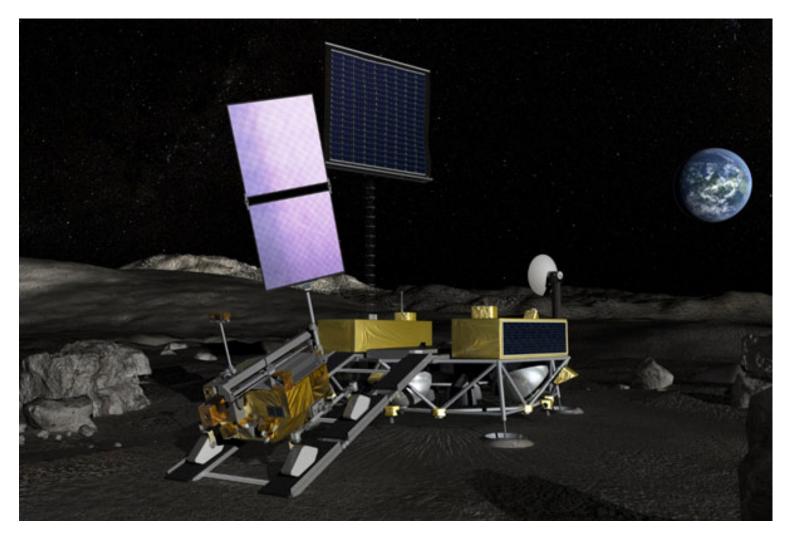
# IT IAS Toppers

### The Lunar Polar Exploration Mission (LUPEX)

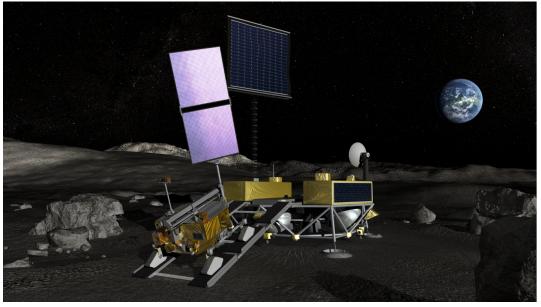
By IAStoppers | 2024-05-18 16:05:00



#### Lunar Polar Exploration Mission (LUPEX)

Lunar Polar Exploration Mission (LUPEX) is likely to take flight in a few years.

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[Ref: JAXA]

### About the Lunar Polar Exploration Mission (LUPEX):

- LUPEX is a joint mission by the Japan Aerospace Exploration Agency (JAXA) and the Indian Space Research Organisation (ISRO).
- The mission is aimed at exploring the Moon for water, other resources, and gaining expertise in lunar surface exploration.
- Launch Date: Scheduled for 2025.
- Mission Components: Includes a lander developed by ISRO and a rover managed by JAXA.
- International Contributions: The rover will carry instruments from not only ISRO and JAXA but also from NASA and the European Space Agency (ESA).

#### **Proposed Instruments:**

- **PRATHIMA** (Permittivity and Thermo-physical investigation for Moon's Aquatic Scout): Aimed at the in-situ detection and quantification of water-ice in the lunar surface and sub-surface.
- LEDEX (Lunar Electrostatic Dust EXperiment): Designed to detect charged dust particles, confirm dust levitation processes, and estimate the size and flux of charged levitated dust particles in the Moon's polar regions.