

Editorial

India is now a national superpower in space by landing its spacecraft safely on the unexplored south pole of moon. This achievement makes India the fourth country to land on the moon, and the first to land on one of the lunar poles. Previously, Russia, the United States and China landed spacecraft successfully on the moon. Prime minister of India has pointed out that this success belongs to all of humanity. The lunar South Pole has emerged as a place of exploration interest due to recent discoveries of traces of water ice on the moon. India was also previously attempted a lunar South Pole landing in 2019, but a software failure caused the mission to crash into the surface. South Pole is a very important, historical, scientific and geologic area that a lot of countries are trying to get at that can serve as a base for future exploration. Discovery of water on the south pole of the moon is imperative for future exploration, as it could serve as a source of fuel for rockets and spacecraft. Russia was also attempted to land its first spacecraft on the moon. However, their last attempt was smashed into the lunar surface. Earlier this year, the attempt was made by a Japanese company also crashed in the final moments. NASA has largely turned to companies for this type of robotic exploration mission, with the agency instead focusing most if its own effort on the lunar human spaceflight programme. Houston-based Intuitive Machines aims to launch its first cargo mission to the moon this year, while Pittsburgh-based Astrobotic is preparing to launch its first lunar cargo mission within next year. Next year, the space agencies are expected to work together to fly Indian astronauts to the International Space Station. This moment certainly is the culmination of decades of hard work by Indian scientists. India's presence on the moon forever is heralding the nation's entry into the elite club of the countries that had earlier placed on the Moon.

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