

**CURRENT AFFAIRS SNIPPETS : SEPTEMBER 2017****INTERNATIONAL****Scientists create world's first 'molecular robot'**

Scientists at The University of Manchester have created the world's first 'molecular robot' that is capable of performing basic tasks including building other molecules. The tiny robots, which are a millionth of a millimeter in size, can be programmed to move and build molecular cargo, using a tiny robotic arm.

Each individual robot is capable of manipulating a single molecule and is made up of just 150 carbon, hydrogen, oxygen and nitrogen atoms. To put that size into context, a pile of a billion billion of these robots would still only be the same size (volume/weight) as a few grains of salt.

**World's largest aircraft successfully passes first engine tests**

The world's largest airplane, which has been designed to serve as a launching platform for sending rockets into low-Earth orbit, has successfully completed its initial engine tests. The plane weighs about 227,000 kg and has the biggest wingspan ever built, measuring 118 m from one end to the other.

The 747 turbofan engines of the plane were loaded with fuel and started one at a time and then allowed to idle at the Mojave Air and Space Port in California, US. The double-bodied airplane is designed to serve as a mobile launch platform to carry rockets into low-Earth orbit.

**India and United States renew commitment for Joint Collaboration on Health**

Both countries renewed their commitment to collaborate in the healthcare sector at the second India-US Health Dialogue that was held on 26-27 September 2017 in New Delhi. Norway, followed by Switzerland and Iceland. The two-day event saw several experts deliberate on issues of bilateral importance including communicable and non-communicable diseases, low-cost innovations, food and drug regulations, traditional medicine and access to medicines.

**New US travel ban includes N Korea, Venezuela, and Chad among 8 countries**

The new restrictions impose complete or partial blocks on travel to the United States on the listed eight nations. Full travel bans have been placed on the nationals from North Korea and Chad.

In case of Venezuela, the restrictions are limited to officials from a long list of government agencies and their families. The ban on other Muslim-Majority nations including Iran, Libya, Somalia, Syria and Yemen remains like before.

**SCIENCE, AEROSPACE, DEFENSE & TECHNOLOGY****Isro's Mars Orbiter Mission completed 3 years in orbit**

ISRO's globally acclaimed Mars Orbiter Mission (MOM) also known as Mangalyaan completed three years in Martian orbit. It has outlived its original lifespan & is still in good health & continuous to work as expected.

Mangalyaan spacecraft was launched on board of PSLV C25 rocket from Sriharikota in Andhra Pradesh on November 5, 2013 with aim of studying Martian surface & mineral composition as well as scan its atmosphere for methane (an indicator of life on Mars). It had entered Mar's orbit on September 24, 2014, in its first attempt. It was nine-month-long mission.

**CSIR's artificial leaf creates fuel from sunlight, water**

Scientists have developed an artificial leaf that absorbs sunlight to generate hydrogen fuel from water, an advance that may provide clean energy for powering eco-friendly cars in the future. The ultra-thin wireless device mimics plant leaves to produce energy using water and sunlight.

The device consists of semiconductors stacked in a manner to simulate the natural leaf system. When visible light strikes the semiconductors, electrons move in one direction, producing electric current. The current almost instantaneously splits water into hydrogen - which researchers believe is one of the cleanest forms of fuel as its main byproduct is water.

### **India's first private missile production facility unveiled in Hyderabad**

India's first private sector missile sub-systems manufacturing facility, Kalyani Rafael Advanced Systems (KRAS) plant was inaugurated at the Hardware Park in Rangareddy district near Hyderabad.

The facility, which is a joint venture between India's Kalyani Group and Israel's Rafael Advanced Defense Systems Ltd, has been established in line with the Union government's 'Make in India' initiative and the policy to encourage private sector participation in defense production.

### **INS Tarasa commissioned into Indian Navy**

INS Tarasa (T94), the fourth and last ship in series of Water Jet Fast Attack Craft (WJFAC) was commissioned into Indian Navy at Naval Dockyard, Mumbai. It is an improved variant of Car Nicobar-class high-speed offshore patrol vessels (OPVs) built indigenously by Kolkata (West Bengal) based Garden Reach Shipbuilders & Engineers Ltd (GRSE), for the Indian Navy.

INS Tarasa has been named after the picturesque island in the Andaman and Nicobar archipelago in Bay of Bengal.

### **Indian navy gets its first conventional submarine in 17 years---INS Kalvari**

The boat is the first of six in a variant on the Scorpène class of submarines that India is buying from France under an agreement reached back in 2005. The delivery of INS Kalvari (tiger shark), the first of the six French diesel-electric Scorpene submarines being built under the Rs 23,652 crore "Project-75" at Mazagon Docks in Mumbai.

It is significant because the Navy currently has just 13 ageing diesel-electric submarines, with just half of them operational at any given time.

### **SLINEX: A joint naval Exercise between India & Sri Lanka**

The seventh edition of India-Sri Lanka joint maritime naval exercise SLINEX 2017 was held near Vishakhapatnam (Andhra Pradesh) in Bay of Bengal. It was conducted from 7th to 14th September 2017.

The seven days exercise aimed to reinforce strong neighborly ties between both countries underscored

by extensive maritime interaction and improved understanding.

### **Navika Sagar Parikrama: India's first all-women circumnavigation expedition flagged-off**

India's first all-women crew circumnavigation expedition named as Navika Sagar Parikrama was flagged off by Defense Minister Nirmala Sitharaman in Goa.

The crew belongs to Indian Navy and is sailing Indian Naval Sailing Vessel Tarini (INSV Tarini). It will circumnavigate globe in approximately 165 days & is expected to return to Goa in April 2018.

## **BUSINESS**

### **Tata Motors bags EESL order for 10,000 e-cars**

Central government entity Energy Efficiency Services Limited (EESL), has awarded a contract to Tata Motors to procure 10,000 electric vehicles for government departments. The company was selected through an international competitive bidding. Others in the race included Mahindra & Mahindra and Nissan Motors.

TATA Motors will supply the Electric Vehicles (EVs) in two phases - first 500 e-cars will be supplied to EESL in November 2017 and the remaining 9,500 EVs will be delivered in the second phase.

TATA Motor quoted the lowest price of ₹10.16 lakh, exclusive of GST, in the competitive bidding.

### **SBI launched India's first bond index series at London Stock Exchange**

The FTSE SBI Bond Index Series, launched by India's largest commercial bank along with global index and data provider FTSE Russell, is positioned as a first-of-its-kind transparent benchmark for investors in international markets to analyze India's government bond market.

The launch follows the November 2015 visit of Prime Minister Narendra Modi in the UK when a letter of intent was signed between SBI and FTSE to jointly develop the new index tracking Indian fixed income securities. The Indian bond market is worth around \$1.7 trillion.

### **Tribes India products to be sold on Amazon**

Tribal Cooperative Marketing Development Federation of India Limited (TRIFED) has inked MoU with

e-commerce giant Amazon for selling tribal products. The aim of initiative is to promote tribal handicrafts like handloom products, cane and bamboo products, tribal jewellery, Dhokra craft, tribal weaves and embroidery, tribal paintings etc. TRIFED already has tied-up with Snapdeal.

At a workshop in Delhi, Tribal Affairs Minister Jual Oram also announced the nationwide expansion of the scheme to provide minimum support price for 24 minor forest produce (MFPs), such as karanj seed, mahua seed, tamarind, wild honey etc. The scheme is already being implemented in nine States.

#### **PNB, BSNL join hands for mobile wallet Speedpay rollout**

Punjab National Bank and state-run firm BSNL teamed up to roll out open mobile wallet Speedpay across 10 states in the country.

Speedway wallet will operate like any other mobile wallet for paying bills, recharging phone besides its users will be able to deposit and withdraw money from authorized retail outlets. Also, Speedway users will be able to operate Internet banking services from the application.

#### **Fincare Small Finance Bank starts operations with 25 branches in 4 states**

Previously known as Disha Microfin Limited), Fincare started banking operations with 25 operational branches across Gujarat, Tamil Nadu, Karnataka and Andhra Pradesh.

The bank was given final small finance bank (SFB) licence from the Reserve Bank of India (RBI) in May this year. On the day of its launch, the bank raised over Rs. 225 crore of deposits from its about 1000-odd depositors. This forms about 15 per cent of the bank's existing balance sheet of Rs. 2000 crore, which includes Rs. 1,350 crore as loans and advances, Rs. 450 crore as investments besides the deposits.

### **GOVERNMENT**

#### **Pradhan Mantri Sahaj Bijli Har Ghar Yojana - "Saubhagya" by Ministry of Power**

Prime Minister has launched a new scheme to ensure electrification of all willing households in the country in rural as well as urban areas. The total outlay of the project is Rs. 16,320 crore while the Gross Budgetary

Support (GBS) is Rs. 12,320 crore. The outlay for the rural households is Rs. 14,025 crore while the GBS is Rs. 10,587.50 crore

In Telangana state, 93.09 per cent households have electricity. Across the country 77.38 per cent of households have a power connection.

#### **Pradhan Mantri LPG Panchayat scheme Led by The Ministry of Petroleum and Natural Gas**

The scheme was launched by Union Petroleum and Natural Gas Minister Dharmendra Pradhan at Mota Ishanpur village in Gandhinagar district in Gujarat. The LPG Panchayat scheme aims at spreading awareness among LPG users about how to properly use clean fuel and its useful benefits.

LPG panchayat will serve as an interactive platform for the inheritors of LPG cylinders under the Pradhan Mantri Ujjwala Yojana (PMUY). Moreover, for officials, NGOs and other stakeholders, to identify the issues faced by the rural population for using LPG.

#### **First electric bus service in India has been launched in Himachal Pradesh**

It is first of its kind electric bus service for tourist spot in India and first in world at an altitude of 13,000 feet. The electric bus service will ply between Manali and Rohtang and there will be 10 electric buses in fleet.

The electric bus, which is built by Goldstone Infratech, has been certified by the Automotive Research Association of India (ARAI), after extensive testing at the parts and vehicle level. With this initiative, Himachal has become the first in the world to ply electric buses at an altitude of 13 thousand feet. These buses will ply on 51km eco fragile stretch between Manali and Rohtang. Each electric bus has a capacity to carry 30 passengers and can cover 200 km with the fully charged batteries. The fare is yet to be fixed but it would be marginally higher than diesel buses.

#### **India's first advanced Homoeopathy Virology lab inaugurated in Kolkata**

The laboratory has been established to develop new drugs and technologies in homoeopathy to combat emerging challenges of viral diseases. It was inaugurated by Union Minister of State at Dr. Anjali Chatterjee at Regional Research Institute for Homoeopathy in Kolkata

The laboratory is established at a cost of Rs. 8 crore is the only one in India for conducting basic and fundamental research in Homoeopathy for viral diseases like influenza, Japanese encephalitis, dengue, chikungunya and swine flu

**Government launches online facility to resolve foreign trade issues**

Government has set up an online service facility 'Contact@DGFT' for resolution of their matters. This online service facility can be used by importers and exporters to resolve all foreign trade-related issues. Traders can raise all matters related to the directorate or other agencies of the Centre and States through this facility, which is activated at the DGFT website.

**India imposes duty on Chinese flat steel for five years**

Directorate General of Anti-Dumping and Allied Duties (DGAD) has announced countervailing duty (CVD) for a period of five years on certain Chinese flat steel products. The Union Finance Ministry has imposed 18.95% countervailing duty (CVD) on certain Chinese flat steel products for period of five years to protect domestic players from cheap subsidized imports

**President appoints governors for 5 states**

President Ram Nath Kovind appointed Governors in five states viz. Arunachal Pradesh, Bihar, Tamil Nadu, Assam and Meghalaya. Lieutenant Governor for Andaman and Nicobar Islands was also appointed. The appointments will come into effect from the date incumbents assume charge of new posts.

Appointed Governors are-

**Brigadier BD Mishra** - Governor of Arunachal Pradesh

**Satya Pal Malik** - Governor of Bihar

**Banwarilal Purohit** - Governor of Tamil Nadu

**Prof. Jagdish Mukhi** - Governor of Assam

**Ganga Prasad** - Governor of Meghalaya

**Devendra Kumar Joshi**- Governor of Andaman & Nicobar Islands

**CARA launches monthly 'Jan Sampark' Program to facilitate adoption**

The first of its kind programme was held in New Delhi by Central Adoption Resource Authority (CARA) of the Ministry of Women & Child Development in

September 2017. This program is launched to enable the public to have interaction with its officials and staff for seeking information related to Adoption as well as flagging their concerns.

CARA is statutory body of Ministry of Women & Child Development established under Juvenile Justice Act, 2015. It is a nodal body for adoption of India children.

**Government launches PENCIL Portal**

The Union Ministry of Labor and Employment launched Platform for Effective Enforcement for No Child Labor (PENCIL) Portal at National Conference on Child Labor. This portal is an electronic platform that aims at involving Centre, State, District, Governments, civil society and general public in achieving the target of child labor free society.

It encompasses various components- Child Tracking System, Complaint Corner, State Government, National Child Labour Project and Convergence. Each district will nominate District Nodal Officers (DNOs) who will receive the complaints. Within 48 hours of receiving complaints, DNOs will check genuineness of complaint and take rescue measures in coordination with police, if complaint is genuine.

**SPORTS**

**PV Sindhu beats Nozomi Okuhara to win 2017 Korea Open Super Series**

She became the first Indian shuttler to win the BWF Korean Open Super Series by defeating Nozomi Okuhara of Japan 22-20, 11-21, 21-18. The duo had already fought-out the longest match in the final of the BWF World Championship in August 2017, when Okuhara emerged victorious after a 110-minute match.

**US Open 2017**

Rafael Nadal on 10 September 2017 won his third US Open and 16th Grand Slam title in New York by defeating finalist Kevin Anderson, 6-3, 6-3, 6-4. Sloane Stephens won her first Grand Slam title, defeating Madison Keys in the final, 6-3, 6-0 & Martina Hingis and Jamie Murray won their second consecutive Grand Slam mixed doubles title, defeating Chan Hao-ching and Michael Venus in the final, 6-1, 4-6, [10-8].

**PERSON-IN-NEWS****Peggy Whitson returns to Earth after 665 days in space**

Astronaut Peggy Whitson returned to Earth late Saturday, wrapping up a record-breaking flight that catapulted her to first place for U.S. space endurance. Whitson's 665 days off the planet 288 days on this mission alone exceeds that of any other American and any other woman worldwide.

Whitson was the last one carried from the Soyuz. She immediately received a pair of sunglasses to put on, as she rested in a chair on the barren, wind-swept Kazak steppes. Medical personnel took her pulse, standard practice. She then received a bouquet of flowers with the greeting, "Welcome back, Peggy."

**Jagmeet Singh Becomes Canada's First Non-White Politician To Lead A Major Party**

Jagmeet Singh, a lawyer and the son of Indian Sikh immigrants from Punjab, became the leader of Canada's New Democratic Party winning 53.6% of votes cast by his party members. His victory was heralded globally as a groundbreaking step toward inclusiveness and diversity in Canadian politics.

**MS Dhoni becomes first wicket keeper in the world for 100 stumpings**

Former India captain Mahendra Singh Dhoni became the first wicket keeper in the world to complete a century of stumpings in one-day internationals.

He achieved this feat in his 301st ODI and in his 296th innings. In addition to 100 stumpings, Dhoni is third in the all-time list of dismissals with 383, behind Sangakkara (483) and Australian keeper Adam Gilchrist (472).

**DEATHS****Founder of 'Playboy' magazine passed away**

The founder & chief creative officer of iconic magazine 'Playboy', passed away in Los Angeles. Hefner died at his home in Holmby Hills, Los Angeles, California, on September 27, 2017, at the age of 91.

**First Air Marshal of India, Arjan Singh passed away**

The Indian Air Force Marshal served as Chief of Air Staff, was the he first and only officer of the Indian

Air Force to be promoted to five-star rank as Marshal. He was also recipient of Padma Vibhushan award.

In 2002, he became the first and only officer of the Indian Air Force to be promoted to five-star rank as Marshal of the Indian Air Force, equal to the army rank of Field Marshal

**Indian journalist Gauri Lankesh shot dead outside her residence**

Three unidentified men shot Gauri to death at her house in Rajarajeshwari Nagar, Bangalore.

She journalist turned social activist & editor in Lankesh Patrike, a Kannada weekly started by her father P. Lankesh, and ran her own weekly called Gauri Lankesh Patrik.

