



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 CERC-ENVIS 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.

Nickel produces environmentally safe hydrogen



Researchers of Nanyang Technological University have discovered a novel way of intensifying the efficacy of molybdenum disulphide (MoS₂) catalysts, an important aspect of hydrogen economy. This could potentially help in trimming down the consumption of fossil fuels and reducing carbon footprints. According to the study, more environmentally safe hydrogen could be produced by simply altering the amount of nickel in MoS₂ catalysts. It is considered a breakthrough in the nanostructure research segment as past attempts at MoS₂ alterations have all failed. Scientists are also in pursuit of new ways to develop effective electro-catalysts capable of creating oxygen from water under varying pH conditions. The study published in *Science Advances*.

<http://advances.sciencemag.org/content/1/7/e1500259>

Eco product of the month

Green issue

COP21: the 2015 Paris Climate Conference



The international political response to climate change began at the Rio Earth Summit in 1992, where the 'Rio Convention' included the adoption of the UN Framework on Climate Change (UNFCCC). This convention set out a framework for action aimed at stabilizing atmospheric concentrations of greenhouse gases (GHGs) to avoid "dangerous anthropogenic interference with the climate system." The UNFCCC which entered into force on 21 March 1994 now has a near-universal membership of 195 parties. COP21 aims to achieve a legally binding and universal agreement on climate, with the aim of keeping global warming below 2°C. The Paris Agreement and the outcomes of the UN climate conference (COP21) cover all the crucial areas identified as essential for a landmark conclusion.

The Outcome is a turning point for action to limit climate change below dangerous levels. It signals the end of business as usual for the energy industries. Future investment will need to be compatible with a zero carbon world. The Agreement establishes an enduring, binding and transparent legal regime where all countries make commitments to reduce greenhouse gas emissions and manage the impacts of climate change. It will shape climate action for decades into the future. Countries will need to review and increase their emission reduction commitments every 5 years in order to meet the long term goal of greenhouse gas neutrality by the second half of century.

Following the adoption of the Paris Agreement by the COP (Conference of the Parties), it will be deposited at the UN in New York and be opened for one year for signature on 22 April 2016--Mother Earth Day. The agreement will enter into force after 55 countries that account for at least 55% of global emissions have deposited their instruments of ratification.

The 22nd session of the Conference of the Parties (COP 22) to the UNFCCC is expected to take place in from 7-18 November 2016 in the city of Marrakech, Morocco. Building on year-round work from Climate Action and the UN Environment Programme, the Forum will convene cross-sector participants from business, Government, finance, UN, NGO and civil society to create an unparalleled opportunity to bolster business innovation and bring scale to the emerging green economy.

<http://www.cop21paris.org/about/cop21/>, <http://www.e3g.org/library/judging-cop21-outcome-and-whats-next-for-climate-action>

Eco news

India's 1st indigenous driverless vehicle

Environment friendly Automated guided vehicle (AGV) has been developed by Gurgaon based company the High Tech Robotics Systemz Ltd (THRSL). It is driverless shuttle Novus-Drive. The vehicle has capacity of 14 passengers and can navigate seamlessly with the help of advanced high-fidelity sensors and robust algorithms. The vehicle is environment friendly which is battery-driven. It can navigate up to 150 kms on a single charge and can reach to top speeds up to 40 km/hr. It also includes 3D lidars, GPS, and stereovision cameras for mapping the external world. Passengers have the option to enter a destination on a tablet mounted in the car. The company has designed the vehicle for use in university campuses, health care facilities, carnivals, and even large parks.

<http://www.deccanchronicle.com/business/autos/210216/indian-company-develops-country-s-first-indigenous-driverless-vehicle.html>

Mobile App for eco-friendly measures

Kolkata Municipal Corporation has released a mobile application which will help citizens take necessary steps to maintain an eco-friendly atmosphere and also prepare themselves for natural disasters, if any. "This initiative is expected to help citizens take steps at individual and collective level to make a difference to the city," said a release issued by the Bengal Chamber of Commerce and Industry.

This project was started in partnership with the UK government in 2013. The authorities hope that this will serve as an inspiration for other civic bodies in the country to take up similar initiatives. Climate change and pollution is a menace in large cities of India and something like this could go a long way in curbing it.

<http://thanthinews.blogspot.in/2016/02/mobile-app-to-help-citizens-adopt-eco.html>

Embrace a green lifestyle

Repair an item instead of replacing it is the more environmentally friendly approach. By choosing to repair broken items, instead of throwing them away, you can help to reduce waste pollution.

Eco tip of the month

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

Consumer Education and Research Centre

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