

# SIPS CELEBRATES AND APPLAUDS THE LAUNCH OF CHANDRAYAN-2



## OVER THE Moon

# INDIA CREATES HISTORY

## Chandrayaan-2 put into orbit

**1** The success of Chandrayaan-2 mission will make India the fourth country in the world to land a vehicle and travel on the Moon surface after the US, Russia and China

**2** It was in the 1950s that the mission to the Moon caught the fancy of several countries. But they were abandoned. However, it was the Soviet mission in September 1959 that succeeded first when its lunar impactor carried by its rocket Luna landed on the Moon's surface. The next month Russia followed it by a flyby mission

**3** The first crewed mission to the Moon was by the US in December 1968. The spacecraft Apollo-8 orbited the Moon and returned to Earth. The first human Moon landing mission was launched by the US on July 16, 1969, with Neil Armstrong becoming the first man to step on the Moon on July 21, 1969

**4** India launched its first Moon mission Chandrayaan-1 in October 2008, using its light rocket Polar Satellite Launch Vehicle (PSLV)

**FOR THE RECORD**

India moved towards its second tryst with the Moon with Isro's rocket carrying an orbiter, lander and a rover in a stepped up Moon mission to uncover lunar secrets launched into space successfully in its second bid from the Sriharikota launch pad on Monday. The launch, originally slated for the early hours of last Monday, was aborted after a pressure drop in one of the tanks in the upper stage of the rocket.

The 43.4-metre-tall, 640-ton rocket, nicknamed 'Bahubali' carries the 3.8-ton Chandrayaan-2, which will carry out India's second mission to its closest celestial neighbour. The launch vehicle, GSLV Mk-3, is the country's most powerful rocket to date. The orbiter will continue its mission for a year

We fixed the snag and bounced back with flying colours. The work, done in the next 24 hours after the snag, was mind-boggling. Corrections were made, tests were carried out and confirmed. This was made possible by the experts and it is my duty to salute them  
- K Sivan, Isro chief

Chandrayaan-2 consists of three segments - the Orbiter (weighing 2,379 kg, eight payloads), the lander 'Vikram' (1,471 kg, four payloads) and rover 'Pragyan' (27 kg, two payloads). According to Isro, on the day of landing - estimated on September 7, the lander Vikram will separate from the Orbiter and then perform a series of complex manoeuvres comprising rough braking and fine braking. The separation will come five days after the orbiter enters the lunar orbit

The target is to find more evidence of water, clues about the Moon's evolution and use the natural satellite as a test bed for more space missions related to the solar system. Chandrayaan-II will primarily study the elements on the Moon, map its topography through high-resolution pictures, study its minerals and most importantly, confirm sub-surface water/ice presence