



GREEN ALERT



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The focus of Environment information System (ENVIS) is to disseminate environmental information to decision makers, policy planners, scientists and researchers across the world.

The Centre focuses on 'Eco-labeling and Promotion of Eco-friendly Products'. This bi-monthly e-bulletin features latest news, developments and innovations in the field.

Low-cost solar cells using the humble Jamun

Scientists at IIT Roorkee discovered that jamun can be used to create more efficient solar cell.

Researchers used naturally occurring pigment found in jamun as an inexpensive photosensitizer for Dye Sensitised Solar Cells (DSSCs) or Gratzel cells. They extracted dyes using ethanol and also used fresh plums and black currant, along with mixed berry juices which contain pigments that give characteristic colour to jamun. Lead researcher Soumitra Satapathi said "Natural pigments are way economical in comparison to regular Ruthenium-based pigments and scientists are optimizing to improve the efficiency. The increasing pressure on fossil fuels and concern of global warming has inspired continuous search for alternate energy." The research was published in the *Journal of Photovoltaics*.

Source: <http://www.thehindu.com/sci-tech/science/iit-scientists-create-low-cost-solar-cells-using-jamun/article18333363.ece>



Eco product of the month

Eco-Friendly Missions

Environmental degradation is one of the major threats to human health and livelihood. These are related to deforestation, degradation of agricultural land, natural resource depletion, loss of biodiversity and resilience in ecosystems. Some eco-friendly steps have taken towards the conservation and protection of the environment.

Swachh Bharat Abhiyan: Launched on 2nd October, 2014 with the aim to provide sanitation facilities to every household. It aims to achieve Swachh Bharat by 2019, as a fitting tribute to the 150th Birth Anniversary of Mahatma Gandhi.

National Mission for Clean Ganga: The objective is to clean and protect the Ganga River in a comprehensive manner. It is launched in May 2015 and known as 'Namami Ganga Yojana.' It aims to achieve Clean Ganga by 2020.

National Mission for a Green India: It aims at protecting; restoring and enhancing diminishing forest cover and responding to climate change by a combination of adaptation and mitigation measures. A holistic view of greening and focuses on multiple ecosystem services, specially, biodiversity, water, biomass, preserving mangroves, wetlands, critical habitats etc. along with carbon sequestration as a co-benefit.

National Green Highways Mission: Launched in 2015 with the aim to develop green corridors along National Highways for sustainable environment and inclusive growth. The policy envisions "development of eco-friendly National Highways with participation of the communities, farmers, NGOs, private sector, institutions, government agencies and the Forest Departments for economic growth and development in a sustainable manner."

National Solar Mission: Launched on 2010 with the mission to target of deploying 20,000 MW of grid connected solar power by 2022. It is aimed at reducing the cost of solar power generation through long term policy; large scale deployment goals; aggressive R&D; and domestic production of critical raw materials, components and products.

Green issue



Eco news

Demand for products in the 'garden category'

A report by Amazon India said that Tier II and Tier III cities are most inclined towards the environmentally friendly practices and products. Solar lamps and lanterns are the top selling products online in the green category witnessing over 60% of customer demand. "Customers today are more environment conscious and recognise the importance of using clean energy. We are excited by the rising demand for solar and garden products across the country," Kaveesh Chawla, Director, Amazon India said. New concepts like hydroponics, organic gardening, home composting, air purifying plants and drip irrigation are witnessing an uptake among customers across India.

Source: <http://www.moneycontrol.com/news/business/startup/small-towns-lead-in-demand-for-solar-green-products-amazon-india-297579.html>



Eco-friendly technologies to boost a sustainable environment

Scientists at IIT, Delhi are experimenting with new technologies, eco-sensitive devices and mapping pollutants to make environment and ecological habitats sustainable. The experiments, besides weaving a multi-disciplinary apparatus, have also boosted the industry-academic collaborations. There are some eco-friendly experiments underway in the labs of the institute. They are working for the replacement of the steel structure of automobiles with a 3D fabric made from glass, carbon and natural fibers can reduce fuel consumption by nearly 25%. They researched on alternate fuels, mainly hydrogen-powered vehicles for transportation. Trial production of a new cement known as Limestone Calcined Clay Cement (LC3) and developed an environment friendly additive for concrete that makes it easier to produce high quality cement.

Source: <http://economictimes.indiatimes.com/industry/services/education/how-iit-delhi-is-coming-up-with-eco-friendly-technologies-to-boost-a-sustainable-vironment/articleshow/58980160.cms>



Think before you buy

When making purchases, make sure you know what is "Good Stuff" and what is not.

Eco tip of the month

Visit CERC-ENVIS website www.cercenvnis.nic.in and <https://www.facebook.com/EcoProductsEcoLabeling> to know more about our activities.

Consumer Education and Research Centre

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