

INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

SIXTEENTH CONVOCATION

July 13, 2014

ADDRESS

By

Dr. R. P. Singh

Chairman, Board of Governors

Indian Institute of Technology Guwahati

Honourable Minister of State for Development of North Eastern Region (Independent Charge), External Affairs and Overseas Indian Affairs, Retired General V.K. Singh PVSM, AVSM, YSM, Distinguished scholars Prof. Jyotiprasad Medhi and Prof. Dipak C. Jain, Director of the Institute Professor Gautam Biswas, Members of the Senate, Faculty, Staff, Graduating students, Parents, Guardians, Ladies and Gentlemen. It gives me great pleasure to extend my heartiest greetings and extend a warm welcome to you all on this august occasion of the Sixteenth Convocation of IIT Guwahati.

On behalf of the Board of Governors, I would especially like to extend a hearty welcome to the Honourable Minister, General V.K. Singh PVSM, AVSM, YSM (Retired) and I express our gratitude to him for accepting our invitation to grace this occasion as the Chief Guest and deliver the convocation address. Sir, I am sure that your valuable words will inspire our graduating students and enthuse the gathering.

I would also like to welcome two great scholars, Prof. Jyotiprasad Medhi and Prof. Dipak C. Jain. The dignity of this convocation is greatly enhanced by your presence. We are proud of your achievements and you can be the role models for our young students.

My dear graduating students, I congratulate you on your achievements. This is a very special day in your life. All your perseverance and hard work have blossomed and fructified. I also congratulate your parents, guardians and teachers for their continued support to you in your efforts.

IIT Guwahati will complete two decades in September this year. Over the years, the Institute has grown into an important seat of learning. It is now globally recognized as one amongst the finest centres of higher education for science and technology. This has been possible because of the earnest effort of the students, faculty, staff and the administration of the Institute. I take the opportunity to compliment you all.

Located at a strategic position, this part of India has the potential to become the business corridor to countries of South Asia. IIT Guwahati can exploit this advantage and become the educational hub of this region. The Institute has already hosted Masters and PhD students from Bangladesh, Nepal, Myanmar, Malaysia and many other countries. I hope that over the years this collaboration will increase manifold.

A great Institute must always excel in research. This Institute is blessed with a large community of young and dedicated researchers. Their research contribution is among the many factors which has led to the Institute getting its high ranking. As a technocrat, I firmly believe that our research should be directed towards the benefit of the Nation and mankind as whole. Collaboration among the academic disciplines and other stakeholders is necessary to enable R&D efforts to become meaningful. In this regard, I want to share some aspects of my vision for research activities which need to be undertaken by this Institute.

Space technology research encompasses many engineering disciplines such as structural engineering, mechanical engineering, electrical engineering, and computer science. It is the technological culmination of a broad spectrum of scientific disciplines including physics, chemistry, mathematics, earth sciences, material science and medical science. IIT Guwahati may initiate this multidisciplinary research in space science and technology in collaboration with the Departments of Space, Earth sciences and the Defense Research and Development Organisation.

Research in the area of earth science and seismology may provide better understanding of natural resources as well as earthquake disasters and thus has a twin advantage. Similarly, Atmospheric research leads to an

understanding of the vital issues of weather prediction and Climate Change. IIT Guwahati may concentrate on some of the areas of earth sciences such as seismology, petrology, hydrology and atmospheric sciences. The Centre for the Environment, the Departments of Civil Engineering, Mechanical Engineering and Mathematics may be partners in this collaborative research.

Every Nation strives to increase its productivity of goods and improve the standard of living of its citizens. India, where a large population lives in rural areas and is dependent on agriculture, needs to focus on the application of technology for agrarian and rural development. Various engineering disciplines including Civil Engineering, Mechanical Engineering, Computer Science and Engineering and Biotechnology can come together to concentrate on improving irrigation, high yielding crops, sophisticated agriculture appliances, preservation and processing of food products and management of knowledge based agriculture development.

Combining the problem solving skills of engineering with medical and biological sciences to address the health care treatment such as diagnosis, monitoring and therapy is an emerging area. The Departments of Mechanical Engineering, Electrical and Electronics Engineering, Computer

Science and Engineering and Biotechnology may collaborate with leading medical schools of the country and abroad for biomedical research.

IIT Guwahati is situated in the North-Eastern region of our country and has a special responsibility towards its people and the region. This part of our country is very rich in flora and fauna. It is blessed with mineral and natural resources such as oil and gas, tea, bamboo and rubber. The Brahmaputra and the Barak river basins feed the region. The blue hills are the abodes of hundreds of ethnic groups with distinct languages, cultures and customs. For harnessing the potential of the region for the benefit of the masses, the Institute can concentrate on some of the following areas:

- (1)Hydropower engineering
- (2)Flood control
- (3)Earthquake engineering
- (4)Plant biotechnology, animal husbandry and forestry
- (5) Conservation of bio-diversity and genetic wealth
- (6) Handloom and sericulture and;
- (7)Language processing and linguistics.

Each of these areas has great potential for the sustainable development of the region. The Institute has already started initiatives in some of these areas as sponsored research projects, and needs to further expand the areas of collaborative research.

My dear graduating students, many of you are entering into professional life after the tireless effort in your student career. You should carry the same attitude to your professional lives. Our ancestors said, योगः कर्मसु कौशलम्. Dexterity in work is Yoga. Let this be the motto of your life. In conclusion I would like to share with you these inspiring words of Albert 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 organization in these topsy- turvy times. You need to become good at tolerating ambiguity and uncertainty. You must embrace the change.”

Thank you and Jai Hind