



ADDRESS

OF

DR. R. P. SINGH

**CHAIRMAN
BOARD OF GOVERNORS**

AT

**THE 12TH CONVOCATION OF
INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI
WEDNESDAY, 26 MAY 2010**

Good morning, Prof. Gautam Barua, Director of the Institute, my colleagues on the Board of Governors, members of the Senate, faculty and staff, graduating students, parents, guardians, ladies and gentlemen. I extend my warm greetings and welcome you to the Twelfth Convocation of the Indian Institute of Technology Guwahati.

This day marks a significant landmark in your life as you are amongst the very few privileged children of the society who will graduate out of this prestigious Institute which is committed to provide quality education. This day belongs to you. Congratulations to you all. I am deeply impressed by the academic ambience of the Institute and laud the efforts made by the faculty, staff and the students.

As you step out of the Institute, you will find that our country is going through one of the most dynamic phases. The world has witnessed some unprecedented events in the financial markets in the last decade and its impact has been felt on people across the globe. The fear of a double dip looms large in the US as the world economy is struggling to crawl out of the economic slowdown. While the developed countries have been a casualty in the recent crisis, the world has looked up to the Asian economies for growth. India, in the wake of the financial crisis, showed that its growth story was robust, as it quickly emerged out of the deep red zone to post some of the most impressive figures of growth across the nations. Indian growth, unlike several of its Asian counterparts, has been a growth fuelled by services rather than manufacturing, a growth that has been fuelled by the entrepreneurial culture of its citizens rather than the state. You belong to a country that has had a rich culture, a troubling past and a promising future. Several sacrifices of your predecessors in the past and the farsightedness of leaders has brought us to this cross road, the tipping point, that promises to propel our country into one of the leading nations across the globe. While India was able to resurrect itself with minimal impact from the financial crisis, it is not without its own share of problems. Infrastructure is one of them. It took 40 years to add the last 230 million people to the India's cities, but it will take half that time to add the next 250 million. India's population in the cities is set to soar from nearly 340 million in 2008 to 590 million

by 2030, nearly twice the population of US today. India could have more than 50 cities with 1 million populations and more. Many cities could be larger than some countries today in population and GDP. Rapid urbanisation will result in the proliferation of slums across cities unless we develop a viable model backed by other infrastructural facilities viz. transport, water, education etc. The urbanisation of the country will put a steep demand on both the financial resources and the human resources. While speeding investments will be key to the development of required infrastructure, turnaround can happen only when it is supplemented by successful implementation of the reforms of governance and administrative structures.

Today, energy is crucial to all aspects of development and its demand is ever increasing. The rapid urbanisation and industrialisation over the last few decades have multiplied this demand many fold. Our country needs to explore both conventional and alternative energy resources. Therefore, it is of utmost priority that new initiatives be taken to continue to tap these resources in times to come.

The North East alone shares about 40% of the country's total hydroelectric potential. Out of the estimated potential of about 60,000 MW, less than 10% has been harnessed so far. The region also has huge reserves of coal, oil and natural gas. To achieve the targeted goals for development, continued R&D support from the academia is needed for every facet of energy technology and its effective management. Given its vast energy resources, this part of the country plays a vital role in contributing to energy policies for the entire country. It is thus heartening to note that this Institute has an active Centre for Energy and has also committed to enter into research and teaching in the power sector, manifested by the recent starting of a BTech programme in Electronics and Electrical Engineering.

For sustained economic development as planned by our Government, we have to create and maintain high-quality physical infrastructure which includes those for power generation and distribution, electronic communication, transport, public health and educational facilities. All of these constitute the backbone of development. Our daily urban life suffers from erratic electricity and water supplies,

traffic congestion and lack of health care, educational and other facilities. For development to be more inclusive, it is imperative that adequate infrastructure and facilities also reach remote areas of the country. Several Departments of the Institute like Civil Engineering and Mechanical Engineering are actively working on R&D to address some of these issues.

Increased human activities have resulted in serious degradation of our environment. To manage the pollutants and preserve the ecological balance today, is a pressing problem which needs to be addressed at every level – in our homes, our localities and our country. The Departments of the Institute like Civil Engineering and Mechanical Engineering have R&D activities to address some of these issues. The Centre for the Environment has been established with the goal of introducing and sustaining efforts on mitigating environmental problems. I am happy to note that many initiatives with a multi-disciplinary focus have also been taken by the Institute in this regard.

Also, climate change has been envisaged as a major threat and research needs to be undertaken on the ramifications of impending climate change. I am happy to note that the Ministry of Water Resources, Government of India, has established a Chair to carry out studies on water resources. The research is aimed at carrying out assessments of the effect of climate change on these resources and also on evolving new strategies in planning, design and management especially for the Brahmaputra basin.

The changing value system in contemporary Indian society has strained the fabric of harmony that persisted. We are today witness to several tensions and internal conflicts. Self-centeredness has slowly crept in to replace the Indian societal value of selflessness. The relevance of social consciousness is being lost in the accelerated growth and fast changing lifestyles. Lack of ethical and moral leadership has led to reduced cohesion of society as a whole. As the leaders of the future you will need to be service oriented, sensitive and responsible to the society that you live in. As our ancient scripts of Vedanta advocates, world prosperity

comes through 3C's: concentration, consistency and co-operation. Unfortunately, we have lacked in these 3-Cs. I am sure being a student of this excellent Institute you are amongst the few who have the required level of concentration (focus, purpose) to lead this nation. But you have to learn to be consistent through well articulated processes to achieve your mission. The gigantic task which you have to accomplish can only be possible if you co-operate. As a loner you cannot be an achiever.

I would like to share with you a few words of wisdom by Einstein:

"The significant problems we face cannot be solved at the same level of thinking we were at when we created them. You must think new, higher, bolder thoughts to manage the change that is bombarding your organisation in these topsy-turvy times. You need to become good at tolerating ambiguity and uncertainty. You must embrace the change."

This day when you graduate a billion eyes will be set on you. This batch of intellects moving out of this Institution will be handed over batons to be the torchbearers of the country's future. The batons will hold the expectations of our billion people. They expect you to seek solutions to the questions that have not been answered. They will look to you to fulfil the need for innovative solutions and to usher in changes. They hope to find in you the social reformers and the change leaders who can take us out of the deep layers of the non-performing, non-committal political and bureaucratic society. You are among the few who will be able to find the difficult routes to lead us and to bring back our old glory.

My dear graduating students I conclude with a scintillating piece of advice from our ancient philosopher, Patanjali, which I am sure will be a guiding philosophy in your life:

"When you are inspired by some great purpose, some extraordinary project, all of your thoughts breaks their bonds: your mind transcends limitations, your

consciousness expands in every direction and you find yourself in a new, great and wonderful world. Dormant forces, faculties and talents become alive and you discover yourself to be a greater person than you ever dreamed yourself to be”.

I wish you success in life.

Jai Hind.

Dr. R. P. Singh
Chairman, Board of Governors
Indian Institute of Technology Guwahati