

Akshata Krishnamurthy : First Indian Citizen To Operate Mars Rover

Why In News

• Akshata Krishnamurthy is an Indian woman who created history as she became the first person from the country to operate the Mars rover with the National Aeronautics and Space Administration (NASA) in the United States.



• She shared her achievement saying, "No dream is ever too big or crazy. Believe in yourself, keep those blinkers on and keep working! I promise you'll get there if you work hard."

Akshata Krishnamurthy

- A woman from India had dream and she fulfilled it by becoming the **first Indian citizen to operate a rover on Mars**, a mission that involves collecting samples to bring back to Earth.
- Akshata is a **PhD holder from the MIT** (Massachusetts Institute of Technology). She is among the few Indians who joined NASA for a full-time opportunity.
- Dr Krishnamurthy **worked on NASA projects** by joining the Jet Propulsion Laboratory, a research laboratory that is owned by NASA.
- Akshata is a **principal investigator** and mission science phase lead at NASA. She has been working at NASA for over five years now.



- Akshata's **journey began 13 years ago** when she came to the United States with a dream to work at NASA and lead science and robotic operations on Earth and Mars.
- However, she was discouraged from having unrealistic goals as she was a foreign national on a visa. People told her to have a different plan or change her field entirely.



- However, Akshata blocked those comments and persevered until she reached the goal.
- Krishnamurthy also delivered a **motivational message** through her viral post. "No dream is ever too big or crazy. Believe in yourself, keep those blinkers on and keep working! I promise, you'll get there if you work hard," she wrote.

Perseverance Rover

- NASA's Perseverance rover is exploring the Jezero Crater on Mars and attempting to collect its first rock samples.
- It was **launched in 2020** aboard a United Launch Alliance Atlas V. The Mars 2020 Perseverance mission is part of NASA's Moon to Mars exploration approach, which includes Artemis missions to the Moon that will help prepare for human exploration of the Red Planet.



- It addresses high-priority science goals for Mars exploration, including key questions about the potential for life on Mars.
- The mission takes the next step by **not only seeking** signs of **habitable conditions** on Mars in the ancient past, but also searching for signs **of past microbial life itself.**
- It introduces a drill that can collect core samples of the most promising rocks and soils and set them aside in a "cache" on the surface of Mars.