

## **Following is the full text of the speech –**

“Dear friends,

I am pleased to be amidst you all today at this premier National Institute devoted to development of Polymer / Petrochemicals and allied industries. I am happy to note the Central Institute of Petrochemical Engineering & Technology (CIPET) is contributing to national development through its diversified activities in the area of skilling programmes, technical support services, academics and Research & Development.

Polymers are wonder materials that have increased the quality of life immensely and have become an important part of the global economy due to their low weight, durability and resourcefulness. Today, if you look around, you would find plastic everywhere. It is ubiquitous... it is in your wrist watch, your pen, mobile phone, computer, kitchen or car... plastic has become indispensable due to its versatility.

During the ongoing COVID-19 pandemic, plastics have played a significant role in manufacture of medical protection equipment and PPE kits, which played a significant role in preventing its spread. The disposable plastic syringes, blood bags, gloves and other medical equipment with enhanced features and functionality have proven their worth during this difficult time. Further, polymeric materials are also being used widely to create medical tools and devices like insulin pens, IV tubes, catheters, inflatable splints, implants and tissue engineering as well.

Continuous advancements and developments in Polymeric Materials as well as cost-effective manufacturing techniques have led plastic to replace the conventional materials in different walks of life.

The average national consumption of polymers is roughly 12 kilograms per capita per year. India is currently ranked among the top five consumers of polymers in the world and has 30,000 plus plastic processing units employing over four million people across the country.

Today, polymers are an integral part of the petrochemical sector with its demand growing at a rate of 8%. It is expected that the polymer sector will account for 20% of total oil consumption and 15% of the global annual carbon budget by 2050.

The global petrochemical industry has experienced more than 15 years of strong growth with the global market size projected to reach USD 958.8 billion by 2025, expanding at an annual rate of 8.5%. The petrochemical demand in India is expected to grow at 7.5% annually by the year 2023.

Various Government programs like Make in India, Start-up India, Stand-up India, Digital India will go a long way in creating the ecosystem for the next-generation research and indigenous technological advancements in the Petrochemical sector.

On the other hand, durability and longevity of plastics have posed several challenges to our environment. Convenience items that are intended for single use are being continually discarded to the landfills; littering our landscapes, thereby creating threats for aquatic and marine life. Also, improper littering habits and lack of awareness on Plastics Waste Management has resulted in many environmental hazards. The solution is not to avoid plastic, but to ensure that it is used responsibly and recycled properly.

Hence, the need of the hour is to follow the best practices of plastic waste management. We need to spread awareness about the 3Rs - Reduce, Reuse and Recycle. A mass media campaign is need of the hour to bring behavioural changes in how people dispose of plastic

products. People should be taught about the importance of segregation of waste for recycling. Media, civil society organisations, students and activists should be an integral part of this awareness drive. We have the example of Swachh Bharat Mission which successfully brought about desired changes in people's approach towards sanitation and open defecation. A similar nationwide campaign is required to educate people on single use plastics. This should turn into a people's movement. People have to understand that the problem is not with plastic, the problem lies in our attitude towards handling plastic. And people's mindset will change only through a sustained awareness campaign. They have to understand the deleterious impact of single use plastic on our environment and think about the future of mankind. We are duty bound to leave a clean and green planet for our children. Therefore, each one of us should commit to use single use plastic items responsibly.

It should be noted that waste management also presents a golden opportunity for our entrepreneurs. It is estimated that the waste management market in India will reach around 13.62 billion dollars by 2025 while the plastic recycling market in India is estimated to grow at a rate of 6.5 % to attain a market size of 53.72 billion dollars by the end of 2023. Probably that is why the term "Waste to Wealth" has found wide acceptance in popular parlance.

I am happy that CIPET has been at the forefront in taking necessary steps to educate and encourage people to recycle, repurpose and reuse plastic items. It is praiseworthy that CIPET has established a model Plastics Waste Management Centre at Guwahati, which focuses on offering skill development training programmes in the areas of plastics recycling and waste management.

I am told that the Institute has also made significant contribution to the Expert Committee constituted by the Department of Chemicals & Petrochemicals on 'Single Use Plastics' to bring-in effective solutions on the issue. The Committee has given its suggestions in responsible management of single use plastics while identifying and categorising the specific products as environmentally problematic.

Dear friends,

One of the major strengths of the polymer industry is the availability of raw materials which can be manufactured domestically. This is a major advantage as it will only help the growth of the Indian polymer industry. The current trend in India's plastic exports seems highly encouraging. The Indian plastics export industry has always offered excellent potential in terms of capacity, infrastructure, and skilled manpower.

In sustainable growth of the sector, institutes such as CIPET have an important role to play. I am told that the R&D wings of CIPET cater to various sectors such as aerospace, automotive, agriculture and health in close alliance with major industrial players and PSUs like BEL, HAL, NTPC etc. for development, implementation and validation of innovative and futuristic ideas. I understand that more than 50 major research projects have been completed, over 300 research papers were published in international journals/conferences and 12 patents were filed by CIPET. My compliments to you all for these achievements.

At the same time, I would urge you to focus on the development of eco-friendly products such as biodegradable plastics so as to balance the environment and development.

Dear friends, with a median age of less than 30 years, India is among the youngest countries in the world. This huge youth energy needs to be constructively channelized for nation building through proper skilling and right motivation.

I am happy that CIPET has been doing good work through various skill training programs including diploma and graduate/post-graduate/Ph.D programmes for serving different tiers of the industry. CIPET has also been catering to the industrial needs through its explicit technical support and consultancy services. During the last five years, around 3.50 lakh technology support assignments have been undertaken, benefitting the industries in establishing new technologies and products in relevant areas. Also, more than three lakh unemployed/under-employed youth have been trained and benefited through CIPET's skill development programmes in the last five years.

Moreover, CIPET's educational pattern already falls in line with the requirements of the newly reformed National Education Policy (NEP 2020), which focuses on skill and application based learning. CIPET has already taken diligent initiatives for reframing the course curriculum to implement NEP 2020 effectively.

I am pleased to note that to give a fillip to the skill requirement of growing petrochemical industry, 16 new CIPET Centres have been set up since 2015-16 across the country.

I am happy that this CIPET centre in Andhra Pradesh for which I have laid the Foundation Stone on 22nd April 2016 along with the then Minister for Chemicals & Fertilizers and the Chief Minister of Andhra Pradesh was dedicated to the nation on 24th October, 2019. It is also noteworthy that CIPET Vijayawada is currently functioning in its new campus and conducts Diploma / Post Diploma courses and Short-term / Skill Development Programmes to the unemployed / underprivileged youth of Andhra Pradesh, while rendering Technical Services to the industries.

I interacted with the students and industrialists and am happy to understand that CIPET Vijayawada is striving towards excellence through its tie-ups with industries across the state. I wish more industries should come up to cater to the increasing demands of petrochemical sector of the country.

Further, the growth of chemicals and petrochemicals in the coming years has become inevitable. I presume that CIPET with its new mandate, would play a crucial role in keeping pace with global advancements and thus, establish technical supremacy of our country in the relevant field.

On this occasion, I extend my greetings and good wishes to the CIPET's Governing Body, the Director General, Employees and its students. May CIPET continue to grow in the times to come!!!

Thank you.

Jai Hind!"