## XLII Convocation Indian Institute of Technology Kanpur



## Convocation Address by Honorable Prime Minister, Dr. Manmohan Singh



सत्यमेव जयते

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## PRIME MINISTER'S SPEECH AT IIT-KANPUR

I am very happy to participate in this convocation of IIT Kanpur. Let me begin by thanking the Board of Governors and Academic Senate of IIT Kanpur for awarding me the degree Doctor of Science (Honoris Causa). This is an honor that I will always cherish.

I congratulate the bright young women and men who have just received medals and degrees. You are indeed a privileged group. The education you have received will serve you well all your life. A very exciting future beckons you.

The Indian Institute of Technology, Kanpur is undoubtedly one of our top-most institutions of higher education. The students graduating today will always have the self-assurance that comes with being educated at a great institution. You will have the confidence that you are better than most others in your chosen fields. But great institutions also teach you humility. They teach you the power of ideas. They teach you to be broad minded and tolerant and also to question relentlessly. They teach you that often there are many, equally valid approaches leading to the same goal. I hope you have also learnt some of these lessons, which in some ways are more important than the knowledge and skills that you have picked up here.

The alumni of the IIT system have done our country proud. The peaking of the careers of the early batches of the IITs has broadly coincided with the new recognition and respect with which the world views India today. IIT alumni have helped immensely in this transformation of India's image, serving as excellent ambassadors for their country. Many of them are leaders in business and technology, both within our country and abroad. They have also enriched India's public service. There is a long list of illustrious IIT alumni – Shri Narayanamurthy in the software industry, Shri Vinod Khosla in venture capital, Prof. Raghuram Rajan in economics, Dr. Subba Rao in public service, late Prof. Rajiv Motwani in computer science, Shri Ashok Kejriwal in the NGO

sector and so on. Your institute is well represented in my office too. There are three officers from IIT Kanpur in the Prime Minister's Office today. Both my private secretaries are alumni of the IITs.

The graduating students of today will pursue diverse careers in academics, in finance, in marketing, in software, in technology and in public service. Most of you will be very successful individuals. You will be well off; you will have accomplishments in your professional life. But you must always bear in mind that the people of our country have partly paid for your education, that our country is still burdened with persistent poverty, hunger and disease and that institutions like yours are islands of excellence in a sea of less endowed institutions. You must in some manner, however small it might be, give back to the society and the people who have nurtured you.

In some respects your graduation from IIT Kanpur is just the beginning of your education. The life ahead will test the strength of your character and the mettle of your spirit as never before. I wish to see you pass these tests with flying colors. I hope you will be a little old fashioned and build your life on the bedrock of ethical conduct. I hope you will have the courage of conviction that Abraham Lincoln once spoke of- to close your ears to a howling mob and to stand and fight if you think you are right.

Our country owes a very deep debt of gratitude to our first Prime Minister, Pandit Jawaharlal Nehru. It was his extraordinary vision that gave birth to many of our best institutions, including the IITs. IIT Kanpur has covered quite a distance since its inception. It has lived up to Nehruji's vision in many ways. It undoubtedly ranks among the very best in the world in undergraduate education in Engineering and Technology. It has many firsts to its credit - the semester system, letter grades, open book and take home examinations and so on. While we should be justifiably proud of the institute's achievements in its journey of 50 years, we should also use this landmark year for some serious introspection as to the deficiencies that we must remove and the higher goals that we must reach in the future. We should all pledge to work together to make IIT

Kanpur and other IITs rank among the very best Science and Technology institutes of the world. An obvious area of improvement is the quality of the post graduate programs. We need to strengthen the master and doctoral programs in the IITs. I urge upon the Senate members, faculty and all others associated with IIT Kanpur to pool their wisdom, knowledge and experience to address this issue.

Let me also touch here upon two issues pertaining to the research being conducted at the IITs. I would suggest that the IITs should collaborate more with each other in research projects. I would also urge all IITs and especially IIT Kanpur for far more collaboration with the corporate sector than we have seen in the past. This would be of mutual benefit to both – to the corporate sector it could mean cost effective solutions and newer technology and products while for the IITs it would bring in much needed funds and enhance their research capabilities.

Indeed, we as a nation urgently need to increase quality research in Science and Technology. Science and Technology today play a dominant role in determining the power and progress of a nation. This role has become even more critical in the wake of newer challenges like climate change. We need more innovation in areas like sustainable agriculture, affordable health care and energy security. India's strength in frugal engineering and extremely affordable innovations is becoming known internationally. Indian scientists and engineers should leverage this strength to play a more prominent role in addressing problems that affect all countries of the world.

To enhance our capabilities our Government has tried to ensure that Science and Technology form strong pillars of our strategic alliances with other countries. The establishment of IIT Kanpur marked the beginning of cooperation between India and the United States in Science and Technology. In the recently held meeting of Indo-US Science & Technology Joint Commission, several important decisions have been taken to take this cooperation rapidly forward. For high quality research we need world-class institutions. We also need more bright students to opt for research. We need more young women and men acquiring PhD degrees. These needs of our country exist not only in Science and Technology but across all areas of higher education. In the last five years we have expanded higher education facilities on an unprecedented scale. A number of new IITs, IIMs, and IISERs have been started. More than 300 degree colleges have been opened in selected districts. Government spending on higher education has been enhanced manifold. However, the issue of quality remains. A major constraint is the availability of good faculty. I am told that the new IITs are ALSO facing problems in this area. An obvious solution lies in encouraging a larger number of bright students to join academics. However, the IIT community must come together to also evolve other innovative ways to address these issues. I assure you that the Central Government will do all that is possible to ensure that the IITs function with the required degree of autonomy and flexibility and that the genuine needs of the IIT faculty are met.

We have also set in motion an ambitious program to completely restructure the legal and regulatory environment of higher education. Intensive consultations are being carried out for setting up the National Council for Higher Education & Research. Several important bills have been introduced in the Parliament. These relate to accreditation, foreign universities, educational tribunals and unfair practices. I would urge the entire IIT community to carefully go through these bills and offer suggestions to make them better. I further suggest that high-class institutions like the IITs should also apply their minds to the improvement of the overall public policy framework in the field of higher education.

I am happy that in the past few years IIT Kanpur has become associated with a number of projects which would greatly benefit our country. These cover a diverse range of areas like railways, water resources, energy and environment. We have just launched a new initiative in solar energy to be executed jointly by three Ministries of the Central Government and IIT Kanpur. I am told that the project would explore new ways of storage of solar energy and its conversion into electricity. The importance of such initiatives in energy cannot be over-emphasized given India's dependence on fossil fuel

imports and the increasing demand for energy to meet the requirements of our growing economy. We have also launched a joint initiatives of 7 IITs for the development of a management plan for the National Ganga River Basin. I am told that IIT Kanpur has also been involved with important projects of the Indian Railways. The development of zero discharge toilet technology is a wonderful contribution not only to the railways but also to the Shikaras of the Dal Lake in Srinagar. Similarly, the train tracking system that IIT Kanpur has developed should improve the efficiency and safety of our railways. There are many other critical areas where IIT Kanpur could contribute. I would urge the Institute, its faculty, staff and students to focus mere on projects and initiatives which are of immediate benefit to our country and our people.

As you venture into a new phase in your life and career, I wish you all luck. I also wish IIT Kanpur its faculty and staff all the best in the years ahead. I am sure that the institute will set higher and higher standards of excellence in the future.

May God be with you.



## **Dr. MANMOHAN SINGH**

He is an eminent scholar-statesman, architect of India's economic and social structural reforms and the Honorable Prime Minister of India.

Born on September 26, 1932 in Gah (now in Pakistan), Dr. Manmohan Singh and his family migrated to Amritsar after the partition of India. Dr. Manmohan Singh served as an Economic Affairs Officer during 1966-69 at the United Nations Conference on Trade and Development (<u>UNCTAD</u>). Dr. Manmohan Singh was appointed as the Governor of the Reserve Bank of India in 1982 and then as the Deputy Chairman of the Planning Commission in 1985. Dr. Manmohan Singh also served as the Secretary General of the South Commission in Geneva in 1987 and 1990. In 1991. Dr Manmohan Singh was the Chairman of University Grants Commission. Dr. Manmohan Singh was declared the Finance Minister of the Year by Euromoney in 1993 and by Asiamoney in 1993 and 1994.

Dr. Manmohan Singh has a long list of honors and awards to his credit. Doctor of Civil Law from University of Oxford and University of Cambridge, Honorary Fellow of St. John's College, University of Cambridge and Nuffield College, University of Oxford, and Distinguished Fellow of London School of Economics, are a few of them. Dr. Manmohan Singh was awarded Padma Vibhushan by the Government of India in 1987.

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