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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

Indian scientists designed a cost-effective metal-free catalyst to convert CO2 to methane

To absorb visible light and catalyze the CO_2 reduction and also to convert carbon dioxide to methane by absorption of visible light, Indian scientists at Jawaharlal Nehru Centre for Advanced Scientific Research, an autonomous institute of the Department of Science & Technology, Govt. of India, developed & designed a cost-effective New non-toxic organic photocatalyst metal-free catalyst..

Researchers at IISc developed a low-cost and effective method to detect adulterants in milk

Researchers at the Indian Institute of Science (IISc), has developed a low-cost and effective method to detect adulterants in milk by analysing deposition patterns after evaporation.

CSIR-CMERI, Durgapur developed an indigenous Mechanized Scavenging System

Researchers at the Council of Scientific And Industrial Research-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur indeginously developed a Mechanized Scavenging System for Sewerage Maintenance. MCD, Delhi Jal Board and Sulabh International to put this device into use.

Researchers at CSIR-CMERI Durgapur developed machine for road cleaning with sewage water

Researchers at the Council of Scientific And Industrial Research-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur developed a new machine for road cleaning with sewage water, which could be useful in maintaining good cleanliness and hygienic standards of Indian roads/streets. The machine sucks out the wastewater from drain/manhole using slurry pump and treats the sewage water with chemical disinfectant, which is furter used in jetting operation to clean the road. Further researchers also reported that the performance of this machine depends on water pressure, water volume, and orientation of nozzles, collection of slurry water and its treatment.

Indian Scientist developed highly stable and non-toxic security ink from nano-materials

To combat the counterfeiting of branded goods, bank-notes, medicine, certificates, currency, Indian Scientist from Institute of Nano Science and Technology, Mohali, an autonomous institute under the Department of Science & Technology, Government of India has developed a highly stable and non-toxic metal phosphate-based security ink from nano-materials that spontaneously emit light (luminescent) due to its unique chemical properties. The luminescent security ink developed by the researcher is based on lanthanide ions (Ln^{3+}) doped Gd_{1-x} Bi_x PO_4 nano-materials.

Special Update: Researchers at IIT Gandhinagar developed an integrated predictive model to assess heavy rainfall-induced road damages

To accurately understand and assess the real magnitude of heavy rainfall linduced damages in road transport networks, Researchers at Indian Institute of Technology, IIT Gandhinagar developed an integrated predictive model, which could help administrators identify the 'hotspots' to be reinforced and protected to avoid highway-flooding. The model uses satellite imageries, ingeniously developed landslide and debris flow models, and state-of-the-art flood prediction models to predict the occurrence time and geographical locations that have a high susceptibility to the simultaneous occurrence of flooding, landslide and debris flow events after heavy rainfall episodes.