

MAHARASHTRA ACADEMY OF SCIENCES & MUKTANAGAN EXPLORATORY SCIENCE CENTRE, Pune

Announce "Prof. V. G. Bhide Memorial Lecture"

for all by

Dr. S. Radhakrishnan, F. M. A. S.

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Topic

LIVING WITH PLASTICS

Date & Time: Monday, 22nd November 2010 at 4.00 PM

Venue: Muktangan Exploratory Building Bharatiya Vidyabhavan Complex Off Senapati Bapat Road Pune 411 016

The lecture is mainly directed to educate the school and college students and their teachers about proper effective use of plastics and their disposal so as not to lead to pollution. It is also meant to remove any misconceptions on "say no to plastics" which has been circulated a lot by media

The "Prof. V. G. Bhide Memorial Lecture" is organized annually by the Academy for the benefit of school and college students to familiarize them with the latest trends in frontier areas of science and technology. Accordingly, all are cordially invited with a request to bring along young members of your family. We would also appreciate if you could kindly give publicity to the lecture in your Institute/organization.

Dr. S. S. Tambe Dr. Ramesh Joshi Joint Secretary, M.A.Sc. Director, Muktanagan Exploratory Science Centre

LIVING WITH PLASTICS

Abstract

The technological advances in the modern age has given wonderful materials to mankind such as plastics which are long lasting, chemically inert, flexible or rigid as needed, soft or hard as wanted and shaped in most complex forms to accommodate into intricate space. Plastics are no longer "that cheap material" as tagged by many in the past. There are a variety of plastics (or more scientifically thermoplastic polymers), which have got established in a number of applications and replaced many conventional materials such as metals, ceramics, glass etc. The possibilities of molding them in numerous shapes, sizes, colours together with added properties like impact resistance, light weight, soft feel, repeated flexibility / hinge like behavior, electrically or thermally insulating or if needed even conducting etc. have made them superior to other materials. Their importance is felt so much in all walks of life that these have become part and parcel of our existence.

At the same time we see indiscriminate use and wrong disposal system which has led to "plastics pollution". This has led to "ban on plastics" and banners and headlines shouting "say no to plastics".

The present aversion to plastics underrates the importance of these materials and it is high time we realize the integral role they are playing in our modern life. If we say "no" to these materials, it would be like saying no to most of our present day activities. A few examples of how plastics have become indispensable with our living will affirm the above statements. Starting with the tooth brush, tooth paste tube, soap case, mirror holder, flush tank which you see and use every morning to the mobile phone, land line phone, brief case, files and folders which you hold and carry during the day and finally doze off to sleep on soft mattress / cushion, you are in contact with plastics. How can you ever then say "no" to them.

What is then the problem in their extensive use? Why are the newspaper headlines shouting say no to plastics? This has given wrong impressions in many persons and public at large. The present lecture addresses these issues and proposes some solutions so that we can <u>Live with Plastics in Clean and Environmentally Friendly manner.</u>