

April 2026

To: the members of the academic staff at the Technion

Re: Call for research proposals, 2027

The Center for High Speed Flight ("The Center") acts to develop and deepen knowledge in the field of hypersonic flight by investing in research and infrastructure.

The purpose of this call is to receive research proposals that will advance the field in the following disciplines:

1. Aerodynamics - experimental and computational
2. Propulsion and combustion
3. Structure and materials
4. Thermal control
5. Navigation, guidance, control and optimization
6. Diagnostics and Measurement Methods
7. Multidisciplinary Design Optimization

In addition, to receive proposals for equipment for experimental and measurement initiatives with the potential to be used by several researchers and laboratories in the field.

Proposals submissions are required **for new as well as for continuing projects**. The proposals for continuing projects should reflect the changes due to conclusions and lessons learnt from last year's progress.

Grants Conditions:

The scope of financing:

We do not set an upper threshold. As an indicative figure, the average per project grant awarded by the center in 2025 was approximately NIS 500,000 per year, including 15% overhead and VAT.

The duration of the research funded by the center:

Up to three years. Shorter projects will get priority.

Eligible to submit:

Faculty members and research fellows of the Technion. A faculty member who is on sabbatical or on unpaid vacation is not eligible to receive a grant at this time. The research grants can also fund subcontractors or researchers from other institutions as long as the main researcher is a faculty member of the Technion.

It is clarified that the center's research projects are eligible for cooperation opportunities with other academic institutions – in Israel and abroad. In such cases the researchers are expected to support the cooperation as necessary, including travel to the other party's premises. Payment is subject to provision of an adequate invoice and compliance with Technion financial procedures.

Intellectual Property (IP):

Future IP: It is clarified that all new IP created through the research will be the property of all partners of the center, and each partner will be allowed to use the new IP for its internal use without prior approval, license or compensation. Transfer of the new IP to any third party will however require the approval of *all* partners.

Background IP: Use by a partner of any background IP of a partner (meaning, IP that exists prior to the execution of the research) requires approval of the owning partner. Accordingly, background IP needs to be identified and listed and if such background IP carries any obligations to third parties (such as a funding entity) its incorporation in the project shall require clearance by Technion which the Technion shall aim to seek if required.

Security:

Subject to the center's security procedures. Publishing requires security approval prior to submission to conferences and/or journals.

Submission of Proposals:

Research proposals will be submitted in the English language in the format defined in the appendix to this document. The proposer will also prepare a PowerPoint presentation which he/she will be asked to present to the Management Forum of the Center during the judging process.

Evaluation Process:

All continuing research proposals will be re-evaluated each year with respect to the proposal submitted that year and the results from past years.

The number of grants and their scope will be determined exclusively by the management forum of the center, considering the recommendations of the evaluation team.

The proposals will be pre-screened by an academic committee to ensure academic relevance to the center and then forwarded to an evaluation team that will include the director of the center, a Technion representative appointed/approved by

Technion Executive Vice President for Research and a representative from each industry partner.

As part of the process, the bidders will be invited to present their proposals to the center's management forum. During the presentations they will answer the forum's questions and get an opportunity to update their proposals according to the questions and comments. If necessary, the bidders will be invited for a follow-on presentation.

The evaluation team will rate the proposals according to originality, creativity, applicability, scientific/technological merit, relevance to High-Speed Flight and national security considerations, as well as according to the evaluation team assessment of the research's chance of success, and will recommend, at its sole discretion, the recipients of the grants to the management forum of the Center.

Submission Contact Details:

The proposals must be submitted no later than June 30, 2026, to the following addresses: amnon.harari@technion.ac.il and evpr.researchsec@technion.ac.il.

Additionally, the submissions will be registered through the Technion portal: <https://portal.technion.ac.il>

For questions and clarifications please contact the undersigned.

Reporting:

Grant winners must submit to the center's management a semi-annual progress report and a scientific report at the end of the funding period. The **semiannual** report will detail the progress of the research and will also include a financial breakdown, per the format in attachment 1.

Bgd. Gen. (Res) Amnon Harari
Head of the Center for High Speed Flight

Project/Research name

PI names:

Faculty:

Date:

Submitted to the Center of High Speed Flight

General instructions:

1. The purpose of this document is to enable the center's executive forum and professional reviewers on its behalf to understand the research proposal. Therefore, the document should be detailed enough without assuming that the evaluation committee has prior deep knowledge of the field or the subject.
2. The document should be formatted according to this template, with a total length of 5 pages, not including references or CV.

Executive Summary

This section should concisely present the main and important aspects of the proposal to key academic and administrative personnel. The summary should present an orderly research process that will lead to the completion of the activity, with as few technical/scientific details as possible, so that the reader of the executive summary can understand the core issues of the proposed program.

The abstract should include the following points from the proposal:

- What is the vision of the research?
- How is the proposed research problem being dealt with nowadays (in Israel and internationally)?
- What is new in the proposal?
- If the research is successful, what will be the impact of the success and how will it be measured?
- Expected main risks and opportunities.
- Financial cost.
- Schedule.
- Main objectives, go/no-go and final goal.
- How will progress be assessed? What are the indicators for examining progress?

Keywords

In this section, the keywords relevant to the research field within the proposal must be completed.

Motivation

This section should detail the need for the proposed research, what challenges the research is addressing in the field of hypersonic flight, and what benefits will be achieved if the research is successful.

Scientific background

In this section, the researcher will provide technical/scientific details required to support the proposed research. This section should also include any information, explanations, or constraints required to understand the proposed study, including references to studies that have been performed in the past and how the present research fits into this context.

Objectives and Outputs

Objectives: In this section, the researcher will specify clearly and concisely what are the goals that are trying to be reached through the research.

Indicators: In this section, the researcher will specify what indicators will be used for evaluating and measuring his activities in the project in a quantifiable way.

Outputs: In this section, the researcher will specify which outputs will be obtained in the project in each of the phases towards reaching the objectives (for example: closing a knowledge gap, solving a specific problem, computational model, experimental system, technological demonstrator, prototype, etc.).

The significance of the study

In this section, the researcher will detail what new capabilities/potential "leaps" are expected/will be obtained from this research when all of its objectives are fully accomplished. What is the impact and contribution of this research to the benefit of the relevant community if it is fully successful?

Detailed description of the proposed study

Research methodology: In this section, the researcher will describe the research method by describing the technological/scientific building blocks that are required and should be carried out within the scope of the overall research plan in a logical and orderly manner.

The research plan: The research plan should provide a timeline describing the research activities (Gantt in months).

Risk analysis and alternative directions: Every technology has limitations and disadvantages. The researcher should demonstrate an understanding of the risk factors

during the proposed study. Critical technologies should be identified along with their impact on the overall program.

Resources (initial assessment)

Fill in the Mafat Excell standard format, see attachment 2. Make sure that the file name will include the name of the PI and the research topic.

Note:

Msc student salary - not more than 40% of basic monthly salary of 7,300 NIS

Phd student salary - not more than 40% of basic monthly salary of 8,500 NIS

Postdoc salary – not more than 15,750 NIS monthly

PI salary – not more than 15%

Travel not more than 20,000 NIS

Contact info

Principal Investigator: [Name]

Additional researchers: [Names]

Institution and sub-institution: [Faculty of AAAAAA]

Sources/ relevant prior knowledge/ patents/ intellectual property

Provide sources/relevant prior knowledge/patents/IP. See Section “IP” in the Call for Research Proposals document.

Principal investigator statement

I understand and agree that my proposal will be sent to reviewers for the purpose of obtaining an opinion.

Date: _____ Name and signature of the principal investigator: _____

References (Can extend beyond 5 pages)

Background and past experience of the researcher

Attach abbreviated CVs of the bidders: information relating to the last five years (articles published, students advised, funded research proposals, etc.)

Attachment 1

The center for High-Speed Flight - Semi Annual reporting format

1. Quad chart (MAFAT format) – to remind the team the highlights of the project.
2. What was planned for the reporting period (last 6 months).
3. What was achieved. If papers were published, attach the publication to the report.
4. Main conclusions.
5. What effect will the conclusions have on the continuation of the research plan?
6. Budget status – material and wages consumed since the budget was opened.
7. Human Resources – details of the team members involved in the project.

Note:

Scientific Achievements are reported either via the standard channels of published papers, or as stand-alone scientific reports addressed to the management of the center.

The following reporting format is mandatory.

Attachment 2



קובץ משאבים
נדרשים לפרויקט.xlsx