Important Notice for International Researchers:

We would like to inform you of significant changes to the application procedures for utilizing QST's facilities, including accelerators and other large equipment. Effective next fiscal year, the application process will be revised, and a new application form will be implemented. Please ensure that you thoroughly read the updated guidelines to avoid any errors in your application.

There are separate calls for proposals for PIXE and SPICE. Please contact the secretariat for the start date of the call.

Cyclotron proposals will not be accepted at this time.

CALL FOR PROPOSAL OF EXPERIMENTS AT "HIMAC"

1. Description

National Institutes for Quantum and Science and Technology (QST) in Chiba, Japan, will accept proposals for experiments using Heavy Ion Medical Accelerator in Chiba (HIMAC) during the period from April 2025 through March 2026. Although HIMAC is an accelerator designed for medical applications, beam time is available for research projects beyond the scope of medical sciences.

2. Address for Submission of Proposals

Additional information and instructions for submission of proposals are available from the Program Coordinator at the following address.

E-mail :	himac_riyou@qst.go.jp
Surface mail :	Department of Accelerator and Medical Physics
	National Institutes for Quantum Science and Technology 4-9-1 Anagawa, Inage-ku, Chiba 263-8555, JAPAN

3. Deadline for Submission of Proposals December 16, 2024

4. Description of Facilities

Two experimental halls are available for research at HIMAC. These include facilities for Biology, and Medium-Energy Beams.

HIMAC is used for medical applications. Other research can only be basically performed on Tuesday and Wednesday night.

5. Type of application

The HIMAC collaborative research program will be terminated in FY2024, and the experimental use of HIMAC will be operated under a new system starting in FY2025.

There are three ways to use HIMAC under this program, as described below.

A. Collaborative Research

This is a proposal to be researched in collaboration with a QST co-researcher.

If your proposal is accepted, an MOC (Memorandum of Cooperation) must be signed between your institution and the QST before the experiment starts.

When applying, please be sure to include the name of a QST co-researcher.

The co-researcher will handle the identity registration process at QST. The Secretariat will not do this in the future.

No fee is required.

B. Paid Use

This is conducted without MOC.

Requires the signing of a user contract or articles of incorporation.

Applies to those that do not disclose experimental results.

Please contact the secretariat for fees.

No identity registration process at QST is required, but a Radiation Controlled Area Entry Certificate must be submitted.

C. Paid Use to Publish Results

This is conducted without MOC.

Requires the signing of a user contract or articles of incorporation.

If the results are to be published in a paper, a reduced fee will be applied.

Please contact the secretariat for fees.

No identity registration process at QST is required, but a Radiation Controlled Area Entry Certificate must be submitted.

* If you have any questions about this section, please email your liaison if you are currently using HIMAC, or the Secretariat if you are not using it.

6. Spokesperson

One of participants in the proposal should be identified as the spokesperson. All correspondence with QST should be through this spokesperson.

7. Review and Selection of the Proposals

A Program Advisory Committee (PAC) consisting of researchers inside and outside of QST will review all proposals. The final selection of approved experiments will be informed by the Director General of Institute for Quantum Medical Science based on recommendations from the PAC. The approval is valid for one year. Renewals for continuation or revised proposals must be submitted each year.

Beam time is scheduled every six months. The spokesperson and the liaison at QST for each experiment will work with a beam-time coordinator at QST to arrange preferred beam times.

8. Submission

Necessary documents for submission include,

- (1) A summary of the proposal should be presented using the attached form: "Proposal for Research Project at QST HIMAC".
- (2) Information describing details of the proposal should be presented on separate sheets in either Japanese or English using guidelines in the attached form: "Instructions for Preparation of Details of the Proposal"
- * Caution: Ensure that you have completed the "Safety Issues and Special Requirements" to evaluate the safety of your experiment and confirm necessary procedures.

10. Available Beams

Characteristics of typical beams are listed below. Additional ions or energies may be available in a limited manner upon request. Please contact the Program Coordinator for more information.

-- Medium-Energy Beams--

Ion	He, C, N, O, Ne, Si, Ar, Fe
Energy	6 MeV/u
Intensity	<2.0 x 10^12 pps

-- Biology --

A large and uniform irradiation field is provided for Biology. The user can select a mono-energetic beam with a narrow Bragg Peak (MONO) or a beam with a broad "Spread-Out" Bragg Peak (SOBP).

Ion	energy (MeV/u)	field shape
He	150	MONO, SOBP60
С	290	MONO, SOBP60
С	135, 350, 400	MONO
Ne	230	MONO
Ne	400	MONO, SOBP60
Si	490	MONO
Ar	500	MONO
Fe	500	MONO

A diameter of the beam is 100 mm.

SOBP60 indicates an SOBP field with a thickness in depth of 60 mm. Maximum intensity is approximately 5 Gy/min. for a MONO beam and 3 Gy/min. for an SOBP beam.





C) コンセント:100V×2個 Type A Socket

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