

## NEST Newsletter (February 2021)

### CSIR

- Researchers from the Institute of Minerals and Materials Technology (IMMT), Bhubaneswar, under the Council of Scientific and Industrial Research (CSIR), **have developed an industrial instrument, 'Eye-on-Pellet', to monitor pellets of equal size distribution trend using a camera-based image-processing algorithm in real-time.**

<https://indusdictum.com/2020/02/18/immt-scientists-develop-monitoring-instrument-to-optimize-steel-production/>

### DoT

- The Department of Telecommunications (DoT) has **started readying a roadmap for spectrum allocation for the next 10 years in consultation with stakeholders**, said Sanjay Dhotre, Minister of State for Communications, Electronics and Information Technology. **The Minister also said 5G wireless technology would be introduced gradually in the country**, and would be rolled out fully once the ecosystem develops and the demand for such service improves.

<https://www.livemint.com/industry/telecom/dot-preparing-spectrum-roadmap-for-next-10-years-says-dhotre-11613051953749.html>

- Aimed at taking lead in 5G deployment, **India's ongoing project to set up 'Indigenous 5G Test Bed' is expected to be ready by October this year** to enhance national capability in telecom technology, giving a fillip to Indian telecom manufacturers. According to DoT, the test bed is likely to enhance national capability in telecom technology, develop indigenous Intellectual Property (IP) and give fillip to Indian telecom manufacturers.

<https://telecom.economictimes.indiatimes.com/news/expected-by-october-5g-test-bed-to-boost-telecom-technology/81245804>

### MeitY

- Union Minister for Electronics & Information Technology, Communications and Law & Justice Shri Ravi Shankar Prasad, held a virtual meeting with Amit Agarwal, Amazon's Global Senior Vice President and Country Head for India. Range of issues related to digital sector were discussed during this meeting. After this meeting **Amazon India has made an announcement to start manufacturing of electronics products from India.**

<https://pib.gov.in/PressReleasePage.aspx?PRID=1698424>

- The National Language Translation Mission, announced in Union Budget 2021-22, **will use artificial intelligence, machine learning and speech recognition technologies to build the next generation government apps and websites that will be “conversational” like Amazon's Alexa or Apple’s Siri**, government officials said. The mission will build on existing projects in the Ministry of Electronics and IT (MeitY) which has been working on various applications like text-to-speech, text-to-text, etc.

<https://economictimes.indiatimes.com/tech/technology/ai-ml-to-drive-budget-2021-national-language-translation-mission/articleshow/80674800.cms>

## **NASSCOM**

- Maharashtra is planning to set up a large incubation center for startups near the financial capital soon to give a boost to new-age enterprises. The state is also determined to make Mumbai as one of the fintech hubs in Asia **and is planning to set up a large incubation center near Mumbai with Nasscom** in the near future.

<https://economictimes.indiatimes.com/tech/startups/maharashtra-to-create-incubation-centre-for-startups-near-mumbai-with-nasscom/articleshow/81126990.cms>

- NASSCOM Foundation kicked off the first session of their #TechForGood eSeries in partnership with Accenture, **where eminent industry stalwarts came together to share their valuable insights on 'Fuelling India’s Demographic Dividend by Unleashing Technology and Human Ingenuity'**.

<https://www.cnbctv18.com/technology/nasscom-foundation-kicks-off-the-techforgood-eseries-2021-8338641.htm>

- Intellipaat, India's leading executive online education platform, **in partnership with NASSCOM FutureSkills®, has announced the launch of 3 digital skills programme for training young professionals on the FutureSkills enterprise platform**. There has been an exponential rise in the number of businesses adopting new-age technologies. This has necessitated availability of skilled talent pool on these technologies that can deliver solutions as per the changing consumer & business needs.

<http://www.businessworld.in/article/Intellipaat-amp-NASSCOM-FutureSkills-174-join-hands-to-train-professionals-on-digital-skills-like-AWS-DevOps-and-Web-Development/09-02-2021-375423/>

## **DRDO**

- In a boost for the country's surveillance capabilities to monitor activities of both military warships and merchant shipping in the Indian Ocean Region (IOR), **the 'Sindhu Netra'**

**satellite developed by a team of young scientists from Research and Development Organisation (DRDO) was successfully deployed in space.**

[https://economictimes.indiatimes.com/news/defence/drdos-sindhu-netra-surveillance-satellite-deployed-in-space-will-help-to-monitor-indian-ocean-region/articleshow/81257432.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/news/defence/drdos-sindhu-netra-surveillance-satellite-deployed-in-space-will-help-to-monitor-indian-ocean-region/articleshow/81257432.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

- The DRDO handed over Licensing Agreements for ToT (LAToT) for 14 DRDO developed technologies to 20 industries. The technologies transferred are from the area of electronics, laser technology, armaments, life sciences, materials science, combat vehicles, naval systems, aeronautics, sensors, etc. The product technologies transferred are Low Level Transportable Radar (LLTR), Inertial Navigation System for Ship Application (INS-SA), Long Range Optical Target Locator (OTL 1500), Hand Held Through Wall Imaging Radar (HH-TWIR) and Commander TI (Thermal Imager) Sight for T-72 Tank are the sensor technologies transferred to various industries. NMRL-Fuel Cell based Air Independent Propulsion Technology for Naval Submarines named NMFCAIP is a unique capability developed by DRDO and now transferred to the industry. Multi Agent Robotic System (MARS) will be produced by Indian industry based on DRDO design.

<https://indiaeducationdiary.in/drdo-hands-over-licensing-agreements-for-transfer-of-technology-for-14-technologies-to-20-industries/>

- The joint user trials for anti-tank guided missile systems, developed indigenously by Defense Research and Development Organization (DRDO), have been carried out successfully in desert ranges. The trials of Helina (Army Version) and Dhruvastra (Air Force Version) missile systems have been carried out from Advanced Light Helicopter (ALH) platform. Defense Minister Rajnath Singh congratulated DRDO, the Army and Air Force for the achievements.

[https://www.business-standard.com/article/current-affairs/successful-user-trials-of-drdo-developed-anti-tank-guided-missile-systems-121021900816\\_1.html](https://www.business-standard.com/article/current-affairs/successful-user-trials-of-drdo-developed-anti-tank-guided-missile-systems-121021900816_1.html)

- The Defense Research and Development Organization (DRDO) will strengthen its ties with the IIT Bhubaneswar (IIT-BBS) further to develop it as a center of excellence for promoting defense research.

<https://www.newindianexpress.com/cities/bhubaneswar/2021/feb/13/drdo-iit-bhubaneswar-to-strengthen-defence-research-ties-2263485.html>

- India conducted maiden flight test of Vertically Launched Short Range Surface to Air Missile (VL-SRSAM) from a defense facility off Odisha coast. Defense sources

said two rounds of the indigenously developed missile were tested from a static vertical launcher positioned at the Integrated Test Range and were fired against simulated targets.

<https://www.newindianexpress.com/nation/2021/feb/22/drdo-successfully-launches-vlsrsam-twiceoffodisha-coast-2267490.html>

#### HAL

- **An Indian startup in collaboration with Hindustan Aeronautics Limited (HAL) is developing a solar-powered surveillance drone that can cruise at an altitude of up to 65,000 feet (19,812 meters).** The drone, named Infinity, is being developed as part of India's CATS (Combat Air Teaming System) unmanned drone warfare program with an eye on China, and could be deployed in three to five years.

<https://www.thedefensepost.com/2021/02/05/india-solar-drone-infinity/>

#### ISRO

- **ISRO has lined up 14 missions for launch in 2021, including the space agency's first unmanned mission later this year,** its Chairman K Sivan said. ISRO plans to take up two unmanned space missions before the Gaganyaan-manned space mission. The Gaganyaan mission envisages sending three Indians to space by 2022.

<https://www.hindustantimes.com/india-news/14-missions-lined-up-for-launch-in-2021-says-isro-chairman-k-sivan-101614511876421.html>

- **India's Polar rocket PSLV C-51 carrying Amazonia-1 of Brazil and 18 other satellites blasted off from Sriharikota spaceport in the first mission of the year for ISRO.** At the end of a nearly -26hour countdown, the Polar Satellite Launch Vehicle PSLV-C51 lifted off from the first launch pad of the Satish Dhawan Space Centre (SHAR).

<https://economictimes.indiatimes.com/news/science/watch-nasa-releases-new-video-from-perseverance-rover-on-mars/videoshow/81163836.cms>

- **Indian Space Research Organization (Isro) is exploring the possibility of developing a new propulsion technology to fuel spacecraft for its future deep space missions** called Radioisotope Thermoelectric Generator (RTEG) technology.

[http://timesofindia.indiatimes.com/articleshow/80801653.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://timesofindia.indiatimes.com/articleshow/80801653.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

#### MoES

- The Ministry of Earth Sciences has rolled out the draft of the Blue Economy policy inviting suggestions from stakeholders. **The draft suggests offering educational programs on various technical and managerial skills in universities and engineering or technical institutes of the coastal states.**

<https://www.ndtv.com/jobs/draft-blue-economy-policy-moes-invites-suggestion-till-february-27-2372485>

- The Union Government has increased the budget of Department of Science and Technology and Ministry of Earth Sciences by 30 per cent as compared to the revised estimate of 2020-21. **Science and Technology Minister Dr Harsh Vardhan said that a Deep Ocean Mission will be launched** with a budget outlay of over INR four thousand crore.

<http://newsonair.com/Main-News-Details.aspx?id=409909>

## **MNRE**

- The proposed **National Hydrogen Energy Mission for generating hydrogen from green power sources will soon be placed for the Cabinet approval** as soon as the document will be finalized, according to the Ministry of New and Renewable Energy (MNRE).

<https://www.outlookindia.com/newscroll/national-hydrogen-energy-mission-to-soon-go-for-cabinet-approval-mnre/2026683>

## **Ministry of Finance**

- Finance Minister Smt. Nirmala Sitharaman said there has been a manifold increase in digital payments in the recent past **and the government proposed INR 1,500 crore-scheme to promote digital payments in the country.**

[https://www.business-standard.com/budget/article/budget-2021-fm-proposes-rs-1-500-cr-scheme-to-promote-digital-payments-121020100560\\_1.html](https://www.business-standard.com/budget/article/budget-2021-fm-proposes-rs-1-500-cr-scheme-to-promote-digital-payments-121020100560_1.html)

## **DEVELOPMENTS IN THE PRIVATE SECTOR**

### **TECH-MAHINDRA**

- IBM Corp. and Tech Mahindra Ltd **have partnered to jointly develop solutions for clients that would potentially generate \$1 billion in revenue over the next three**

**years.** The two companies, who have been in a global partnership for more than two decades, will work on five strategic focus areas comprising 5G, automation, hybrid cloud, cyber security, data and artificial intelligence (AI).

<https://www.livemint.com/companies/news/ibm-tech-mahindra-partner-to-create-1-billion-ecosystem-in-3-years-11613484234338.html>

## **RELIANCE**

- India's conglomerate Reliance Industries has partnered with Facebook Inc, Google and fintech player Infibeam to set up a national digital payment network. Last year, India's central bank invited companies to forge new umbrella entities (NUEs) to create a payments network that would rival the system operated by the National Payments Council of India (NPCI), as it seeks to reduce concentration risks in the space.

<https://www.hindustantimes.com/business/reliance-partners-with-google-facebook-for-digital-payment-network-bid-101614424859210.html>

## **ADANICONNEX**

- AdaniConneX **will focus on building a network of hyperscale data centers in India, starting with Chennai, Navi Mumbai, Noida, Vizag and Hyderabad markets.** Development and construction at these sites have already begun. "India currently has one of world's largest data subscriber population and to address the need for a reliable infrastructure to support cloud, content, network, IoT, 5G, AI and enterprise requirements, data centers are a fundamental infrastructure need of a nation", Mr. Gautam Adani said.

<https://www.businesstoday.in/current/corporate/adani-enterprises-edgeconnex-join-forces-to-provide-data-centre-solutions-in-india/story/432133.html>

## **BOSCH**

- Betting big on digital strategies, global supplier of technology and services Bosch has invested INR 800 crore to upgrade its campus in Adegudi, Bengaluru, into an artificial intelligence of things (AIoT)-enabled 'smart campus', a top company executive said.

<https://auto.economictimes.indiatimes.com/news/auto-components/bosch-invests-inr-800-cr-to-transform-its-bengaluru-location-into-smart-campus/81192735>

## **ARTICLES/ EVENTS OF INTEREST**

### **Observer Research Foundation (ORF)**

### Contemporising Data Protection Legislation - (Article by Rahul Sharma)

The 30-member Joint Parliamentary Committee (JPC) reviewing the Personal Data Protection (PDP) Bill 2019 has proposed 89 amendments, an additional clause and amendments in the schedule following a marathon 66 sittings and 160 hours of deliberation—the highest for any bill.

<https://www.orfonline.org/expert-speak/contemporising-data-protection-legislation/>

### Digital Economy and the Union Budget 2021-22: Some Bold Moves, Some More Steps (Article by Vikas Khaturia)

The COVID-19 pandemic has been a catalyst in propelling the use of technology. Areas that were hitherto considered the exclusive domain of physical infrastructure have now transitioned into the online world.

<https://www.orfonline.org/expert-speak/digital-economy-and-the-union-budget-2021-22-some-bold-moves-some-more-steps/>

### Adding heft to diplomacy with some help from science (Article by Prof Harsh V Pant)

The Ministry of External Affairs too has seen a restructuring with a Cyber Diplomacy Division, an E-Governance & Information Technology Division **and a New Emerging & Strategic Technologies Division to manage science and technology issues in the nation's diplomatic matrix.**

### **Carnegie India**

### Govt can ban Bitcoin but for 'digital rupee' to succeed, India has to do a lot (Article by Rajesh Bansal and Prateek Jha)

The Cryptocurrency and Regulation of Official Digital Currency Bill 2021 signals India's first clear intent to launch the 'digital rupee'. Once passed, the Reserve Bank of India will join a growing list of central banks across the world that are seriously exploring the introduction of a Central Bank Digital Currency, or CBDC.

<https://theprint.in/opinion/govt-can-ban-bitcoin-but-for-digital-rupee-to-succeed-india-has-to-do-a-lot/608542/>

### **Gateway House**

### Why Ambanis, Tatas, Mahindras need to work together for India's new Hydrogen Mission (Article by Business Today)

Chaitanya Giri, a fellow of space and ocean studies with Mumbai-based think tank Gateway House says in his paper on Methane Economy that the need of the hour is a coalition of stakeholders, much like the Hydrogen Council or the European Hydrogen Coalition.

<https://www.businesstoday.in/current/economy-politics/why-ambanis-tatas-mahindras-need-to-work-together-for-indias-new-hydrogen-mission/story/430414.html>

## **RSTV**

### *The Big Picture: Need for responsible tech*

The show analyses the scope and opportunities for the tech sector to evolve for larger good of mankind, and the growing need for responsible use of technology.

#### **Guests**

Sangeeta Gupta, Senior Vice President & Chief Strategy Officer, NASSCOM  
Abhishek Singh, CEO, NeGD, Ministry of Electronics and Information Technology (MeitY), Government of India  
Karnika Seth, Advocate, Supreme Court

[https://www.youtube.com/watch?v=f5bCqslDHIU&feature=emb\\_title&ab\\_channel=RajyaSabhaTV](https://www.youtube.com/watch?v=f5bCqslDHIU&feature=emb_title&ab_channel=RajyaSabhaTV)

### *Discussion Today - Social media and OTT: New Guidelines*

The Ministry of Electronics and Information Technology and Ministry of Information and Broadcasting said it undertook elaborate consultations among themselves in order to have a harmonious, soft-touch oversight mechanism in relation to social media platform as well as digital media and OTT platforms.

#### **Guests**

Karan Taurani, Vice President, Elara Capital  
Anuj Agarwal, Advocate, Cyber Law

[https://www.youtube.com/watch?v=Cmurkm9zxEw&ab\\_channel=RajyaSabhaTV](https://www.youtube.com/watch?v=Cmurkm9zxEw&ab_channel=RajyaSabhaTV)

## **NITI-Aayog**

### *Need to get into cutting edge tech to bolster exports- Amitabh Kant, CEO, NITI Aayog*

India now needs to get into cutting edge technology to boost exports which will benefit sectors like telecom, automobiles, battery storage devices and solar energy, Niti Aayog CEO Amitabh

Kant said speaking at the launch event for CII's report 'Foreign Trade & Investment in India: Unlocking Key Opportunities through Strategic Reforms'.

<https://www.businesstoday.in/current/economy-politics/need-to-get-into-cutting-edge-tech-to-bolster-exports-amitabh-kant/story/432186.html>

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