

# STRIDES

Science, Technology, Research, Innovation & DEvelopmentS

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

## EDITORIAL

The National Science Day (NSD) Celebrations this month held a special significance in the year of India's G20 presidency with the theme focusing on Global Science for Global Wellbeing. Confidence was demonstrated in the voices of science leaders buoyed by the fact that India has marked itself one of the topmost internationally in publications, innovations and startups.

They also underlined that the country has proved its strength in developing frugal innovations, low cost vaccines as well as low cost space missions and contributed to some of the most significant global scientific projects.

As the NSD Celebration at the capital laid the platform for leaders in science to brainstorm ways of steering a collective leadership for global science in the year of India's G 20 presidency, scientific institutes and educational institutions all over the country celebrated the day through lectures and other science popularization activities, glimpses of which are reflected in the newsletter.

In the NSD spirit of reaching science and its benefits to the people, the month also saw Geospatial policy approved by the cabinet opening up public access to geospatial data and the technology. G20 science engagement events brought countries together and climate disasters and resiliency were discussed as semiconductor and energy storage research saw new achievements.

—DR AKHILESH GUPTA, EDITOR-IN-CHIEF

## COVER STORY



Union Minister Dr Jitendra Singh launches V A I B H A V Fellowships for Indian D i a s p o r a abroad to mark the National Science Day

Dr Jitendra Singh said, the Vaibhav Fellowship aims at improving the research ecosystem of India's Higher Educational Institutions by facilitating academic and research collaborations between Indian Institutions and the best institutions in the world through mobility of faculty/researcher from overseas institutions to India.

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Union Minister Dr Jitendra Singh says, Troika of Space, Drone and Geospatial Policy will propel India as a pre-eminent Technological Power in a few Years from now

Dwelling on Geospatial Policy, Dr Jitendra Singh said, this technology is going to be an instrument of change in 21st Century India as apart from huge revenue generation potential, it will also open huge employment opportunities.

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INSIDE THE E-NEWSLETTER

NSD Celebration in DST Institutions



# POPULAR SCIENCE STORIES



## Resiliency & Sustainability Summit discusses present and futuristic disaster risks & climate contexts

The Resiliency & Sustainability Summit: Vision 2047 brought together experts from all over India and deliberated upon the key aspects of present and futuristic disaster risks and climate contexts as well as their changing scenarios.

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## Science administrators discuss Research and Innovation for Equitable Society at G20 RIIG inception meeting at Kolkata

The initiation meeting of the Research and Innovation Initiative Gathering (RIIG), an important part of India's science engagements, kicked off in Kolkata, bringing together scientists & administrators from different areas together to discuss research and innovation for equitable society.

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## Artificial synapse developed for brain-like computing with industry-compatible Nitride

## Semiconductors

Scientists have used scandium nitride (ScN), a semiconducting material with supreme stability and Complementary Metal-Oxide-Semiconductor (CMOS) compatibility, to develop brain-like computing.

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## Affordable smart windows with energy storage capability can replace traditional ones in modern structures

Indian scientists have developed a cost-effective polymeric electrochromic smart window which can store energy using hybrid transparent electrodes, as well as carry out transparency switching.

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## Grassroots Innovators conferred Padma Shri for S&T based innovative ways of reviving traditional art and music

Shri CV Raju and Shri Moa Subong, grassroots innovators from Andhra Pradesh and Nagaland,

respectively, are amongst the 106 Padma Shri awardees announced for the year 2023.

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## Study traces high rainfall in Northern Bay of Bengal than the other parts of India for the last 10000 years

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## New plateau type discovered from Maharashtra could prove to be a repository of information to study climate change effects on species survival

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## Debris flow susceptibility map of Leh valley prepared to help predict increasing mass wasting

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## Tree ring isotopes records can help define the nature and strength of the upcoming droughts

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## Current insight on the mechanisms of Cobra





# POPULAR SCIENCE STORIES

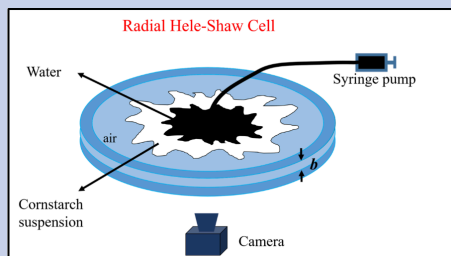


**venom cytotoxins can help anti-venom therapy**

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**Cost-effective, supercapacitor with high capacity to store charge developed by Indian scientists**

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**New finding that explains novel instability of flow of viscoelastic materials in confined environments can help in efficient displacement of granular slurries**

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**Newly discovered next-generation probiotic bacteria can promote longevity and healthy aging**

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**Study explains migration events that brought genetic diversity among Nepalese population**

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**Hemo-halt bandage: a dressing for rapid prevention of blood loss**

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**First evidence of solitary waves near Mars may decode the mystery behind ion loss in the planet**

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**Decoding depositional environment of subsurface sediments in Dibrugarh field of Upper Assam basin: An aided tool for exploration of Hydrocarbons**

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## INTERNATIONAL



**Growth of SCO depends on collaboration among youth on science, technology & innovation sector: Dr Singh**

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**US delegation expresses keen interest in collaborating with**

**India in areas of Critical and Emerging Technologies**

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**Indo-French Astronomy focus meeting on international mega-projects discusses science vision for the next decade**

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## NEW INITIATIVES

► **India-EU Joint Call for Proposal**

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► **Indo-Argentina Joint Call 2023**

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# NSD CELEBRATION IN DST INSTITUTIONS



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This e-newsletter created by the DST communication team at Vigyan Prasar brings you brief information on scientific achievements and activities supported by DST. Each brief, links to detailed information on DST website. If there is any DST supported popular science event which requires wider outreach please share it with us. We also welcome your feedback/suggestions at

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