

Prelim Bits 26-05-2018

NASA Curiosity

\n\n

\n

- NASA's Curiosity Mars rover has successfully collected the first rock samples on the red planet in over a year, using a new way to drill rocks and extract powder from them.

\n

- Curiosity tested percussive drilling penetrating about two inches into a target called "Duluth."

\n

- This technique, called Feed Extended Drilling, keeps the drill's bit extended out past two stabiliser posts that were originally used to steady the drill against Martian rocks

\n

- It lets Curiosity drill using the force of its robotic arm, a little more like the way a human would drill into a wall at home.

\n

- Curiosity is a car-sized rover designed to explore Gale Crater on Mars as part of NASA's Mars Science Laboratory mission (MSL).

\n

\n\n

3D-printed, driverless boats

\n\n

\n

- MIT scientists have designed a fleet of 3D-printed, driverless boats that could ferry goods and people, helping clear up road congestion in waterway-rich cities such as Amsterdam, Bangkok and Venice.

\n

- The autonomous boats offer high manoeuvrability and precise control.

\n

- They can be built using low-cost printer, making mass manufacturing more feasible.

\n

- In the future, the researchers also envision the driverless boats being

adapted to perform city services overnight, instead of during busy daylight hours, further reducing congestion on both roads and canals.

\n

- 3D printing is any of various processes in which material is joined or solidified under computer control to create a three-dimensional object.

\n

- It is used in rapid prototyping and Additive manufacturing.

\n

\n\n

India Netherlands relations

\n\n

\n

- Prime Minister of Netherlands inaugurated the Indo-Dutch Ganga Forum to take forward the Memorandum of Understanding (MoU) signed between the Ministry of Water Resources, River Development and Ganga Rejuvenation and the Ministry of Infrastructure & Environment of the Netherlands.

\n

- The Netherlands has become the 64th signatory member of the International Solar Alliance.

\n

- Prime Minister of India noted that the first Indo-Dutch Centre of Excellence CoE in Vegetables had started in Baramati, Maharashtra.

\n

- The Netherlands government also shared the experiences of their collaboration with Uttar Pradesh government to reduce water consumption and employ cleaner technologies in tanneries in Kanpur.

\n

- According to data for 2016-17, the Netherlands was the fifth largest foreign investor in India.

\n

- In February 2016, a branch of the Netherlands-India Chamber of Commerce and Trade (NICCT) was established in Mumbai

\n

\n\n

Unique telescope link

\n\n

\n

- Scientists in South Africa on Friday launched the world's first optical telescope linked to a radio telescope, combining "eyes and ears" to try to

unravel the secrets of the universe.

\n

- The device forms part of the Square Kilometre Array (SKA) project in the remote Karoo desert, which will be the world's most powerful radio telescope system.

\n

- The latest move combines the new optical telescope MeerLITCH — Dutch for 'more light' — with the recently-completed 64-dish MeerKAT radio telescope, located 200 kilometres away.

\n

- The project has been six years in the making by a joint-team of South African, Dutch and British scientists.

\n

- Among the priorities for MeerLICHT, which cost about \$1.1 million, is the study of black holes, neutron stars and stellar explosions.

\n

- The Square Kilometre Array (SKA) is a large multi radio telescope project aimed to be built in Australia and South Africa.

\n

\n\n

\n

\n\n

\n

\n\n

Patratu Super Thermal Power Project

\n\n

\n

- The Prime Minister of India laid the foundation stone today for the 2400MW first phase of NTPC's Patratu Super Thermal Power Project in Jharkhand.
- \n
- The project is a 74: 26 Joint Venture between Government of Jharkhand (GoJ) and Patratu Vidyut Utpadan Nigam Ltd. (PVUN), a subsidiary company of NTPC establishing a total capacity expansion of 4,000MW.
- \n
- The project has salient features of Dry Ash disposable system (second to NTPC Dadri), zero liquid discharge system, Air-cooled condenser technology (only second to North Karanpura STPP) and rail loading facility for transportation of ash.
- \n
- The Engineering, Procurement & Construction contract of the project has

been awarded to BHEL.

\n

- This project will allocate 85 per cent of the power to Jharkhand that will benefit the state in the long run and help in the economic growth of the region.

\n

- Under the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) scheme, this project will ensure providing 24x7 power availability to the households.

\n

\n\n

\n\n

Source: PIB, The Hindu

\n

