

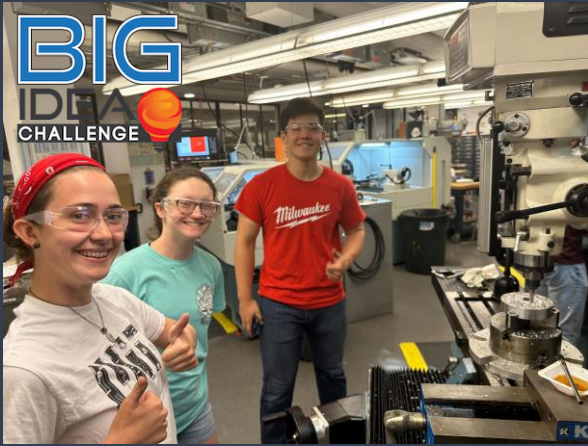


WANT TO WORK ON FUTURISTIC CONCEPTS TO HELP NASA EXPLORE AND DEVELOP SPACE?
JOIN THE MIT NASA CHALLENGES TEAMS!
 INFO SESSION*: **MONDAY SEPT. 25TH, 5:00 PM**
 AT **33-218** AND ON ZOOM (<https://mit.zoom.us/j/2334994262>)

<https://spaceresources.mit.edu>



SPACE RESOURCES WORKSHOP



ARTEMIS Steelworks team members machining parts for a proof-of-concept Molten Regolith Electrolysis reactor, which drives an electric current through regolith to produce steel in the Lunar environment.



WORMS is our architecture for reconfigurable robots to explore lunar terrain, a submission to the 2022 NASA BIG Idea Challenge which won "best technical paper."



Photogrammetry static deflection experiments at 8.5m and 11m height with MIT's self-deploying lunar tower prototype, which earned a path to flight award in the January 2021 at the Big Idea Forum.

***CAN'T MAKE IT ON MON SEPT 25th?**
FILL OUT THIS FORM & WE'LL GET BACK TO YOU! (<https://forms.gle/vpGVixrRZHBZSwzK6>)



Our MARS HOMESTEAD team at the NASA 2023 RASC-AL Challenge Finals, held 11-14 June 2022 at Cocoa Beach, Florida. Awards: First Place Overall and Best in Theme.



Our BART & MARGE team at the NASA 2022 RASC-AL Challenge Finals, held 24-26 June 2022 at Cocoa Beach, Florida. Awards: First Place Overall and Best in Theme.



Our HYDRATION III team at the NASA 2021 RASC-AL Special Edition, held fall 2021. Awards: First Place, Most Water Collected, Best Poster.



NASA CHALLENGES @ MIT MORE INFORMATION



Our NASA Challenges Design & Build teams are recruiting!

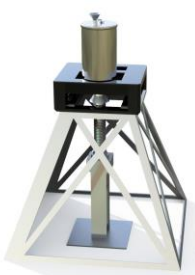
- The Space Resources Workshop will form two new teams to participate in this year's challenges. The **MIT Lunar Analog** team will design a long-duration simulation of a Mars mission conducted on the moon for the 2024 NASA RASC-AL Forum. The **MIT Big Idea team** will complete a build challenge (the theme has yet to be released).
- Join us to help sustain the **excellent track record** of MIT in these NASA competitions! Fourteen awards in six years, including First Place (4), Second Place, Honorable Mention, Best Technical Paper/Poster (3), Most Water Collected, and Best Path to Flight Awards!
- We welcome undergraduate and graduate MIT students from all courses and departments. **Diversity is the secret behind our results!**
- Express your interest using our form at <https://forms.gle/vpGVixrRZHBZSwzK6> or at the info session on **Monday September 25th, at 5:00pm, at 33-218** and also on Zoom (<https://mit.zoom.us/j/2334994262>)

Faculty advisors and industry/NASA mentors

- Our **Space Resources Workshop** (37-084) is advised by Prof Jeffrey Hoffman, director of MIT AeroAstro Human Systems Lab, and by Prof Olivier de Weck, director of MIT AeroAstro Engineering Systems Lab.
- Our 2023 BIG Idea ARTEMIS Steelworks team is advised by Prof Jeffrey Hoffman, Prof Olivier de Weck, Prof Antoine Allanore, and Prof Martin Culpepper.
- Our 2022 BIG Idea **WORMS** team is advised by Prof Jeffrey Hoffman, Prof Olivier de Weck, Prof David Trumper, Prof Sangbae Kim and Prof Wendell Chun. Our industry mentors are Boston Dynamics, MassRobotics and Robots 5.

Links with further details and information

- [Space Resources Workshop website](#), with info on past, current and NEW projects
- MIT Aero/Astro Story on our 2023 RASC-AL Team, [PALE RED DOT](#)
- MIT News Story on our 2022 RASC-AL Team, [BART & MARGE](#)
- NASA [Feature Story](#) on 2020-21 RASC-AL Special Moon to Mars Ice & Prospecting Challenge
- MIT News Story on [Star City](#), winner of Mars Society's 2019 Mars Colony Award
- Short [trailer of MELLTT / SELTI lunar tower](#) concept
- The 2023-2024 NASA [RASC-AL competition](#)
- The 2023-2024 NASA [BIG Idea competition](#)



ARTEMIS Steelworks:
Pictured to the left is the design for a Molten Regolith Electrolysis Reactor for steel production on the moon!

PALE RED DOT, Mars Homestead:
Pictured to the right is the pool used for exercise countermeasures and radiation shielding for the "Ten Forward" Bar, a great location for meetings or relaxing with friends after a week of work on Mars.

