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*Ask the right questions, and nature will open the door to her secrets
- Dr. C.V. Raman, The Nobel Prize in Physics 1930*

DST-IISc Energy Storage Platform Moved Towards Enabling Fast-Charging Solid-State Batteries

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Researchers from the Indian Institute of Science (IISc) reported on an innovative interfacial engineering approach to enable fast charge-discharge rates in solid-state lithium metal batteries and that nanoscopic refractory metal layers like Tungsten could improve the performance of these batteries which are crucial for purposes like electrical mobility. Experimenting with an ultrathin layer of refractory metals between the lithium anode and the solid electrolyte, researchers noted that tungsten is an ideal candidate to impede lithium vacancy motion due to its low solubility for lithium and therefore delay void growth. IISc researcher further added that this was made possible with the facilities created under the Materials for Energy Conservation and Storage Platform (DST-MECSP) program, Technology Mission Division (Energy, Water and Others), Department of Science and Technology (DST).

Research Found Functional connectivity Change in Brain After Meditation

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Researchers through a study supported by the SATYAM programme of the Department of Science and Technology (DST) found that consistent meditation modifies the connectivity between relay channels that takes in data from the sensory world to the cerebral cortex of the brain. It allows a person to easily transition into a state of deep meditation, making it easier to meditate. Meditation has been a mainstay in Indian traditions for ages.

1st Grassroots Innovation-Based Standards Formulated by BIS

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National Innovation Foundation (NIF) – India, an autonomous body of the Department of Science and Technology (DST), Government of India put forward an of grassroots innovation clay cooling cabinet Mitticool developed by Shri Mansukh Bhai Prajapati, from Wankaner, in Gujarat. Taking on this, Bureau of India Standards (BIS) took cognizance of this innovative technology and subsequently engaged with NIF to develop a new Indian Standard -- IS 17693: 2022 'Non-electric cooling cabinet made of clay'. The IS 17693: 2022 Non-electric Cooling Cabinet Made of Clay is the first standard rooted in a grassroots innovation - 'Mitticool Refrigerator'. The Standard specifies the construction and performance requirements of a cooling cabinet of the natural refrigerator made out of clay which operates on the principle of evaporative cooling. NIF further added that the Standard helps in the endeavour of BIS to fulfil 6 of out 17 United Nations Sustainable Development Goals (SDGs).

Centre for Brain Research Inaugurated at IISc Bangalore

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A Centre for Brain Research was inaugurated at the Indian Institute of Science (IISc), Bangalore, which has been developed as a one of its kind research facility and focuses on conducting vital research to provide evidence based public health interventions to manage age-related brain disorders. The Centre would be at the forefront of research on how to manage brain related disorders. On the sidelines, foundation Stone for Bagchi Parthasarathy Multi-speciality Hospital at IISc Bengaluru was also laid, which would, strengthen healthcare capacities and encourage pioneering research in the sector.

Special Update: India's First Logistics Excellence Awards

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Ministry of Commerce & Industry, hosted India's 1st, National Logistics Excellence Awards in New Delhi, which aimed to acknowledge the many logistics service providers in the country that have been able to display innovation, diversity and efficiency. With 169 entries and 12 categories for awards in its first edition, the Ministry of Commerce and Industries undertook a year-long process of identifying, categorising, and selecting qualified applications. Further, DPIIT acknowledged the excellence portrayed by the logistics sector, shared that GatiShakti, Atmanirbhar Bharat, driven by many MSME and Startups of the country, make the logistics sector very crucial to India's economic ambitions and added to involve start-ups to become more transparent and efficient.