monitoring, and reporting of research programs and projects are the responsibility of the RMC of each university.

- i) Scheduled Monitoring, Performance and Financial Reporting
 - Every research program and project are subject to scheduled monitoring throughout the active period of the program and project. Brief financial and progress report must be submitted to ASM every six (6) months once. The Financial Report must be certified by the University Treasurer.
- ii) Final Report
 - The Principal Investigator must submit the final research report in both hardcopy and digital (softcopy) formats within three (3) months after the program end date.

12. Contact information

- Japan-based applicants: inquiries to JST regarding this Call for Proposals should be sent to joint-call-ja@jst.go.jp
- Malaysia-based applicants: inquiries to ASM regarding this Call for Proposals should be sent to mse@akademisains.gov.my.

APPENDIX 1 - Malaysia

** NOTE: (TRL 3 and/or above)

TRL Level	Description	Characterisation
TRL 1	Basic Principle	<ul style="list-style-type: none"> Technology research Pure science begins translation to R&D Identification of and observation of basic properties
TRL 2	Formulation of Concept	<ul style="list-style-type: none"> Early studies for application formulation Invention & Practical Application Begins Outcomes of the theoretical research are specified. Theorising of potential practical applications.
TRL 3	Experimental Proof of Concept	<ul style="list-style-type: none"> Analytical validation & proof of concept Start active research & development Analytical research or experiments towards potential application(s). Initial testing of proposed solutions. Identification of potential stakeholders.
TRL 4	Lab Validation	<ul style="list-style-type: none"> Validation in laboratory environment Ready to begin bridge for technology transition Proof of concept that is based upon the integration of applications and components to demonstrate viability.
TRL 5	Validation in real environment	<ul style="list-style-type: none"> Validation in relevant environment Ready to enter technology development Refined integration of components to confirm validity.
TRL 6	Demonstration in real environment	<ul style="list-style-type: none"> Demonstrated in relevant environment Ready to enter system development Demonstration of a near-end state solutions and testing in a relevant environment in co-operation with relevant stakeholders to gain initial feedback.
TRL 7	Demonstration of prototype	<ul style="list-style-type: none"> Demonstrated in operational environment Ready for limited production decision Refinement of solutions and, if needed, retesting in relevant environment with relevant stakeholders.
TRL 8	Product/System complete and qualified	<ul style="list-style-type: none"> Compliant, qualified, & test/demo complete Ready for operational evaluation Proposed solutions as well as a plan for their application/adaptation are refined through testing, complete and qualified.
TRL 9	Product/System proven	<ul style="list-style-type: none"> Completed operational evaluation Ready for full rate A sustainable set of support measures for the application of the solutions has been worked out.

Source:

1. Ministry of Science, Technology, and Innovation (MOSTI). (2023). Technology Development Fund 2 (Ted 2) Guidelines.
2. Adapted from Technology Readiness Level (TRL) descriptions from the Estonian Research Council.