

# Science and Human Imagination

Good morning to you all!, Respected President of Assam Science Society Dr. D. K. Chaudhury, Vice-chancellor of Gauhati University Dr. O.K. Medhi, distinguished scientists, invited guests, delegates, Students, Ladies & Gentlemen and members of the Press.

Firstly I thank you for inviting me for this occasion of the 55<sup>th</sup> Annual Meet of Assam Science Society and for the love and affection shown to me by you all today. I feel deeply honored.

Human intellectual curiosity gave birth to Science. Science means knowledge. Modern science has transformed the human imagination to reality and it has demonstrated the immense power of the human brain in creating our needs today in all walks of life.

The brain is the most powerful organ in the body, which can capture all that we see, hear, smell, taste, and feel by touch. It is this organ that can comprehend, and reproduce each and everything that we experience through these senses. This human attribute allows us to think, comprehend, understand, analyze, apply, combine, validate, act and create things and solve problems for ourselves. Science and knowledge base, that we created or can create, make changes in the society for the better. The education and science is the back bone of growth and development of a society. Science produces miracle through innovative works.

#### Friends.

We live in a highly competitive society. To prosper, education and science are the career path ways to achieve the set goals. So we need to develop a goal and then accordingly make a mission and its objectives. We need higher educational institutions, universities, and its Labs in universities to undertake research activities in frontier areas of sciences. The cost of research is increasing, so we need to generate funds from Industries besides from the Governments. Indian Government has allocated a huge budget and we need to

use them efficiently in our universities. Universities have to now create scientific environment and mindset among the scientists, students for pursuing research and innovations for new and modern knowledge. All that we wish to do is to be blended with social requirements and with cultural fusion. We have to identify talents in students community, provide them support, nurture them for scholastic achievements through scientific methods.

With the advances in science and technology, value of science has been understood well. It is also being used in day to day life through different ways. These thereby improve the quality of life, which has become visible, measurable, also recorded and recognized by the society. Science has also been used for fun. The science and technology, have now a days become a way of life, say, use of mobile phone, digital camera, medical diagnostic tools,, cars with navigation systems and other domestic computerized gadgets, besides exploring new knowledge from the nature and space.

#### Ladies and Gentlemen:

Science is a systematic, continuing effort to produce new knowledge and understanding through ethically practiced and properly done research.

Science gives us (a) observable evidence, (b) measurable data on observations of phenomenon or a set of phenomenon, and also (c) allows to construct theoretical explanations about how thing work.

The methods of scientific research includes (a) generation of a hypothesis, or about how a phenomenon works. The experimentation tests the hypothesis and also provides its consistency of facts or results. There are various types of sciences such as experimental and applied sciences, both being interlinked. There are a number of fields of science such as physical, natural, veterinary, biomedical, astronomical and agricultural sciences to say few of them. Genetically modified foods are a new area of agricultural sciences. All these outcomes are the products of continuing research by brilliant scholars and scientists.

Science has revolutionized the human society. The world has become a science reality through scientific advances and transformations. Through science and technology, machines for different uses such as ultrasonic machines, computers, lasers, robotics are being made and used in health care sectors for its delivery and advancement of medical science. In medical practice, science causes good, most of the time, but bad also can occur in the form of risk of operations, complications from pharmacotherapy etc. So patient's safety, biosafety in health sector is of paramount importance for health scientists and doctors, nurses and also paramedics in particular and for people in general. Ethical practice is the key to healthy practice of medicine. The biomedical and health sciences with technological advances have made it possible to make miraculous cure in many diseases and conditions after proper diagnostics using, CT, MR, PET scans, ultrasounds

and many other automated and diagnostic machines and tools. All these are the results of research in physics, biochemistry, biotechnology and related subjects, and their application in practice. The technology and sciences have made it possible to do organ transplantation in medical practice and give life to ailing people through organ donations. Today's society has accepted this fact of life and values it highly. I appeal to you all for awareness building in this noble cause of human organ donation programme.

Education in general and science and technology in particular have changed the life of mankind. The world has become a village due to advances in information, communication and aviation technologies.

We now live in a knowledge based society. I am proud of Assamese people for their great contribution to science and technology in India and abroad. The fact that in this conference as many as 269 scientific papers from pure and health sciences will be read both by eminent science leaders and young students from the north east region testifies the scientific growth in this part of the country. I commend them all. We can do miracle if our youth work with commitment and seriousness.

## Young's friends!

You could be a big force in developing a new India. With knowledge, skill and confidence, you can do miracle and collectively, illuminate the society. I appeal to you: make all efforts and bring changes through innovations. You could be a global partner. However, access and inclusiveness are the keys to societal growth. Universities can create such an environment and provide opportunities to all students.

Students, you have to work hard and excel in all your endeavor in life. Academic freedom is of course be made available in every laboratories in the Universities and Science Laboratories to these youth.

You have to move fast, you create self belief and confidence, with these, you participate in nation building activates in Assam and India. You can contribute to growth and development of our economy and be a proud partner in this activity.

### Ladies and Gentlemen,

I would like to also mention, ours is a country with rich spiritual knowledge and skill of yoga. Today, there is a belief and desire in the society, to mix as well as make a fusion between science and spirituality to produce a better quality scientist to serve the society. And make it free from wars, terrorism and hatred and ultimately marching towards making a peaceful society.

In all our efforts in education and science, we have to add universal and core values to whatever we produce and thereby transform the society for the better.

Friend's I am extremely grateful to all for your kind indulgence. Thank you,

Professor Ramesh C. Deka\*

Director & C.E.O. AIIMS, New Delhi.

• This was the address made by Professor Deka to the delegates of the 55<sup>th</sup> Annual Meet of the Assam Sciences Congress at Gauhati University auditorium, on 15<sup>th</sup> February, 2010.