

Praj Leads the Way in Bioplastics with Polylactic Acid (PLA): Unveils India's First Demonstration Facility for Biopolymers in Pune

Pune, Wednesday, October 16, 2024

India's first-of-its-kind 'Demonstration Facility for Biopolymers', showcasing Praj's indigenously developed integrated Polylactic Acid Technology, was inaugurated at the hands of Dr. Jitendra Singh, Hon' Union Minister (GoI), Minister of State (IC), Ministry of Science & Technology, in the presence of Dr. Rajesh Gokhale, Secretary, Dept. of Biotechnology (DBT) and Dr. Ashish Lele, Director, National Chemical Laboratory, on Sunday, 13th October, 2024 at Jejuri near Pune.

Recognizing the global shift towards a circular economy and bio-based products, Praj Industries, a leader in industrial biotechnology, envisions a future driven by biorefineries. With the Bio-Mobility[®] portfolio, Praj developed a strong leadership position in the biofuels industry. Leveraging this expertise and experience, Praj strategically diversified into the Renewable Chemicals and Materials (RCM) through the Bio-Prism[®] portfolio. Among the selected RCM in this portfolio, bioplastics have been a key focus, leading to the development of an integrated PLA technology at Praj Matrix R&D Centre.

At Praj's recently constructed state-of-the-art demonstration facility, PLA is the first biopolymer in the series to be scaled up. This facility houses fermentation, chemical synthesis, separation and purification sections alongwith other supporting sections, spread over 3 acres. The facility showcases production capacities of 100 tons per annum (TPA) for Lactic Acid, 60 TPA for Lactide, equivalent to 55 TPA for PLA.

Apart from the release of plastic breakdown products like microplastics and nanoplastics, more than 3200 harmful plastic monomers and additives, get leached out from the plastic products used in everyday life. This poses significant health risks like cancer, respiratory disorders, hormonal disruptions, and infertility issues, as per the recent UN report, "*Chemicals in Plastics, 2023*". Accumulation of Single-use Plastic (SUP) products also suffocate aquatic ecosystems and threaten wildlife. Bio-based plastics, which are made up of natural monomers and contain safer additives, are biodegradable and provide an effective solution to mitigate the hazards of plastics. Functionality and processability of PLA has been established for flexible and rigid products that are used in sectors like food, personal care, agriculture, pharma, etc.

Speaking on the occasion, **Dr. Jitendra Singh**, Honorable Union Minister (GoI), Minister of State (IC), Ministry of Science & Technology said, "*Praj's 'First-of-its-kind Demonstration Facility for Biopolymers in India' is a pioneering effort in developing indigenously integrated technology for the production of PLA. This demonstrates India's strong lead in technological innovation and the resolve to transition from fossil-based plastics to eco-friendly alternatives, crucial for addressing the global plastic pollution crisis. This will also enable dual goals of 'Atmanirbhar Bharat' and 'Make-in India'. This facility symbolises a new chapter for India's bioeconomy.*"

*'हरित भविष्यासाठी प्राज इंडस्ट्रीज' which translates to 'Praj Industries for a Green Future' that is how Dr. Rajesh Gokhale, Secretary, DBT, appreciated Praj for remarkable achievement in setting up India's First Demonstration Facility for Biopolymers showcasing homegrown integrated Polylactic Acid Technology. He further added, "Praj's efforts perfectly align with the recently announced **Bio-E3** Policy (Biotechnology for Economy, Environment and Employment), and **Bio-RIDE** scheme (Biotechnology Research Innovation and Entrepreneurship Development). I am assured that the disruptive innovation culminating under the visionary leadership of Dr. Pramod Chaudhari will help India become a global biomanufacturing hub for Bioplastics."*

"The inauguration of Praj Industries' demonstration facility for biopolymers signifies a pivotal advancement. India produces around 25 million tons of plastic annually, with 9.3 million tons becoming waste and only 3.4 million tons being collected. The rest ends up in landfills and our oceans. It is crucial to tackle the plastic crisis by shifting towards biodegradable and compostable bioplastics. A collaborative partnership among industry, academia, and government, exemplified by Praj's initiatives, is essential to address this urgent challenge" added Dr. Ashish Lele, Director of the National Chemical Laboratory, Pune.

Commenting on this landmark development, **Dr. Pramod Chaudhari, Founder Chairman, Praj Industries** said, *"In 2020, during the COVID-19 pandemic, Praj strategically chose to diversify its offerings beyond its established leadership in bioenergy solutions, signalling a crucial turning point in the company's development. We began our journey into renewable chemicals and materials, particularly emphasizing bioplastics. Together, we are dedicated to the shared vision of establishing India as a Global Bio-Manufacturing Hub, while addressing the plastic crisis, and creating a sustainable, innovative, and resilient future for #ViksitBharat!"*

XXX

Praj Industries Limited:

Praj, India's most accomplished industrial biotech company, is driven by innovation, integration, and delivery capabilities. Over the past four decades, Praj has focused on the environment, energy, and agri-process industry, with 1000 ++ customer references spanning 100+ countries across all five continents. Bio-Mobility™ and Bio-Prism™ are the mainstays of Praj's contribution to the global Bioeconomy. The Bio-Mobility platform offers technology solutions globally to produce the renewable transportation fuel, thus ensuring sustainable decarbonization through a circular bioeconomy. The company's Bio-Prism™ portfolio comprises technologies to produce renewable chemicals and materials, promises sustainability while reimagining nature. Praj Matrix, the state-of-the-art R&D facility, forms the backbone for the company's endeavours towards a clean energy-based Bioeconomy. Praj's diverse portfolio comprises Bio-energy solutions, Critical process equipment & skids, Breweries, Zero liquid discharge systems and High purity water systems. Led by an accomplished and caring leadership, Praj is a socially responsible corporate citizen. Praj is listed on the Bombay and National Stock Exchanges of India.

For Media Enquiries:

Name: Ms. Sayali Thakare

Designation: Associate Manager-Corporate Strategy

Praj Industries Ltd.

Phone: 020 7180 1018

Email:sayalithakare@praj.net