24 - 05 - 2024

<u>News:</u> Perseverance Rover

Recently, NASA's Perseverance Rover, nicknamed Percy, created the first "sample depot on another world" by putting down ten rock sample tubes that were supposed to be returned to Earth as part of the Mars Sample Return Campaign.

Perseverance Mission

- Perseverance is the most advanced, most expensive and most sophisticated mobile laboratory sent to Mars.
- It is different from previous missions because it is capable of drilling and collecting core samples of the most promising rocks and soils and setting them aside in a "cache" on the surface of Mars.
- It is the centerpiece of NASA's Mars 2020 mission which also included the small robotic and coaxial helicopter Ingenuity.
- ▶ It was launched on 30th July 2020 and landed on mars on 18th February 2021.
- Power Source of the probe is a Multi-Mission Radioisotope Thermoelectric Generator (MMRTG) which converts heat from the natural radioactive decay of plutonium (Plutonium Dioxide) into electricity.

Objectives

- > Perseverance's primary objective is looking for signs of ancient microbial life.
- > The rover is studying and analyzing the Red Planet's regolith, rock and dust,

and is the first rover to collect and cache samples.