

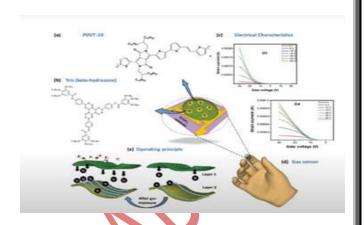
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 Union Ministry of Agriculture signs MoU with Microsoft.



- Union Ministry of Agriculture and Microsoft India inked a Memorandum of Understanding (MoU) for a pilot project in 100 villages of 6 states. On this occasion.
- Microsoft has come forward to start a pilot project in selected 100 villages in 10 districts of 6 states (Uttar Pradesh, Madhya Pradesh, Gujarat, Haryana, Rajasthan and Andhra Pradesh) to develop farmer interface for smart and well-organized agriculture, including post-harvest management and distribution. For this project, Microsoft has joined in with its local partner, CropData. In this regard, a MoU and tripartite agreement have been exchanged in the presence of Cabinet Minister Shri Tomar and the two Ministers of State. The project is for one year and both sides inking the MoU will bear the cost on their own. This project will carry out various tasks for the betterment of farmers in the selected 100 villages, which will enhance their income. This project will reduce the input costs for farmers and make farming easy. It is proposed to undertake similar pilot projects with other public and private players to create a vibrant digital agro-ecosystem in the country.
- The government aims to increase the income of farmers by removing the bottleneck of inconsistent information. A number of new initiatives have been launched to achieve this goal. A major initiative, in this regard, is the creation of Agri-Funds based on the National Farmers Database.
- > The government is preparing a farmer database by linking the land records of farmers across the country. The data related to PM Kisan, Soil Health Card and Pradhan Mantri Crop Insurance Scheme, available with the government, have been integrated and the process of inclusion of other data is going on.
- Union Agriculture Minister Shri Tomar has also issued directives for Geo tagging of all the assets that will be created by the virtue of all schemes of the Ministry of Agriculture.

#### 2. New electronic nose



Scientists have developed an electronic nose with biodegradable polymer and monomer that can detect hydrogen sulphide (H2S), a poisonous, corrosive, and flammable gas produced from swamps and sewers.

H2S is the primary gas produced from the microbial breakdown of organic matter in the absence of oxygen, and this necessitates easy detection of its emission from sewers and swamps.

Responding to this challenge, scientists from the Centre for Nano and Soft Matter Sciences (CeNS), Bangalore, an autonomous institute of the Department of Science & Technology, Government of India, in collaboration with their counterparts from Saudi Arabia, have developed an exceptionally sensitive and selective H2S Gas sensor developed by impersonating the neuron responsible for identification of airborne molecules or olfactory receptor neuron (ORN).

The fabricated sensor consists of a heterostructure consisting of two layers – the top layer a monomer and is realized with a novel chemical tris (keto-hydrazone), which is both porous and contains H2S specific functional groups, and the bottom layer is the active channel layer which plays a key role in altering the current and mobility of charge carriers.

Thus the synergistic combination helps to pre-concentrate the H2S molecules, initiate an acid-base chemical reaction, and thereby brings a change in the majority carriers (holes) of the channel region in the device. The capacitance sensor (a sensor that detects nearby objects by their effect on the electrical field created by the sensor) developed by the scientists showed an excellent sensitivity in detecting H2S gas with an experimental limit of detection of around 25 parts per billion. It also has high ambient stability of around 8 months without compromising sensing performance.



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3. Online Grievance Management Portal.



- Union Minister for Communication & IT and Law & Justice Shri Ravi Shankar Prasad launched the "Online Grievance Management Portal of National Commission for Scheduled Castes (NCSC)" in the august presence of Minister of State for Social Justice & Empowerment Shri Rattan Lala Kataria,
- NCSC Grievance Management portal would make it easier for Scheduled Castes population of our country to register their complaint from any part of the country. The portal shall enable them to file their application and other atrocity and services related grievances online and to get them addressed in a time bound manner.
- The portal designed in collaboration with the Bhaskaracharya Institute for Space Applications and Geoinformatics (BISAG-N), a Centre of Excellence under the Ministry of Electronics and Information Technology, Government of India will facilitate an end-to-end e-filing of complaints and grievances and their tracking. Finally, it is intended to make the hearing process work on similar lines as e-courts. This portal is linked to the Commission's website and one can file one's complaint upon registering on it. The facility to upload documents and audio/video files is also available. This would supplement the physical submission of complaints and grievances.
- The National Commission for Scheduled Castes (NCSC) was set up under the Article 338 of the Constitution of India with the objective to investigate and monitor all issues pertaining to the safeguards provided for the Scheduled Castes under any law for the time being in force or under any order of the Government of India. The Commission also enquires into specific complaints with respect to the deprivation of rights and safeguards provided for the Scheduled Castes. The NCSC renews its commitment to serve the cause of the SC community as mandated in the Constitution and policies of the government.

 Community Mental-Health Digital platform MANAS launched by the Principal Scientific Advise.



- The Principal Scientific Adviser to the Government of India Prof. K VijayRaghavan virtually launched the "MANAS" App to promote wellbeing across age groups. MANAS which stands for Mental Health and Normalcy Augmentation System was endorsed as a national program by the Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC).
- MANAS is a comprehensive, scalable, and national digital wellbeing platform and an app developed to augment mental well-being of Indian citizens. MANAS App integrates the health and wellness efforts of various government ministries, scientifically validated indigenous tools with gamified interfaces developed/researched by various national bodies and research institutions.
- MANAS was initiated by the Office of the Principal Scientific Adviser to the Government of India. It was jointly executed by NIMHANS Bengaluru, AFMC Pune and C-DAC Bengaluru.

### 5. traditional New Year



Various regions of the country are celebrating traditional new year in the form of Ugadi, Gudi Padava, Chaitra Sukladi, Cheti Chand, Vishu, Puthandu and Bohag Bihu. According to the Luni-Solar calendar, the



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- first day of the full moon of Chaitra is the beginning of the hindu new year.
- People of Andhra Pradesh and Telangana call it 'Ugadi', and in Karnataka, it is 'Yugadi'. In Maharashtra, it is celebrated as 'Gudi Padwa', and in Tamil Nadu, it is observed as 'Puthandu'. In Kerala, the day is celebrated as 'Vishu', In Punjab it is 'Vaisakhi' and in Odisha, it is called 'Pana Sankranthi'. In West Bengal, it is called 'Poila Boishakh' and in Assam, 'Bohag Bihu.
- Telugu speaking people across the world are celebrating their Telugu New Year day, Ugaadi . Though the COVID Pandemic situation dampens the gaiety, people are observing the customary festivities with traditional fervour. The festival is being celebrated across the two Telugu states, Telangana and Andhra Pradesh to mark the beginning of the Hindu Lunar calendar.
- Prime Minister Narendra Modi too has greeted the nation on the occasion of Chaitra Sukladi, Ugadi, Gudi Padwa, Cheti Chand, Baisakhi, Vishu, Navreh and Sajibu Cheiraoba being celebrated by citizens across the country. He also extended his greetings on the beginning of the new Samvat Year 2078 and wished for happiness and joy in everyone's life.
  - Atal Innovation Mission & Dassault Systemes
     Fondation announces partnership for seeding future innovators and entrepreneurs.



- Atal Innovation Mission (AIM), NITI Aayog today signed an agreement with Dassault Systemes Fondation to jointly work towards providing a digitally rich ecosystem of Innovation in India and promoting STEM based innovation and entrepreneurship among aspiring young minds across the country.
- One of the flagship programs of AIM, the Atal Tinkering Labs (ATLs) has played a pivotal role in fostering creativity and imagination amongst school children. Dassault Systemes Fondation dedicated to transform the future of education and research in India with 3D technologies and virtual universes, is all set to contribute to the ATL program in three broad areas project based, self-paced learning content, hackathons and challenges and inter-country academia collaborations

- Dassault Systemes Fondation has designed and developed an initiative as part of its CSR objectives, initial set of 'Ready to use' well documented self-learning training cum instructional playbook, with appropriate videos for visual understanding which they would be sharing with the ATL students that they can access digitally. This playbook comes with instructional videos for teachers so that it can be implemented with minimal support from experts. This content shall be available for AIM to offer to all schools with ATLs and other schools as well as out of school children in India for use.
- Under this Sol, Dassault Systemes Fondation shall design and organise innovative challenges / hackathons for ATLs, promoting problem solving skills, scientific and technology based exploratory learning skills and innovation culture amongst students and teachers.
- Through this collaboration, AIM and Dassault Systemes Fondation shall jointly encourage inter country collaborations amongst schools and school students for collaborative science / technology learning, skilling and cultural interactions amongst students.

### 7. Raisina Dialogue-2021

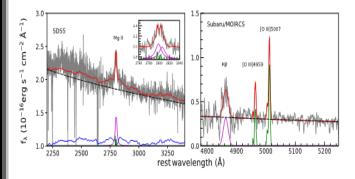


- ➤ The 6th Edition of the prestigious Raisina Dialogue, jointly organised by the Ministry of External Affairs and the Observer Research Foundation, will be held virtually from 13-16 April, 2021.
- > This edition of Raisina dialogue takes place at a watershed moment in human history.
- The theme for the 2021 Edition is "#ViralWorld: Outbreaks, Outliers and Out of Control.
- > The Prime Minister called upon the global community to introspect on some pertinent questions in the present context.
- The Prime Minister emphasized that global systems should adapt themselves, in order to address the underlying causes and not just the symptoms. The Prime Minister called for keeping humanity at the centre of our thoughts and action, and creatingsystems that address the problems of today and the challenges of tomorrow.



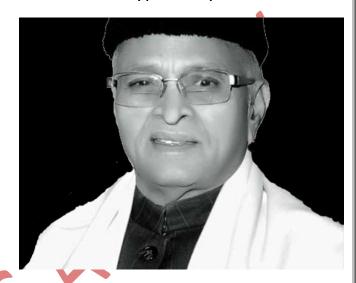
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 Scientists discover the farthest Gamma-ray emitting active galaxy with narrow emission lines.



- Astronomers have discovered a new active galaxy identified as the farthest gamma-ray emitting galaxy that has so far been stumbled upon. This active galaxy called the Narrow-Line Seyfert 1 (NLS1) galaxy, which is about 31 billion light-years away, opens up avenues to explore more such gamma-ray emitting galaxies that wait to meet us.
- Ever since 1929, when Edwin Hubble discovered that the Universe is expanding, it has been known that most other galaxies are moving away from us. Light from these galaxies is shifted to longer (and this means redder) wavelengths in other words, it is red-shifted. Scientists have been trying to trace such red-shifted galaxies to understand the early Universe.
- Scientists from ARIES, an autonomous institute of the Department of Science & Technology (DST), Government of India, in collaboration with researchers from other institutions, studied around 25,000 luminous Active galactic nuclei (AGN) from the Sloan Digital Sky Survey (SDSS), a major optical imaging and spectroscopic survey of astronomical objects in-operation for the last 20 years and found a unique object that emits high-energy gamma rays located at a high redshift (more than 1). They identified it as a gamma-ray emitting NLS1 galaxy, which is a rare entity in space.
- For the research, the scientists used one of the largest ground-based telescopes in the world, the 8.2 m Subaru Telescope located at Hawaii, USA. They helped establish a new method to find high redshift NLS1 galaxies that were not known previously by comparing different emission lines in their spectra. The new gamma-ray emitting NLS1 was formed when the Universe was only about 4.7 billion years old as compared to its current age of about 13.8 billion years.

9. Former Chief Election Commissioner G.V.G. Krishnamurty passes away.



- Former Chief Election Commissioner G.V.G. Krishnamurty passed away on Wednesday due to age-related ailments, He was 86.
- Krishnamurty "made an exemplary contribution during his tenure in the Commission as Election Commissioner from October 1, 1993, to September 30, 1996".
- ➤ His contribution particularly in strengthening laws and procedures of conducting elections will be long remembered by the commission.

#### 10. Facebook and CleanMax



- Facebook and CleanMax announced a partnership to support renewable power from wind and solar facilities in India.
- We're excited to announce this important step that is helping us support our operations in the region, including our offices in India, with 100 per cent renewable energy," Urvi Parekh, Head of renewable energy at Facebook said in a statement.



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- Under the agreement, Facebook and CleanMax will assemble a portfolio of wind and solar projects supplying renewable power into India's electrical grid.
- The first project to be brought online in the agreement is a 32MW wind project located in Karnataka, India. This will be followed in states where the tech giant is operational. Approximately half of the project capacity has recently been commissioned and is already generating power.
- This partnership with CleanMax will enable new solar and wind power to be generated in the near future, contributing to the decarbonisation of the Indian electrical grid.
- The social media giant also announced that it has reached 100 per cent renewable energy and achieved net zero emissions for its global operations.