Graduation day address by Dr.S V Sharma, Deputy Director, ISAC

Theme: Education, Ethics, Technology And Space Program

1. Respected Dr. Bhanumathy T, Chairperson, Dr. G Ranganath, Principal, Deans Prof. K Suresh Babu, Prof Badrinarayanan, Prof. Krishnamohana Reddy, Chief Controller of Exam and other distinguished professors and lecturers, my dear student friends girls & boys, their parents, Ladies and Gentlemen!

Very good Morning to you all.

- 2. I am extremely happy to be a part of your 23rd graduation day. The sight of your campus gives me a great feeling that ADHIYAMAAN College of Engineering is one of the most premier education centre. I am sure that this college will grow to greater heights and become a leading institute in the country.
- 3. Today, I will talk about "Education, Ethics, Technology and Space Program". My dear students at this juncture, I very strongly believe it is our duty to honor our parents, grandparents, brothers, sisters, and relatives on one side and the teachers on the other side. My dear students on this occasion please give them all a big round of applause in appreciation of whatever good they did for you. What you are today is because of them. Please believe me, they were the only non contenders till now and in the time to come. My dear students, as I stand before you, I am looking at the next generation of leaders and entrepreneurs. You are the leaders of the 21st century.
- 4. "Education is the most powerful weapon which you can use to change the world" was said by Nelson Mandela. In face of rapidly changing technology, keeping abreast with knowledge is imperative. Education is not merely about making millions literate. It is also about citizens realizing their rights and their

- obligations, both of which are necessary to democratic functioning. *Mahatma Gandhi, Father of our nation said "Live as if you were to die tomorrow. Learn as if you were to live forever".* His vision was to have entire nation with literates for the smooth functioning of Democracy.
- 5. Adhiyamaan College of Engineering is one such reputed college in India providing graduation and post graduation courses in critical fields like Electronics, computer science, mechanical, Civil, electrical, aeronautics, bio medical and Bio technology. I am sure this college will continue to offer such courses and become a catalyst in giving future CV Ramans and Aryabhatas'.
- 6. Well **Ethics** is one topic which I felt I have to stress today. Today we see this topic is very vital in everybody's life.
- 7. Man's life has a moral standard. Ethics is most important as you grow. You have to show concern and take care of your parents, teachers, life partner, friends and society. But at office also your ethics will have significant impact on your professional success. Your boss, peers and subordinates look at your relations which are an integral part of your success. Honesty, integrity, respectful, caring for others, fairness, co-perative and appreciate others value systems are some of the constituents of ethics. Though they cannot be taught they have to be acquired and adopted by you. I request you sincerely follow ethics and at the same time have judicious work life balance. Passing ethics to next generation is also an important duty in your life.
- 8. Now moving on to the topic "Technology":
- 9. Technology is the most spoken word in today's world. Though I am not elaborating on technologies I thought this is a topic which I feel is common between you and me. In its most simplest form definition of technology it is the application of knowledge to solve

a problem or improve a pre-existing solution to achieve a goal. 'Development of technology' started since 2 million years back when mankind started using stone tools for hunting and protection. From then onwards it has been growing exponentially with advancement in science and education. Today's science is tomorrow's Technology. It bridges the gap between possible and impossible.

- 10. I strongly feel that if INDIA has to become a leading nation in the world, technology will be a major dimension for our prosperity. Scientific knowledge and expertise, innovation, high technology, industrial infrastructure and skilled workforce are the key factors that have driven the progress of the country to a major extent. Our country is home to the third largest technical and scientific manpower in the world and it is also one of the top-ranking countries in the field of basic research. We have a strong technological base in various fields like space, nuclear, defence, IT, textiles etc
- of you will be involved in building future new technologies and taking our country to the top of the world. I think most of you would have heard about 'knowledge economy' which will be one more parameter for measuring the country's growth. I urge all of you to think about future and take appropriate steps in your life to make our country feel proud.

Now to speak about Indian Space Programme,

India is now the role model to the world in space applications; one of the six in the world with the capability to build satellites and launch them from her own soil.

You are well aware that India's Mars Orbiter Mission was launched during November 2013 and the satellite will reach the MARS by September 2014. This is ISRO's first mission to planet Mars with an orbiter craft designed to go around mars in an elliptical orbit. One of the main objectives of this mission is to conduct chemical, topographical and terrain mapping. We are also planning to study Mars atmosphere. Our future Mars missions will depend on this mission. India's Mars Orbiter Mission was successful in our first attempt itself. The world applauded at our achievements.

On January 5th 2014, the world witnessed the successful launch of GSLV-D5 carrying GSAT-14 satellite. Ours is the sixth nation to indigenously develop cryogenic technology. If you recall twenty years back, Russians denied this technology to India. This was blessing in disguise for us. Our Scientists and Engineers worked hard and finally developed this critical technology and once again demonstrated to the world that we are at par with other space faring nations.

Based on the application derived out of the space programme, Indian Space Programme today has the satellite & launch vehicle programme. In the area of satellites, there are three major programmes namely Earth observation programme, communication programme and navigation programme. We also have interesting projects for space science and interplanetary missions.

Indian Remote Sensing (IRS) satellite system is the largest civilian remote sensing satellite constellation in the world providing imageries in a variety of applications. Several applications covering agriculture, water resources, urban development, mineral prospecting, environment, forestry, drought & flood forecasting,

ocean resources, disaster management etc. are provided by these satellites.

The Indian National Satellite (INSAT) system established in 1983 with launch of INSAT-1B has initiated a major revolution in India's communications sector and sustained the same later. INSAT space segment consists of many operational Satellites. The system with a total of 210 transponders in the C, Extended C and Ku-bands provides services in telecommunications, television broadcasting, weather forecasting, disaster warning and Search & Rescue operations.

Satellite based navigation is emerging as an important space application wherein constellation of satellites work together to provide accurate position, time and velocity information to objects travelling on land, sea or in air making the travel more efficient and safe. India is developing its own satellite based navigation system called Indian Regional Navigation Satellite System (IRNSS) comprising **seven** satellites. Our first navigation satellite IRNSS-1A is already in space and the launch of our second mission in this programme is planned next month. The entire constellation will be ready by 2015.

Space Capsule Recovery Experiment was intended of performing experiments in micro gravity conditions and the capsule was deorbited and recovered. This technology is extremely important for Human Space Program.

As part of Interplanetary exploration; Chandrayaan-1, India's first mission to Moon, was launched successfully on October 22, 2008. You all know, the mission confirmed the presence of water on the lunar surface. Chandrayaan-2, India's second mission to the Moon,

will have an Orbiter and Lander-Rover module and will be launched during 2016-17.

My dear friends what more inspiration and assurance you need to go all out to realize your dreams than this?

Finally I am concluding the address with the following four aspects that you need to focus:

- In your professional life, you will face many challenges both technical and managerial. Always changes are led by a leader.
 I hope that each one of you will lead a change that will make a better India. Remember a good leader is always ethical.
- 2) Make sure that you will **make use of opportunities** that come your way. Be entrepreneurial and have the courage to fail. When you face hurdles, use your conviction and your commitment.
- 3) I have no doubt that every one of you will be very successful. Don't forget the less fortunate living in our country. We need to bring the full power of the technology and the new wealth created to improve the life of everyone in our country.
- 4) My dear friends, congratulations, it is a dream realized for most of you as well as your parents and teachers. **Learning through out the life** should be your guiding principle.

Thank you one and all for your patient hearing. Jai Hind