

SPEECH OF PROF. U. R. RAO

Your Excellency Padmashree Dr. D. Y. Patil, the Governor of Tripura, Shri. Shushilkumar Shinde, my old friend and the Chief Guest of today's Convocation Ceremony, Chancellor of the University, Dr. P. D. Patil, Members of the Board of Management and of the Academic Council of the Vidyapeeth, Deans of faculties, the gradaunts of the day, Teachers and staff of the Vidyapeeth, Distinguished Guests, members in place, ladies and gentlemen.

At the outset, let me thank the University, Vice Chancellor, Academic Council, and Members of Board of Management and so on for having conferred a honorary doctorate on me.

I shall cherish it particularly because, this is the first convocation of this University. My heartiest congratulations to all the successful graduants of the year. I have no doubt that your training in this beautiful temple of learning, has equipped you with both the knowledge and wisdom which is more important, to boldly face the challenges facing our Nation. I only wish to emphasize that your learning process does not stop here, it begins now. It is a long life process and if you forget that my friends, you will never fortify.

In the last 50 years, particularly since beginning of the space and the first lunch of sputnik, the entire world has changed, The amount of knowledge that has accumulated is enormous, since many many thousands and thousands of years. We knew hardly anything what is happening in the space. We for the first time tried to see well beyond the space, could go back to the beginning of the time and the end of the Universe. First time we have been able to do that. We have seen objects, which have just never seen before in the sky, even more importantly space has been used for various applications, particularly in this Country and I am proud to say that Indian space programme stands high and above most of the nations in the World, in the application of space.

We started with the application of the space for communications: It was just brief event in the 80s. It was extremely difficult to get a telephone line, it was impossible to talk outside. Every thing changed by the INSAT, the communication satellites. The remote sensing satellite, the meteorological imaging, which is done every half an hour every day, is the only meteorological instrument in the entire World was in Indian Ocean, providing to the entire World. It's used in agriculture, in forestry, in identifying water, and recently we have gone to Chandrayan for water even on the moon, not much but enough to show that it is a different type of object. We never knew that there was water, infact, we have thought that moon was waterless. We started our flight, so no doubt, we have reached the technology level of anywhere in the World. We have launched over 52 satellites out of which half of them were launched from Shri Harikota, our own space booth. Yet there are many more things to be done, but in the most important thing space has brought is convergence of communication and the space technology and with the result it has started the information communication technology revolution. Unlike the earlier two major revolutions of World has gone through, the agriculture revolution of 10,000 years ago and the industrial revolution four hundred years ago. The ICT revolution has changed the entire World; it is knowledge which now rules the World and the amount of information that you get gathered today 20 trillion pixels, not billion, 1000 billion is trillion. Every subject, you get 2000 pages of the new material and is only a Country which can access, immediately analyze, synthesize and disseminate and use that can essentially complete in the globalized World. We are now in globalized world. For the first time, because of space, the entire world has shrunk, but the extra ordinary pace of obsolescence so great that in a no next 50 years, what you have seen in last 50 years is nothing, what you are going to see that is exactly I want to address the young students. When I studied M. Sc., if I had said that I want to go to the moon, people would have said that I must be admitted into mental hospital. Today not even a child says this because you know that we are already in. The most important thing that is going to happen is that new type of discoveries which are coming every day is going to change the face of the world. For the first time e.g. we are talking of putting elevators to space today's gestation orbit we might succeed, may be in the next few years with the nano technology. Today more than 10 million transistors can be put into postage size stamp of IC. The nano technology

has come into picture. Infact, very good work is going on in Pune, which may become the most important thing for the identification process and something which can not be repeated. We are talking of essentially putting habitat on moon and then on the Mars. May be 100 years we might even think of we have already started thinking but we will be even succeed in starting building of colony on the Mars and create an atmosphere. These are the challenges you will face, whereas we have seen in last 50 years, you are going to see in next 50 years.

My dear friends, time and history have assigned you a unique role and responsibility of leading our nation at a very critical and turbulent period. You have the opportunity to wipe out tears from the eyes of all the people, through new agriculture so called new ever green industrial agriculture revolution by creating enough wealth. You have to face the global warming and you will find solutions. Science and technology will certainly find solutions. If you do not want to be frozen in history, you must liberate yourself though new ideas, discoveries and inventions to create a prosperous, just and equitable society.

I would like to say you, “must dare to dream”, because you are young. Dare to dream and back of your dreams with hard dedicated efforts, to enable this community/nation to occupy its full right place in the comity of nation. Whenever you dare to dream, there are many senior scientists to say “no that is not possible”. I would quote Clerk, “when a distinguished but elderly scientist states that something is possible he is almost right, when a distinguished but elderly scientist states that something is possible is almost certainly right, but when he states that something is impossible is most probably wrong”, because that is what going to change. Every day new things are coming. Things we thought were not possible have become possible. We are talking of new type of universe. For the first time we have found that the entire temperature difference between one end of the universe and other end of the universe is only 0.0004 degree as against more than 100 degrees on the earth. We see small differences that the one which created the galaxy, the stars, the planets and so on. We are talking whether there was a tarries norm today, infact we are going very near to the Hindu philosophy. Do

you have only one universe we are thinking on our own universe? May be there are many universes like this. May be it is a universe of universes; it is multi-universe, if the name we put. The laws of physics and science may change, we don't know but things are changing what is happened in entire horizon is in front of you and its for you to dare to dream and then you can create history.

I wish all of you a very very bright future. I wish I was there receiving a degree rather than, ofcourse I am receiving a degree but not an honorary but the rightful one.

Thank you very much !