

NASA solicits ideas for International Space Station research

January 29 2013

NASA wants to know how you can improve the International Space Station as a technology test bed.

NASA's <u>International Space Station</u> National Laboratory and <u>Technology Demonstration</u> offices are asking for proposals on how the space station may be used to develop advanced or improved exploration technologies. NASA also is seeking proposals about how new approaches, technologies and capabilities could improve the unique laboratory environment of the orbiting outpost.

The NASA Research Announcement, "Soliciting Proposals for Exploration Technology Demonstration and National Lab Utilization Enhancements," may be viewed at: go.nasa.gov/Uqkccz

The annoucement will provide successful proposers access to the space station's microgravity environment, crew support and robotic servicing. It closes Sept. 30.

"The space station is a world-class facility and critical to NASA's plan to extend humanity's presence beyond <u>low-Earth orbit</u>," said Andrew Clem of the Technology Demonstration Office in the International Space Station Program at NASA's Johnson Space Center in Houston. "This is an opportunity for researchers, inventors and designers to demonstrate a technology needed for future human spaceflights or to improve an existing space station capability."



NASA will review submissions throughout the year as they are received. The agency will cover launch and integration costs for selected proposals. Successful submissions also may be eligible for limited additional funding.

Proposed technologies should help advance exploration and research capabilities aboard the space station. Concepts must fit within existing NASA standards for mass and volume to meet requirements for current launch vehicles. Suggested areas include in-space propulsion; space power and energy storage; components of highly reliable, closed-loop, human health, life support and habitation systems; thermal systems; robotics, telerobotics, and autonomous systems; and human exploration destination systems.

Proposals for new exploration technologies could include strategies to reduce mass, maintenance and power requirements, while also increasing efficiency, reliability and safety. The idea could be a new technology or a new, improved use of existing space hardware. Proposals also may have the potential to yield benefits for humanity, such as testing a new material or stimulating economic growth.

Alternately, proposers could address improvements to the existing capabilities of the U.S. National Laboratory, such as new uses for existing experiment tools and infrastructure aboard the orbiting outpost, or potential efficiencies like advances in data communications. Other possibilities include ground equipment for space studies, in-orbit analytical tools, three-dimensional cell and tissue culture hardware, or improvements or new uses for existing station research resources.

The enhancements sought in this announcement will further efforts by the Center for the Advancement of Science in Space to promote research aboard the station's U.S. National Laboratory.



For assistance with responding to the announcement, visit the Guidebook for Proposers Responding to a NASA Research Announcement or Cooperative Agreements Notice at: go.nasa.gov/W3HlSe

Provided by NASA

Citation: NASA solicits ideas for International Space Station research (2013, January 29) retrieved 22 June 2024 from https://phys.org/news/2013-01-nasa-solicits-ideas-international-space.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.