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Dr. Y. B. Vasudeo, holds a Doctorate in Chemistry, from the prestigious UDCT, Mumbai. He started his career with TIPCO, India's pioneering company in thermoset plastics and also set up the filled and reinforced thermoplastic compounds business of TIPCO. During the period 1996 to 2006, Dr. Vasudeo, led the technical team of polymer business as Head of Product Application & Research Center of Reliance Industries Limited, Mumbai.

Currently, he serves as an advisor to a leading thermo-plastics compounding business unit and is on the Board Of Directors of Plastiblends India Limited.

Dr. Y. B. Vasudeo has been decorated with many honors by all the leading plastics professional bodies and associations, in India. Dr. Y. B. Vasudeo has held many important positions in industry associations.

During an illustrious career spanning over 25 years, the Innovation Consultant, has conceived and developed specialized and customized plastic products and services for a wide spectrum of end-use industries, including automotive, appliances & consumer durables, wires and cables, packaging, woven sacks, etc.

L. P. R. I. to e-Academy

Plastics & Rubber Institute of London (PRI, UK), was one of the primary associations spread among the Commonwealth countries. In India too, there was an India Chapter with its tentacles in major cities of India.

University Department of Chemical Technology, UDCT (now ICT), used to conduct Plastics Technology degree course. There were very few seats. Till 1993, UDCT used to admit only eight students, every year for B.Sc. Tech., and degree course in Plastics Technology. Apart from UDCT, there were only two colleges in India, HBTI Kanpur & LIT of Nagpur, who used to conduct Plastics Technology course but again seats were limited.

There was a generation of these students, who built the Indian Plastics Industry. Initially, this industry was small but this trained manpower started working with ICI, Union Carbide, and later with Sri Ram, Chemplast, Polychem and NOCIL, etc. and also in the downstream processing industry. Some of them became entrepreneurs and started their own business in Plastics as well as additives such as Stabilizers, Lubricants etc. Rest of the manpower employed by Plastics industry was either chemistry graduates, chemical and mechanical engineers, who were mostly self-trained. These people then trained the operators and others, to work for plastic processing industry, which was small and always constrained by non-availability of plastics raw material. This paucity of raw materials in turn created recycling industries, in India as most of the Plastics after end of life could be recycled. Unfortunately, people, who blame plastics, do not know that India has a vast recycling industry, unlike the west or developed countries.

All these, self trained and experienced people mentioned above contributed to formation of India Chapter of Plastics & Rubber Institute, at London, in June 1963. This institute used to publish Plastics & Rubber International magazine every month, which was looked upon as sole source of information and technological update by the Industry. PRI, UK, was also known for training, as similar situation was also probably existed in UK. PRI, UK, used to conduct Licentiate Diploma course and used to award "Licentiate of Plastics & Rubber Institute", which was known as L.P.R.I. (LONDON). There was also an advance course, which was known as "Graduate of Plastics & Rubber International", which was known as G.P.R.I. (LONDON).

India Chapter of PRI, UK, started conducting L.P.R.I. course, in Mumbai and few other cities. Prof. M.V. Joshi, of UDCT, who started Plastics Engineering Post Graduate Course in UDCT, took the lead.

Most of his students used to be mechanical engineers, whom he brought in to Plastics Industry. He also used to encourage his own students and research students with Chemistry background to take up L.P.R.I course. I was fortunate to be one of the L.P.R.I. course was supplementary to University education. The classes were conducted everyday in the evening at UDCT, in Mumbai, at 6 p.m. The students and faculty used to be predominantly from the industry. Theory and engineering drawing, product mould design was taught by Prof. M.V. Joshi and other faculty members, from UDCT. Faculty did not expect any remuneration. It was always considered as social cause, sharing of knowledge and experience.

Question papers were set by PRI, UK, for world-wide examination and answer booklets were sent to London for corrections. This was done very seriously and L.P.R.I. course attained value in the Indian Plastics Industry. There was a generation of L.P.R.I. diploma holders in the industry, who used to take pride and display their diploma as L.P.R.I. (LOND) on the visiting cards. I was also one of them.

Question papers, set by PRI paper setters were unique as there were no straight questions. All the questions were totally opposite to the questions, which would normally be there in any Indian University. Most of the students, who were used to University Examination, used to have difficulties in answering the questions, as a result only three to four students used to pass every year out of the twenty-five students who took the exam. This means passing rate was only 10 to 15% every year. This gave more credibility to the L.P.R.I. course. Many people in the Industry used to joke and tease the students, who used to attend classes, "you will never pass", "It is not meant for dumb fellow like you" etc. This brought lot of seriousness among the students.

The questions in exam paper used to be simple but twisted and the answers were expected to be crisp and to the point, e.g. (1) Explain the differences in the cups made by injection moulding and thermoforming. (2) Explain differences in the polymers made by condensation, addition and suspension polymerization (3) Explain differences between various transparent amorphous plastics. etc.

Hence, there was no essay to be written but crisp answers to the point, which most of the students found difficult. They found that they knew the answers yet could not complete writing the answer booklet within the scheduled two hours of examination.

This was the L.P.R.I. Diploma.

I have mentioned all the above, so that future generations will at least have the history, and would know the struggle earlier generation had to undergo, in order to acquire information and knowledge. These days, information is available at the fingertip but we still find adequate knowledge is missing.

India Chapter of PRI, UK, became Indian Plastics Institute (IPI) on 30th April, 1985, and was formally inaugurated on 6th May, 1985. IPI started conducting its own Diploma Course DIPI, on similar lines in many cities of India. Today, there are about twenty-five colleges, throughout India, offering B.Tech Degree Course in Polymer Technology. CIPET offers many diploma courses including B.Tech and M.Tech courses. The growing need of Plastics Industry got satisfied and industry started getting "Ready to Use" manpower from these institutes. Diploma course of IPI, DIPI is still conducted, mainly in Mumbai & Bangalore, but got a back seat.

Hence, IPI had been engaged in conducting diploma courses in plastics, when there were very few Universities and Polytechnics offering courses in plastics. Since then, in the millennium, plastics industry has grown leaps and bounds in India, which is evidently seen during Plastindia Exhibitions.

During earlier days, plastics industry was located in major cities and towns throughout India, but due to the incentive scheme being offered by the Government of India, as well as State Governments, industry is now going outside major cities and towns.

The Diploma Courses offered by IPI were conducted after office hours. This gave an opportunity to young as well as old technical people working in the industry to upgrade their knowledge and skills. However, today, since the industry has moved out of cities and towns, this opportunity does not exist for them. We, at IPI, have realized these aspects of knowledge management and debated amongst ourselves. The result of all this brainstorming is the knowledge management project, which would be taken up with support from Plastindia Foundation.

Indian Plastics Industry is targeting consumption of plastics from 5 Kg to global average of 27 Kg's. The polymer consumption has reached the level of 12 -13 mmt per annum. This offers tremendous growth potential within the industry that would translate to substantial employment generation. Today, industry employs about 3.5 million people,

contributing Rs. 8,000/- crores in tax revenues to the government, which is expected to double in coming years.

This is a massive task, which creates new challenges in every aspect of industry. Trained manpower - "Human Capital" of this industry is the most vital for this growth. It is estimated that industry will need 50,000 new people every year. Issue would then be how to train these people for industry needs.

There would be material, process and technology up gradation that will take place and the new & existing manpower needs to get trained or oriented to this new change. To improve, the productivity, training needs have to be identified and training programs need to be in place.

There is a constant information flow today, and lot of knowledge is available on the web. But people who have a commitment to excel have little time to assimilate this information and knowledge. This flow stops at a particular expert level. Such experts, within the industry and academia, need to be identified for sharing their knowledge and expertise.

However, people are often geographically separated. Experts are at one remote place and students are in different clusters, where industry is today. The challenge lies in bringing them together.

IPI e-Academy is not a typical University education, but it would supplement the same. It would make available experts in every field to all those who wish to acquire special skill sets.

Indian entrepreneurs and the business community, today, is looking forward to create culture and climate that promotes creativity & innovation. This community has recognized the need and looks forward to cultivate the concept of market orientation, creative and innovative approach, enhanced productivity and finally, a culture, which recognizes bottom line (profits) orientation in their people.

The delivery of education is moving towards providing value in anytime, anywhere framework. The institutes also are required to embrace modern technologies, which include teleconferencing, broadcast facilities, network, global connectivity, digitization of information, decentralized access to information, etc. Proponents of information technology have therefore predicted that brick and mortar institutes will disappear within couple of decades. Virtual colleges operating in cyber-space are moving in, providing learning in "anytime, anywhere" framework. This will also bring in changes in the teaching methodology. Emphasis will shift from teaching to learning and to student achievement

and competency. Problem-based learning, collaborative learning will become an important component of education delivery. The faculty will be called upon to shift their role from teacher to being a mentor, coach and guide. To change from lecturing to creating participatory learning experience is going to be a major challenge.

We have decided to change this education process and to orient education to the present market need, which involves a fundamental change. The biggest challenge, today, is to deliver education at an affordable price to the growing number of young people spread all across India. Most of this young population are urbanized and have high aspirations and global exposure due to penetration of internet. There is a demand for better facilities, use of modern teaching technology and well-paid teachers, as many of these young people are today working, due to their social needs and cannot afford the high cost of higher education. This means that there is a need for periodical market research-based planning process, market value weighted assistance of faculty, greater participation of practicing professionals and strong linkages with industry and other institutes. Plastics industry has also entered a world, where product life-cycles are getting shorter. The rate of obsolescence is on the increase, which creates increase in demand on educational institute for continuous learning.

e-Academy Programme would be as follows, One hour lecture on Webinar,

- One Hour Company Presentation,
- Short Courses,
- Diploma Courses,

We at IPI feel that, with CMS computers as partners (who have provided the hardware), IPI e-Academy has created the platform for e-learning. All of us need to support this initiative so that it grows. Please consider this as a newborn child of yours, who needs your support, guidance and caring, so that it grows and fulfills your expectation.

Friends, IPI is an organization run by professionals like you and me, who give our valuable time selflessly to this organization. All of us, who have worked in this industry, survived and grown, need to give back something that is the wealth that we carry in the form of knowledge and money. This is an opportunity to do so. My humble request to all of you, on behalf of Chairman & GC Members, as well as President and Presidential Board Members, is to support this noble effort.