



Project Proposal Submission

Science and Technology Research onboard the International Space Station

1. Cover Page

Proposal details:

Project Name:	
Research Area:	Submission Date:
Project type: <input type="checkbox"/> Technology Development or Device <input type="checkbox"/> Scientific Research	Space heritage: <input type="checkbox"/> Yes <input type="checkbox"/> No
Project Logo (if exists):	

Point of Contact:

Principal Investigator (PI):	Organization:
Email:	Phone No:
Organization Type: <input type="checkbox"/> Commercial <input type="checkbox"/> Academic <input type="checkbox"/> Government <input type="checkbox"/> Nonprofit	
Organization Logo:	

Collaborate Investigator:	Organization:
Email:	Phone No:
Organization Type: <input type="checkbox"/> Commercial <input type="checkbox"/> Academic <input type="checkbox"/> Government <input type="checkbox"/> Nonprofit	
Organization Logo:	

Second Collaborate Investigator:	Organization:
Email:	Phone No:
Organization Type: <input type="checkbox"/> Commercial <input type="checkbox"/> Academic <input type="checkbox"/> Government <input type="checkbox"/> Nonprofit	
Organization Logo:	



2. Abstract (350 words limit)

Summary of the proposed activity. Should include:

- Brief description of the proposed research and its objectives.
- The specific vantage of using the International Space Station facilities.
- A summary of the technical approach and the operation methodology.
- Anticipated outcomes, and the contribution of the results for future research or application.

3. Technical Section (10 pages limit)

A detailed description of the scientific research or the technology demonstration project. Should contain information addressing seven technical subsections outlined below. Please make sure to address each subpoint in the different sections. Proponents should be concise, clear, and readable, describing the entire technical approach. All abbreviated terms should be identified.

3.1 Scientific and Technical Concept

- Define the scientific/technological question addressing expected advancement(s) and the project's objectives and goals.
- Overview of the technical approach/research plan to address the different objectives.
- Innovation, multidisciplinary integration, and novelty of the approach
- Basis and justification for utilizing the International Space Station resources – describe how the project will benefit from the space environment (such as persistent exposure to Low Earth Orbit environment, persistent microgravity, specific influence on organism or material's behavior, etc.)
- Iterative research on multiple flights – if there is a requirement for iterative microgravity studies, which would include multiple flights, please specify it and explain the objectives of each flight.
- Difference from previous research – mention what research has been done previously onboard the ISS in this area and what specifies the proposed project in comparison to it.

3.2 Implementation feasibility

- Describe the implementation approach - hardware, software, and facilities needed to meet the project's goals. Clearly state design requirements and critical components.
- Outline product development steps, including manufacturing timelines if needed.
- In the case of shipping hardware to the ISS, describe any requirements for the delivery phase (power, temperature control, etc.). Also, specify the need for a return to Earth and if parts can be discarded after the operation.
- Implementation risk assessment and mitigation - Identify anticipated implementation risks associated with any project milestones.

3.3 Operation and ISS Utilization

- Define the estimated crew time needed for the installation and operation. Detailed the specific requirements and needed performance of the crew.
- Identify the mass, volume, and interface specifications.



- Present the data downlink and communication plans, including data volumes and frequency of collection. Describe how they support the science investigation objectives.

3.4 Success criteria

- State expected results and interpretation of negative results.
- Define the minimum success criteria.
- Define the minimum required duration in microgravity or the space environment.

3.5 Safety

- Identify potential ISS hazards and provide control techniques to address them.
- Material list and all Material Safety Data Sheets needed.

3.4 Technology Readiness Level (TRL)

- State the Technology Readiness Levels (TRL) of the project. The definition of TRLs can be found at https://www.nasa.gov/directorates/heo/scan/engineering/technology/technology_readiness_level, and at https://www.nasa.gov/pdf/458490main_TRL_Definitions.pdf.
- If you expect the TRL of the suggested technology will be changed in the next 6-12 months, please mention this as well.

3.7 Business and Economic Impact

- Discuss the impact of the solution/product resulting (directly or indirectly) from the project.
- Ability to leverage project outcomes across multiple applications, customers, or needs.
- Identify funding available for this project.

4. Budget breakdown (1-page limit)

Elaborate on the estimation of the total resources necessary to achieve the desired goals and objectives of the project, except for launch and ISS operation costs*.

You may use the following resources table or present the details in a different method.

Item	Description	Amount (\$)

*In case of receiving a pricing offer for launch and on-orbit operation cost please provide this as well.

5. Project schedule

Provide detailed project schedule milestones, excluding the ISS integration plan, that will be designed after phases 1 and 2 of the integration process plan.

5. Collaboration description

List all partners on this proposal. For each partner, list and discuss the partner's role and contribution in accomplishing the stated goals. If there are no proposed partnerships, state so.



6. Reference list (optional, 1-page limit)

This section may only be used for references cited in the proposal, supplementary information augmenting the proposal may not be included and will not be reviewed.