

1944

♦ Dept. of Dyestuff Technology

Department of Dyestuff Technology was established in 1944 under Professor K. Venkatraman, the then director of ICT.

1946

♦ Dept. of Polymer and Surface Engineering

Earlier known as Paints, Pigments and Varnishes (PPV), Dept. of Polymer and Surface Engineering was established under Professor N.R. Kamath.

1952

♦ Dept. of Chemistry

♦ Dept. of General Engineering

1959

Establishment of **B. Pharm. Course at ICT**. It was the first course of its kind in the state of Maharashtra.

1966

♦ Dept. of Mathematics.

♦ Dept. of Physics

2002

UDCT was **renamed** as UICT.

2004

Autonomy was granted to ICT.

2008

ICT was granted **Deemed University** status by MHRD.

SCIENCE NEWS AND NOTES

Excerpts of New Age Research and Innovations...

Science is like an abstract painting; there is more to what meets the eye. Every new glance is more intriguing than the previous one. The more you look into it, the more power it has to captivate you with its beauty. A new discovery or an invention creates ground-breaking progress in the existing sciences. Right from the foundations of material science to curing a disease in practice, these small pieces of the puzzle interlock with each other fitting together to create what we know as science. This increases the scope of the human race to grow tremendously.

In an age of prevalence of common assumptions, this article runs through various advances made in the field of science. Despite the ravages of time, these articles have matured and grown in value to become artifacts, kindling enthusiasm in today's youth.

Synthetic Natural Rubber!

Synthetic natural rubber like materials have been in use for nearly fifty years but it is only now that truly synthetic "natural" rubber, i.e. an essentially cis-1,4 polyisoprene, has been successfully prepared. For the first time, man has succeeded in synthesizing a natural polymer, by the method apparently different from the one that is likely to occur in nature. Two methods are available for synthesis. In the first method developed by Firestone Tyre and Rubber Co. Akron, Ohio (Ind. Eng. Chem., 1956, 48, 778), isoprene is polymerized at 30-40°C using 0.1% of metallic lithium in Vaseline, as a catalyst. In the second method, developed by the B. F. Goodrich Research Centre,

Brecksville, Ohio (ibid., p.784) isoprene is polymerized using a catalyst based on polyolefin information purchased from Karl Ziegler (exact nature of the catalyst is not stated), with the advantage that a cis or trans polymer can be obtained as desired. Full information on the stability, macro- and micro- structure of the polymer, processibility, and behavior of Vulcanisates etc. have not been recorded for both the types of Polymers. The performance of tyres based on the new synthetic rubber is claimed to be 95% of natural Heavea rubber. A bright future is expected for this new material, which should go a long way to minimize the dependency of those countries lacking natural rubber resources.

Dietary Fat and Heart Disease

Experiments by Prof. J. F. Brock and his co-workers indicate that the nature of dietary fat affects the lipid content of the serum. Oils with a high proportion of unsaturated fatty acids such as most vegetable and fish oils consistently depress the serum cholesterol levels. If the view is accepted that a high serum cholesterol level is associated with a coronary heart disease, then this is circumstantial evidence that the development of coronary heart disease in man is influenced by the fat in his diet. However, systematic knowledge of the ratio of essential to total fatty acids is almost non-existent for fat consumed in the diets of any large group of persons, and much more research will be required before it is possible to decide how variation in that ratio affects disease prevalence. - (Food Manuf., 31, 219, 1956).

The Bombay Technologist, Volume 7, February 1957, Science News and Notes.

Recent research on common cold

A recent note in science (1958,-128, and 3314) reported results from the use of pooled human globulins in the transmission of a common cold. Transmission of the common cold occurs when filtered nasal secretion is used as a vehicle. When the same material is installed at a later date, some people are found susceptible. The processed infective nasal material was installed in volunteers using Saline solution, boiled gamma globulin, albumin and gamma globulin as vehicles. Transmission of cold occurred in varying degrees but a statistically significant difference was noted from the use of pooled human gamma globulin. Protection, in terms of reduced symptom score, was stated to be 65 per cent. The investigators consider the result as "note-worthy" emphasizing at the same time that further research in this field is necessary.

The Bombay Technologist, Volume 9, February 1959, Science News and Notes.