

**ADDRESS BY THIRU BANWARILAL PUROHIT, HON'BLE GOVERNOR OF  
TAMIL NADU AT THE GOLDEN JUBILEE CELEBRATIONS OF CIPET &  
PRESENTATION OF 8<sup>TH</sup> NATIONAL AWARDS FOR TECHNOLOGY  
INNOVATION IN PETRO CHEMICALS AT CENTENARY AUDITORIUM,  
UNIVERSITY OF MADRAS, CHENNAI ON 24.01.2019 AT 10.50 AM**

**Anaivarukkum Kaalai Vanakkam**

**Hon'ble Vice President of India,  
Thiru. Venkaiah Naiduji**

**Thiru. D.V.Sadananda Gowda,  
Hon'ble Union Minister,  
Ministry of Chemicals and Fertilizers**

**Thiru.D.Jayakumar  
Minister for Fisheries,Personnel & Administrative Reforms**

**Dr. J. Jayavardhan,  
Member of Parliament**

**Dr. K.P. Krishnan,  
Secretary,  
Ministry of Skill Development & Entrepreneurship**

**Thiru. P. Raghavendra Rao,  
Secretary,  
DCPC, Ministry of Chemicals and Fertilizers**

**Thiru. M. Sampath,  
Chief Post Master General, Chennai**

**Distinguished Invitees**

**Ladies & Gentlemen**

I am happy to be here today at the Golden Jubilee Celebrations of the Central Institute of Plastics Engineering & Technology (CIPET). We are honoured by the presence of our Hon'ble Vice-President, who as the Chief Guest will be presenting the National awards for technology innovation in Petro chemicals.

I am happy to note that CIPET in the last 5 decades has emerged as a renowned global institution devoted to Skill Development, Academics, Technology support and Research in Plastics & allied industries.

The fact that this institution is universally acknowledged for its ability in providing customised Skill Development programmes is

indicative of the tremendous faith that the industry has reposed in CIPET.

The global technological alliance of the R & D wings of CIPET with industries / universities at national and global levels have also been another great contribution of the Institute.

The word plastic is derived from the Greek word 'plastikos' meaning "capable of being shaped or molded".

The plasticity, or malleability, of the material during manufacture allows it to be cast, pressed, or extruded into a variety of shapes, such as : films, fibers, plates, tubes, bottles, boxes, amongst many others.

The development of plastics has evolved from the use of natural plastic materials to the use of chemically modified, natural materials and finally to completely synthetic molecules. Early plastics were bio-derived from materials such as egg which are organic polymers.

In the early 1900s, Bakelite, the first fully synthetic thermoset, was reported by Belgian chemist Leo Baekeland by using phenol and formaldehyde.

The plastics industry was revolutionized in the 1930s with the discovery of polyamide (PA), better known by its trade name nylon.

After World War II, improvements in chemical technology led to an explosion in new forms of

plastics, with mass production beginning in the 1940s and 1950s. Among the earliest examples in the wave of new polymers were polystyrene and polyvinyl chloride and polyethylene and polypropylene.

Polyethylene terephthalate (PET)'s discovery is credited to employees of the Calico Printers' Association in the UK. It became popular as one of the few plastics appropriate as a replacement for glass in many circumstances, resulting in widespread use for bottles.

It was in these circumstances that this institute for Plastics Engineering and Technology was set up to guide industry in the manufacturing of Plastics to meet the requirements of a large

consuming population in India. Plastics are colourful, relatively cheaper, durable and easy to use. The problem is only in the disposal of the plastic waste.

Most plastics degrade very slowly, as their chemical structure renders them resistant to many natural processes of degradation. Estimates suggest a cumulative 6.3 billion tons of plastic waste that has been generated so far. The quantity is in magnitude and the problem if left unchecked can pose a serious threat to life on the planet.

Appreciating this concern the quantity of post-consumer plastics recycled has increased every year since at least 1990, but rates lag far behind

those of other items, such as newspaper which is about 80% and fiberboard which is about 70%. In 2016 only 14% of plastic waste was recycled globally.

While most plastics are produced from petrochemicals, bioplastics are made substantially from renewable plant materials such: as cellulose and starch. Due to the finite limits of the petrochemical reserves and threat of global warming, the development of bioplastics is a growing field.

However, bioplastic development begins from a very low base and, as yet, does not compare significantly with petrochemical production. Estimates of the global production capacity for bio-

derived materials is put at 327,000 tonnes/year. In contrast, global production of petrochemical derived polyolefins, was estimated at over 150 million tonnes in 2015.

The Tamil Nadu Government has banned certain “one time use and throwaway plastics” such as plastic sheets, plastic plates, plastic coated teacups/tumblers, plastic straws, plastic flags, plastic water pouches and carry bags irrespective of thickness from 01.01.2019 onwards.

Efforts at promoting the recycling and reuse of plastics need a fresh impetus. I am sure that this centre is examining various ways to promote bio plastics and the use of non-degradable plastics in



activities such as road laying. CIPET has rendered yeomen service in the last fifty years of its existence. Their technological inputs will be greatly necessary to promote the use of plastics in an environment friendly manner. The banner of this institution is certain to be flying high for many more decades in the future. I extend my best wishes and greetings to the employees of CIPET on this happy occasion of the institution having completed fifty years of glorious service to the nation. May they be greeted with success in all their endeavours.

Nandri Vanakkam.....

Jai Hind....