>>>> NEWSLETTER <<<

SUSTAINABILITY NEWS

AIPMA - ENVIRONMENT CELL

UPCOMING EVENTS



POLYPLASTICS TO HIGHLIGHT LATEST MATERIAL INITIATIVES AT NPE 2024

Source:medicalplasticnews

At the NPE 2024 expo, which will take place from May 6–10 at the Orange County Convention Center in Orlando, Florida, Polyplastics will present its state-of-the-art material innovations. The introduction of SARPEK, a novel polyetherketone (PEK) intended for uses needing remarkable heat resistance and metal replacement capabilities without post-curing, is one of their highlights. Polyplastics will make its LAPEROS LCP materials available worldwide. Wider market coverage in the Americas and EMEA is made possible by this expansion, which is backed by higher manufacturing capacity to keep up with demand. Polyplastics will highlight PLASTRON LFT, a polypropylene (PP) resin reinforced with long cellulose fiber, as part of its dedication to sustainability. Because of its environmentally friendly composition of regenerated cellulose fibers, PLASTRON LFT offers a balance between mechanical strength and reduced environmental impact. Polyplastics seeks to address sustainability issues by utilizing natural materials while upholding the performance requirements for a range of applications.

INDIA'S PLASTIC EXPORTS RISE OVER 14% ON-YEAR TO \$997 MILLION IN FEBRUARY

India's plastic exports saw a sharp increase in February 2024, amounting to \$997 million, a 14.3% rise over the same month the previous year. The total value of plastics exports from April 2023 to February 2024 fell to \$10,433 million from \$10,911 million over the same period the previous year, indicating a 4.4% fall, notwithstanding this growth.



PLASTIC RECYCLING

>>> AHEAD OF U.N. MEET, INDIA CHOOSES TO 'REGULATE', NOT BAN, SINGLE-USE PLASTIC

Source: : The Hindu



According to the Centre for Science and Environment (CSE), India prefers to regulate single-use plastic over outright banning it as talks with 192 countries to combat global plastic pollution get underway in Toronto. India's position, informed by a thorough investigation, is in opposition to the EU's suggestion to limit the manufacturing and distribution of specific plastics. The United States suggests customized lists of harmful plastics, more in line with India's strategy. These roles demonstrate a range of financial goals and aptitude for recycling. Disagreements about the best ways to manage plastic waste and production continue despite efforts to reduce plastic pollution, highlighting the complexity of the problem.

PRESS RELEASE: APR REPORT STUDIES PYROLYSIS AS POSSIBLE COMPLEMENT TO MECHANICAL RECYCLING FOR PLASTIC FILM AND FLEXIBLE PACKAGING (FFP)



In a groundbreaking paper titled "How to Scale the Recycling of Flexible Film Packaging," the Association of Plastic Recyclers (APR) examined the possibilities of pyrolysis technologies in recycling flexible film packaging (FFP) back into plastic resins for new goods. Under the direction of Eunomia Research & Consulting, the paper explores the potential and difficulties of FFP recycling, highlighting the necessity of modifications to package design, infrastructure expenditures, and customer involvement. The research emphasizes the challenges of collecting, sorting, and recycling with a particular focus on residential FFP. It also makes a need for extensive supply chain cooperation and investment in order to attain scalable recycling solutions. APR's endorsement of responsible chemical recycling technology highlights the importance of this report in promoting the circular economy and tackling the issues associated with plastic pollution.

>>>> GOVERNMENT PLANS TO DEVELOP PLANT FOR RECYCLING LITHIUMION BATTERIES. **E-WASTE IN UTTARAKHAND**

In an effort to address India's growing electronic waste problem, the Technology Development Board (TDB) and Remine India have partnered to build a state-of-theart commercial facility in Uttarakhand that will recycle e-waste and lithium-ion batteries. The Ministry of Science and Technology is supporting this program, which aims to promote a circular economy, with financial support from TDB amounting to Rs7.5 crore and an estimated project cost of Rs15 crore.

Situated in the SIIDCUL Industrial Area in Sitarganj, Uttarakhand, the facility aims to apply environmentally sustainable and productive recycling methods by leveraging local technology created by the Center for Materials for Electronics Technology (CMET). The lithium-ion battery recycling industry is expected to develop significantly and reach a value of \$14.89 billion by 2030, according to market estimations. This underscores the significance of sustainable solutions.

India ranks third in the world for the generation of e-waste, which is the solid waste stream with the fastest rate of growth. The problem has been made worse by the widespread use of lithium-ion batteries, and unofficial recycling techniques provide both financial and environmental difficulties. This effort seeks to allay these worries and make a positive contribution to a more sustainable future by encouraging systematic e-waste management methods.

Source: Times of India & Swaraj





NEW RESEARCH/INOVATION

BIODEGRADABLE BREAKTHROUGH: PLASTICS THAT DON'T CREATE MICROPLASTICS OR MAKE US SICK Source: Earth.com

The University of California San Diego's study, which was carried out in conjunction with Algenesis, emphasizes the importance of biodegradable polymers in tackling the worldwide problem of plastic pollution. Urgent action is required in response to microplastics, which have detrimental consequences on ecosystems as well as human health.

Plant-based polymers that fully biodegrade in less than seven months—even at the microplastic level—are the groundbreaking solution that the research presents. This invention not only slows the buildup of microplastics but also paves the way for the development of environmentally friendly material substitutes.

Under the direction of Professors Robert Pomeroy and Michael Burkart, the group stresses how crucial it is to create plastics that don't produce persistent microplastics over the course of their lives. Their polymers made of algae are put through a testing process, which confirms their exceptional biodegradability as compared to plastics made of petroleum.

Knowing the science underlying biodegradability emphasizes how crucial it is to choose materials that support environmental objectives. Although biodegradable plastics have potential, appropriate disposal circumstances are necessary for them to reach their full potential. People can help create a more environmentally friendly future by adopting biodegradable products and making sure that proper waste management procedures are followed.

SCIENTISTS DEVELOP INNOVATIVE TECHNIQUE TO TRANSFORM PLASTIC WASTE INTO POWERFUL CLEAN FUEL: '[IT] COULD BE PRODUCED FOR FREE'

Source: Yahoo tech

The University of California San Diego's study, which was carried out in conjunction with Algenesis, emphasizes the importance of biodegradable polymers in tackling the worldwide problem of plastic pollution. Urgent action is required in response to microplastics, which have detrimental consequences on ecosystems as well as human health. Plant-based polymers that fully biodegrade in less than seven months—even at the microplastic level—are the ground-breaking solution that the research presents. This invention not only slows the buildup of microplastics but also paves the way for the development of environmentally friendly material substitutes.

Under the direction of Professors Robert Pomeroy and Michael Burkart, the group stresses how crucial it is to create plastics that don't produce persistent microplastics over the course of their lives. Their polymers made of algae are put through a testing process, which confirms their exceptional biodegradability as compared to plastics made of petroleum. Knowing the science underlying biodegradability emphasizes how crucial it is to choose materials that support environmental objectives. Although biodegradable plastics have potential, appropriate disposal circumstances are necessary for them to reach their full potential. People can help create a more environmentally friendly future by adopting biodegradable products and making sure that proper waste management procedures are followed.



INDIA LAUNCHES THE WORLD'S LARGEST RENEWABLE ENERGY PARK, FIVE TIMES LARGER THAN PARIS, WITH A SIGNIFICANT INVOLVEMENT FROM GAUTAM ADANI. ADANI GROUP'S AMBITIOUS RENEWABLE ENERGY AGENDA AIMS TO PRODUCE 500 GW OF NON-FOSSIL ELECTRICITY BY 2030, ALIGNING WITH A BROADER GOAL OF ACHIEVING NET-ZERO EMISSIONS BY 2070

>>> FRENCH STARTUP USES PLASTIC-CHEWING ENZYMES IN 'CLOSED-LOOP' RECYCLING

Source: Down to Earth

April 22 marks Earth Day, and this year's theme is "Planet vs. Plastics". Over the past 60 years, around 7 billion tons of plastic have been produced, according to the UN. But only around 10 percent of it has been recycled. Initiatives are flourishing around the world to tackle the waste crisis, including new technology to improve recycling rates. French startup Carbios has developed an alternative method to mechanical recycling, using plastic-chewing enzymes to break down polyethylene, one of the most common single-use plastics in the world. The Down to Earth team visited their demonstration plant in Clermont-Ferrand.

WASTE MANAGEMENT

>>> THE SHOCKING EXTENT OF EARTH'S PLASTIC CRISIS: 220 MILLION TONNES OF WASTE ARE SET TO BE GENERATED THIS YEAR - THE EQUIVALENT OF 20,000 EIFFEL TOWERS

The global plastic crisis has reached alarming proportions, with an estimated 220 million tonnes of plastic waste projected for 2024 alone, originating largely from just 12 countries including China, USA, India, Brazil, and Mexico. With each person generating an average of 28kg of plastic waste annually, over a third of this waste is expected to be mismanaged, exacerbating environmental pollution.

Last year marked the inaugural Global Plastic Overshoot Day, and this year it's forecasted to be September 5, 2024, with developing countries facing increasing pressure from plastic pollution. To address this crisis, a comprehensive approach is necessary, including reducing single-use plastics, improving waste management systems, promoting sustainable alternatives like bioplastics, and implementing stricter regulations on plastic production. The upcoming UN Global Plastics Treaty negotiations present a vital opportunity for countries to collaborate and adopt effective policies for a plastic-free future. Source: Down to Earth & Mail Online



ASTUTE ANALYTICA REPORT REVEALS ROBUST GROWTH IN GLOBAL WASTE MANAGEMENT MARKET Source: WhaTech

A recent study by Astute Analytica titled "Global Waste Management Market - Industry Dynamics, Market Size, And Opportunity Forecast To 2031" provides information about the future direction of the waste management industry. Projected to expand at a 3.2% compound annual growth rate (CAGR) between 2023 and 2031, the global waste management industry indicates encouraging growth. The study highlights the noteworthy advancements achieved by the Asia-Pacific region, accounting for more than half of the global market share in terms of revenue. This indicates that the region has taken proactive steps and made investments in sustainable waste management solutions. Both Europe and South America have made significant improvements in trash management as well, utilizing strict laws and creative solutions to solve garbage-related issues. Growing urbanization, growing environmental concerns, and technological improvements are some of the main factors driving the waste management market's expansion. Technological advancements, such as sophisticated garbage sorting systems and lot-enabled smart waste management systems, are changing the industry landscape, improving operational effectiveness, and advancing sustainability objectives. Collaborative efforts from governments, industries, and communities are essential in driving collective action towards achieving a circular economy and a zero-waste future.

DO YOU KNOW?



REPLACING PLASTICS WITH ALTERNATIVES IS WORSE FOR GREENHOUSE GAS EMISSIONS IN MOST CASES, STUDY FINDS



WET WIPES CONTAINING PLASTIC TO BE BANNED FROM SALE IN UK