



Podcast explains how plutonium powers Mars exploration

August 13, 2020

LOS ALAMOS, N.M., Aug. 13, 2020—To have dependable power to explore the the frigid surface of Mars, NASA’s Perseverance rover is equipped with a type of power system called a radioisotope thermoelectric generator (RTG)—which is what the latest episode of *Mars Technica* will tell listeners all about.

“An RTG is essentially a nuclear battery that uses heat from the natural radioactive decay of plutonium-238 to generate electricity,” said Jackie Lopez-Barlow, the radioisotopes power system program manager at Los Alamos National Laboratory. “You can’t always rely on solar power, particularly when you’re far from the Sun or when dust storms might be a problem. RTGs provide long-lasting power that works no matter how far out in space you are.”

On this podcast episode, Lopez-Barlow explains how an RTG (also called a Radioisotope Power System) works and Los Alamos’ role in getting it onboard spacecraft such as the Perseverance rover, which is currently on its way to Mars. In addition, Lisa E. Gordon-Hagerty, Administrator of the National Nuclear Security Administration (NNSA) and DOE’s Under Secretary for Nuclear Security, and [Thom Mason](#), director of Los Alamos National Laboratory, discuss the important roles NNSA and the Laboratory play in building RTGs, and the exploration they enable.

This is the third episode of *Mars Technica*, a new seven-series podcast produced by Los Alamos National Laboratory, which delves into the Lab’s role on the Mars Perseverance mission.

Upcoming episodes explore topics including signatures of life and what secrets rock varnish might hold. You can stream episodes via the [Mars Technica website](#).

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