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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

Inauguration of State-of-the-Art Research Facility at IIT Madras

Ministry of State for Electronics & Information Technology and Skill Development and Entrepreneurship, GoI, inaugurated a state-of-the-art research facility at Indian Institute of Technology Madras (IIT Madras). The 'Veena and Pratap Subrahmanyam Centre for Digital Intelligence, Security Hardware and Architecture' (V&PS - CDISHA) will undertake various cutting-edge research using SHAKTI, the IIT Madras-developed indigenous microprocessor, including building a new class of computers to handle emerging AI applications. In addition, the 'MacDermid Alpha Center of Excellence in Electronics Assembly and Skills Development' was also inaugurated on the occasion. It is an automatic PCB assembly facility established at the Central Electronics Center of IIT Madras.

IISc Develop Multifunctional Wafer-Scale Gas Sensor

Researchers at Centre for Nanoscience and Engineering, Indian Institute of Science (IISc), Bangalore developed a miniaturised wafer-scale optical gas sensor, which could have widespread use in the food industry, healthcare, and other industrial applications. Optical sensing of gases offers a unique advantage, unlike other sensing technologies, such as electronic, that lack gas specificity. Optical molecular absorption sensing is intrinsically selective to chemical molecules. The mid-infrared region of the optical spectrum is called the fingerprint region. The gas sensor has a gas cell, an optical filter & an integrated gas flow channel that could be fabricated using a semiconductor manufacturing process.

IISER Bhopal Designed Organic Molecules for Easier Proton Transport

Indian researchers at Indian Institute of Science Education and Research (IISER), Bhopal designed organic molecules to create conductive channels for easy transport of protons. Photosynthesis and hydrogen fuel cells are two such examples, respectively. Researchers added that Proton transport plays a key role in energy conversion and storage processes in nature and in industry therefore designing molecules that act as stable and efficient proton conductors is essential for achieving the high efficiency in industrial devices. Researchers further explained that helical molecules stack over one another significantly influence their ability to conduct the proton. This stacking is predictable and can be controlled by the solvent for preparing the solid. These findings highlight the importance of molecular design and the molecular assembly in achieving efficient material outcome.

Inauguration of State-of-the-Art Research Facility at NTCPWC-Discovery Campus at IIT Madras

Ministry of Ports, Shipping and Waterways and AYUSH, Govt of India inaugurated the state-of-the-art Research Facility at NTCPWC-Discovery Campus of Indian Institute of Technology Madras (IIT Madras). The National Technology Centre for Ports, Waterways and Coasts (NTCPWC) is the technology arm of the Ministry of Shipping with a mandate to bring cutting-edge technology to the Port and Waterways sectors. Its key objectives including boosting 'Make in India' for Port, Coastal and Inland water transport and engineering by developing state-of-the-art technologies and application products besides fast-track innovations to tackle challenges. Discovery Campus hosts state-of-the-art standalone Research Centres with large dedicated facilities & own support infrastructure.

Special update: IIT-Madras to Set-up its 1st International Campus in Tanzania

The first Indian Institute of Technology to be set-up in Africa would come up in October 2023 in Tanzania as Indian Institute of Technology (IIT) Madras would set up its first International campus in Zanzibar, Tanzania, with plans to to start the classes by October 2023. This was decided after a team of five professors from IIT visited earlier in Feb 2023 Tanzania and held discussions with various officials on starting the campus. Director V Kamakoti in his presidential address at IIT Madras' 64th Institute Day also highlighted that IIT Madras has designed a clear path for transformation of idea to design to prototype to start-up to unicorn as IIT Madras is creating an environment to enable students to become employers rather than employees.