INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

SIXTEENTH CONVOCATION

July 13, 2014

CONVOCATION ADDRESS

By

General V.K. Singh PVSM, AVSM, YSM (Retired) Minister of State for Development of North Eastern Region (Independent Charge), External Affairs and Overseas Indian Affairs, Government of India New Delhi, India Esteemed Dr. R P Singh, Chairman of the Board Governors, Distinguished members of the Board of Governors of IIT Guwahati, Prof. Gautam Biswas, the Director, Honorable members of the Senate, Faculty and Staff, distinguished scholars of honour, Prof. Jyotiprasad Medhi and Prof. Dipak C. Jain, esteemed guests and invitees and my dear graduating students

I deem it a great pleasure and honour to address this Sixteenth Convocation of IIT, Guwahati. Over the past two decades of its existence, this Institute has distinguished itself as a pre-eminent Institution for scientific and technological studies and high calibre research. It is not mere coincidence that this Institute of erudition has been rated as one of the best young Institutes in the world, in the most recent survey of Times Higher Education (THE), London. It is your hard work, devotion to quality, contributions of your illustrious alumni, dedication of your teachers and staff, and, vision of your administration which are responsible for this achievement.

Dear graduating students, the day belongs to you. Today marks an important milestone in your life's journey. Entering this Institution facing intense competition, you pursued your academic work with great dedication. By your hard labour and dedication to maintain

high standards, you reached the target. It is a moment of pride for you as much as it is for your teachers, parents and those who had any role in shaping your life so far. You can recall that your mission for higher learning started here with great passion. The journey will not end here. It will not end until you feel fully confident of meeting uncertainties and challenges of the life's laboratory and dealing with successes and failures with an undisturbed attitude*duhkhesu anudvigna-manah sukhesu vigata-spriha*. I am sure that each one of you has different dreams and you should never give up your dreams and aspirations. If you are prepared to think big and act in time with conviction, you can be a stalwart. From the bottom of my heart, I wish each one of you success in your future endeavours.

IITs are Institutions which played a pioneering role in building the brand image of contemporary India. Many of their alumni have achieved a position of great pride in the world by scaling newer heights. It is heartening to see IIT Guwahati adding values to this brand. Many of IIT Guwahati alumni have globally excelled as technology leaders, scientists, managers, educators and entrepreneurs. The young and dynamic faculty members of the Institute have achieved global and national recognition for themselves and the Institute through their research and innovation.

My dear students, you are among a few fortunate persons who have had access to educational experience at this renowned institution. This experience will reward you throughout your life.

Knowledge is the supreme power. But mere accumulation of basic knowledge is of limited practical use, unless it is translated into innovations, providing its economic or social value. The transfer of knowledge for economic growth has revolutionized the world. The Industrial Revolution in Europe and the Green Revolution in our own country are examples of such transfer.

Today we live in a world where global economies are interconnected. Knowledge is again recognized as a key resource for achieving economic growth and social development. The knowledge revolution has restructured manufacturing processes, redistributed markets, redefined relations among nations and refined methods of governance.

India has exploited information and communication technologies (ICTs) for ushering the knowledge revolution. The significant growth of the infrastructure for higher education, the national-level initiatives like the NPTEL (National Programme on Technolgy Enhanced Learning), Virtual Lab, INDEST Consortium of e-resources and the pan-India knowledge network (NKN) have

contributed to the spread of higher education. Similar ICT-based initiatives are needed for the primary and secondary levels of education and the health sector.

As a society, we traditionally valued and nurtured the knowledge building activity. The current knowledge age seeks and rewards ideas, irrespective of where they originate and reside.

The large source of human capital of India has to be tapped and converted into value. India's role and destiny in the world will thus depend on the quality of her human resources. Simultaneously, we have to imbibe in our youths and children the basic tenets of our culture, our commitment to society and about our roles in balancing the ecology and preserving the environment.

Technology development can take place through *imitation*, *transplantation* and *innovation*. Becoming a mere destination for outsourcing should not be the goal of India. Ownership and pride lie not in imitation and transplantation of technology, but in innovation. India has done reasonably well in the service industry. But we have to devote our energy to the manufacturing sector with efficient and robust processing techniques. There is an overriding priority to undertake technology development in different fields, and make India a nerve centre of our industrial activities.

The Institute as a knowledge organization has to play multiple roles. The dissemination of existing knowledge to the satisfaction of the young minds itself is a difficult task. Simultaneously, the environment should be created to inculcate the culture of creativity and the spirit for innovation. Factors leading to innovation should be searched by the educators and integrated with our teachinglearning system.

It is clear that quality education and high calibre R&D hold the key of advancement. Over the years, IITs have established themselves as important research institutes. To remain at the forefront of technological and scientific developments, our research demands for international collaboration and the collaboration with Industry. At the same times, IITs should guide their R&D activities to cater to contemporary research needs of the nation.

With about 200 different ethnic groups and more than 150 spoken languages, with the difficult hilly terrains and the mighty river bodies, with the vast natural resources and the rich biodiversity, with the natural hazards of earthquake, flood and erosion and with an inadequate infrastructure and poor connectivity, the North East Region presents unique research challenges in humanities, science and technology. It is natural to expect IIT Guwahati to

play a major role in addressing some of these challenges. I am glad to know about the increased participation of various Departments and Centres of the Institute in R&D activities involving the North Eastern Region. It is also heartening to know that the educational outréach activities of the Institute have covered all the eight states of the Region.

Dear graduating students, it is borne out by experience of all nations that failures are the stepping stones for greater progress, provided lessons are appropriately learnt. Our civilization is thriving and moving ahead despite our occasional failures. Let the undefeated spirit be the guiding factor for you as an individual also. I quote Helen Keller, "*Life is a daring adventure or nothing. To keep our faces toward change and behave like free spirits in the presence of fate is strength indefeatable*". I wish you a marvelous future.

Thanking you all,

Jai Hind.