

Science, Technology, Research, Innovation & DEvelopmentS

BRINGS NEWS ON S&T DEVELOPMENT FROM DST SUPPORT AND BEYOND

EDITORIAL

FROM VIGYAN PRASAR DIRECTOR'S DESK

The last two months witnessed a number of scientific collaborations that opened new frontiers of expertise sharing in multiple emerging areas of science. A high-level India-Sweden innovation dialogue was inaugurated by Hon'ble Prime Minister of India, Shri Narendra Modi and His Majesty, the King of Sweden, Carl XVI Gustaf, bringing together the best experts of the two countries for joint innovation policy formulation. Meanwhile, the ICMR-DST-AMED workshop planned the future of Indo-Japan collaborations. India also excelled at the international platforms in S&T as a young scholar from the country won the ASEAN India Grassroots Innovation Forum. The result of several collaborations saw success stories unfold as 15 innovations brought about through collaborations between Indian companies and those abroad were awarded by the Hon'ble Minister for Science and Technology, Earth Sciences and Health and family welfare.

Besides this you can also enjoy reading interesting science and technology stories like that of a nano drug delivery system to simplify Psoriasis treatment, a new technology for recycling plastics, a device that can determine antibiotic susceptibility, affordable milk chilling technology and how technology helps Assam village women craft their sustainable future.

COVER STORY



INDIA SWEDEN HIGH-LEVEL INNOVATION DIALOGUE ANNOUNCES SEVERAL COLLABORATIONS

The India Sweden Dialogue was jointly inaugurated by the Prime Minister of India Hon'ble Narendra Modi and His Majesty, the King of Sweden Carl XVI Gustaf. The dialogue created a platform with key stakeholders in a triple helix format from the government, private sector, and academia to provide overall strategic direction for joint innovation policy formulation. The dialogue jointly formulated and implemented shortand long-term projects in strategic areas such as, but not limited to, circular economy, digital health, artificial intelligence, sustainable energy, and future mobility.

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From Vigyan Cover Story

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VIGYAN PRASAR (An Autonomous Organisation of DST)

NEWS HIGHLIGHTS



Indians excel at ASEAN India Grassroots Innovation Forum

Mr Thirupati Nannam and Mr Pranjal Srivastava from India have made the country proud by winning 1st prize both in Grassroots Innovation Competition and Student Innovation Competition, respectively, held during 2nd ASEAN India Grassroots Innovation Forum 2019 at Davao City, Philippines between 20th and 22nd November 2019.

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Dr. Erik Jacquemyn honoured with Kalinga Chair

Dr. Erik Jacquemyn, Science

Communicator from Belgium, has been honoured with Kalinga Chair introduced by Government of India in 2001. As holder of the Kalinga Chair, the winner travels to India for a period of two to four weeks as the guest of the Government of India. The Chair also comprises a token honorarium of US\$ 5,000.

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15 GITA supported innovators awarded as S&T Minister calls for tech & innovation to be Backbone of Development

Dr. Harsh Vardhan, Hon'ble Minister of Health & Family Welfare, Science & Technology, Earth Sciences, Govt. of India, recognized and felicitated 15 successful projects supported by Global Innovation and Technology Alliance (GITA) (PPP between (TDB) of the (DST) and (CII) on the 8th foundation day of GITA.



Summit discussed Himalayan climate issues and Spring-Shed Management

Experts discussed Vulnerability and Risk Assessment in the Indian Himalayan Region (IHR), State Level Training Programme in IHR, and ways of Enhancing Knowledge on Spring-Shed Management in IHR as well as the Indian Himalayas Climate Adaptation Programme (IHCAP).

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A new device can determine antibiotic susceptibility for effective treatment

National Hub for Healthcare Instrumentation Development (NHHID), Anna University, Chennai has developed a

new device to determine antibiotic susceptibility of bacteria infecting the individuals.

FORTHCOMING EVENTS

Indian Science Congress

The largest gathering of scientific luminaries from countries across the world with its focus on 'Science & Technology: Rural Development,' the IO7th Indian Science Congress scheduled to be held during January 3-7, 2020, at University of Agricultural Sciences, Bengaluru.

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Nano drug delivery system developed can simplify Psoriasis treatment

A nanocarrier based drug delivery system developed by ISF College of Pharmacy, Moga, Punjab can ease the treatment of skin conditions like Psoriasis. It reduces the frequency of skin application to once a day as compared to three times a day in case of a conventional dosage of medicine.

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🗄 POPULAR SCIENCE STORIES 🕹



Technology helps Assam village women craft their sustainable future

A Common facility centre at Chanoabori village has been established for developing, boarding technologies, and providing training for location specific technologies for women. The women are developing value added products and convenience foods from food crops, adopting smokeless cook stoves and biosand filters for access to clean drinking water.

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Affordable milk chilling technology at the point of harvest can benefit cattle farmers

Indian PhD scholar from ICAR-National Dairy Research Institute (NDRI), Bangalore Mr. Ravi Prakash, received the BRICS Young Innovator Prize for inventing a nano-particle based affordable unit for chilling milk while harvesting for small and marginal dairy farmers. The young scientist received the first prize worth \$25,000 at the 4th BRICS-Young Scientist Forum (YSF) - 2019 held during 6-8 November 2019 in Rio de Janeiro, Brazil.

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ICMR-DST-AMED workshop deliberate on future Indo-Japan collaborations

Research themes were identified for future collaboration of Department of Science & Technology (DST), Indian Council of Medical Research (ICMR) and Japan Agency for Medical Research & Development (AMED). Tthese included interoperable platform for data management under Information and Communication Technology (ICT) and its applications for early detection of cancer, air pollution and innovative medical devices, collaboration for zoonotic infections.



> NEW INITIATIVES

- ► India-Denmark Joint research on Cyber Security—Call for Proposals
- ▶ India-Uzbekistan Joint research Call for Proposals-2019

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MEET THE SCIENTIST

LT GEN GIRISH KUMAR



FEATURED INSTITUTION



Wadia Institute's Garhwal Himalayas glacial study used in global climate change programme

The Wadia Institute of Himalayan Geology has been monitoring recession of glaciers for more than ten years in the Garhwal Himalayas by establishing a permanent monitoring station.

The data generated in the study of glaciers in the Garhwal Himalayas was used in global climate change programme. The Institute has been nurturing a monitoring system in an integrated manner by hosting 'Multi-Parametric Geophysical Observatory (MPGO)' at Ghuttu (Tehri), Uttarakhand, which can help earthquake precursory study in Himalayan region. READ MORE

Surveyor General of India (SGI), Survey of India (SoI)

Lt Gen Girish Kumar is known for his exemplary contribution in the geospatial field, and he has been awarded the Vishisht Seva Medal and Chief of Army Staff commendation card in his career. He is a renowned expert in the geospatial domain with almost 37 years of service experience in wide-ranging areas of Surveying, Mapping, Geospatial Policy, GIS applications, Digital data generation, Geospatial Infrastructure, International boundary matters etc. He is also serving as the Additional Director General (ADG), Military Survey (MO-GSGS), Ministry Of Defence since October 2017.

As Civil Engineering Graduate of Punjab Engineering College (PEC), he had joined the Corps of Engineers in the year 1980 and joined SoI in 1982. He possesses wide-ranging work experience in various positions and capacities covering Technical, Planning, Policy Making, Finance, Administration, Human Resource Management activities in SoI and Military Survey.

He is an extraordinary leader and visionary with noted achievements to his credit like playing a key role in formulating the National Map Policy (NMP) of the Government of India in 2005, pivotal work in preparing the design document and standards for National Land Record Modernization Programme (NLRMP) in year 2005, Modernization of tidal gauge network of country, Digital Map Production in Sol, Finalization of India-Bangladesh boundary protocol-2011 as Advisor to MEA, etc.

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