

**Convocation Address of Sh. Kapil Sibal**  
**At IIT Delhi**

Respected BoG Chairman Prof. Ramamurthy, Director Prof. Surendra Prasad, Honorable Members of the Board of Governors and the Senate, Eminent Guests, Esteemed Faculty Members, Graduating students and their Families and Parents;

It is a great pleasure for me to deliver the Convocation Address on the occasion of the 40<sup>th</sup> convocation of IIT Delhi. I am truly privileged to be in your midst on an occasion which is both joyous and solemn. It represents a major milestone in your careers. My wholehearted congratulations to you for all your achievements. I know only too well the time, effort and dedication that is required to obtain such a prestigious academic qualification. I am sure you would all agree that there is another group in the audience who need to be congratulated today, that is your families who have sacrificed for your success; who have provided you emotive support in all your endeavours and aspirations. Your success today follows years of patience, support and love of your parents and families and the dedication and commitment of your faculty. They too share in your success and glory and must be congratulated.

Convocation day is an important day in the calendar of any educational institution. On this day the institution delivers on its promise. Young men and women who have been nurtured for years in the womb of the Institution, enter society, the real world. For Institutions like IIT Delhi, where the significant majority of students not only get their professional education but also learn other life skills and values because of a 24X7 association, the relationships are even stronger and thus this day is of even more significance. The graduates and the Institute fraternity develop strong bonds that extend well beyond education and degrees to create a lifelong lasting emotional relationship.

Being here reminds me of my days at Harvard. Dr. Charles Eliot, the eminent educator, was often asked, "How had Harvard gained its reputation as the greatest storehouse of knowledge?" His sly reply used to be "it is because the freshmen bring in so much of it and that the seniors take away so little of it". Jokes apart, I believe the establishment of IITs was the precursor for the Indian brand equity becoming known globally. The 50 plus year long journey of IITs in general and IIT Delhi in particular, would no doubt make any Indian proud. IITs have emerged as one of the most visible brand names, if not the most, to come out of independent India. The graduates of IITs are not only welcome in all parts of the country but also globally in all countries and corporations. Their branding has become so strong that they are assumed to be bright and well trained to deliver in almost all walks of life! To those who always decry Indian efficiency would be surprised to know that all of this has been achieved at a small fraction of investment compared to the globally well known universities and institutions.

However, any celebration of this kind has to be tempered with introspection to identify weaknesses and the resolve to learn from experience and improve. IITs have had many successes to be proud of but today there are many challenges to confront. In some sense, these successes have resulted in new and enhanced expectations.

Very often one hears comments like "What is great about IITs? Tell me how many Nobel laureates have they produced?" There are two ways to look at such comments. One is that it is factual. Accepting that the statement is not untrue, on the other hand, the person making the comment would not seek a response for a large number of other educational institutions in the country. In a way the comment reflects rising expectations of IIT's success story. When these institutions were set-up five decades ago, mentors had to be outsourced from the West. All we wanted then was to set-up educational Institutions of excellence. Today, we want these Institutions to compete globally with the best, not only in terms of education and training, but also in research output. Rather than despair,

this expectation should be channelized to create the resolve to reach “new targets”.

Let us talk more about these new expectations. The IIT brand name rides on the shoulders of its alumni. If quality graduates is the expected outcome, then the journey till now is satisfactory. The research within the institution plays more of a supportive role, i.e. it is intended to provide enough exposure to the students to embark upon a productive career in the New Age. But, the great research universities around the world are visible not just through their quality graduates but as new knowledge creators and technology developers. It is this transition that is expected of IITs. We must break the cycle of producing only quality graduates. Students joining IITs put in enormous efforts to get admission either through JEE for undergraduate admissions or through GATE and other exams for postgraduate admissions. Once in the campus, the passion with which entry was sought is lacking in when confronted with challenges which can be met with by creating new knowledge or developing solutions using technology, even though the Institute may attempt to inculcate a sense of purpose in such endeavours. On the other hand, the best research institutions attract talent whose primary commitment is to advance the state of the art technologies and create intellectual property in the new frontiers of knowledge. The focus as well as the ecosystem is geared towards new knowledge creation as well as using technology for serving the needs of society. We must recognize today the needs of our future and work towards creating an ecosystem for impact research.

I am happy to note that, today, there is nearly 30% annual growth in sponsored research as well as PhD enrollment which reflects in the significant progress made by IIT Delhi in this direction. Clearly there is still a long road ahead, if the intent is to, compete with the best, globally.

In this context, I would like to point out a clear research opportunity that has only emerged recently. For long, scientists and technologists in the developing world were disadvantaged because of the distance “from the market”. It was a period

where new technologies were creating products that were targeted to primarily improve the quality of life in developed societies. The last decade has clearly shown that science and technology can create products and services which can impact even the poorest communities. This, coupled with the well known demographic changes taking place, has created enormous research opportunities for our scientists and engineers who are now very “close to the future market”. Incidentally, these changes demonstrate the vision of the founder of IITs, Pundit Jawaharlal Nehru, who five decade ago was convinced of the key role science and technology was destined to play to find solutions for our poor in this large diverse country.

The other great challenge before the IITs is to act as a catalyst in the growth of quality technical education in the country. This is not only necessary for the economic growth of the country but also for the IITs to make the transition as creators of knowledge. Without a large base of well educated undergraduates in the country, it is difficult to imagine any significant growth in research output from these institutions. The last two decades has seen exponential growth in technical education. The growth in quantity has not translated to any significant growth in the number of quality graduates. The key missing link in this growth is the availability of quality faculty. Here two factors are critical; perceived attractiveness of faculty positions vis-à-vis other opportunities and also the aptitude of trained graduates. It is clear that IITs have been able to attract and retain quality faculty in spite of having a major disadvantage in terms of compensation packages vis-à-vis corporate R&D. This has been possible only due to the other attractions available to the faculty at IITs and the commitment to the IIT system. It is clear that not many technical institutions in the Government and private sector have been able to match this “attractiveness”. To achieve quality growth, the government has taken a major step by investing heavily in expanding the IIT system. But clearly, this cannot be the whole solution. A significant effort is required to reach out and train faculty, in both teaching and research, in other Institutions as well. Here, existing IITs have a major role to play. I am very happy to note the many outreach programmes have been initiated

in this regard by IIT Delhi, but clearly this is only the proverbial tip of the iceberg. There is a major challenge to evolve ways by which these programs can be scaled up and create an impact.

My Dear Students,

You are fortunate to be graduating from one of the best technical institutions in the country. You represent the very best and brightest we have. My expectations from you are of a very high order not only as professionals, but also as intelligent and wise voices in the community you will now serve. This is the time we need the very best of truly educated minds; their skills and specialized knowledge, their patience, understanding, tolerance and above all compassion. May you bring reason and hope to all whom you touch in your professional and personal lives and may you make your work deeply rewarding and truly satisfying.

Also if we were to draw up a list of some of the main problems that are confronting us in the new Century, I believe these are poverty, water, disease, environment, violence and terrorism and especially for us in India, destruction of our traditional social fabric. It is obvious that none of these can be adequately tackled at the hands of specific individual disciplines. They clearly represent trans-disciplinary challenges. This should not present a problem as long as the learning received by those who go through institutions of higher education is coherent with the challenge.

It is customary for a person giving this type of address to preach from the pulpit, words of wisdom. I know that IIT graduates are exceptionally mature, and I am sure by this time, all of you must have already decided on your path ahead. So there is hardly much that I can tell you. Nevertheless here are five points that you may wish to keep in mind as you move along:

- i. All you need for a successful career is a sound mind, a healthy body and above all, a genuine desire to be of help to as many people as possible;
- ii. Don't forget the boost or help, someone who sometime somewhere helped you and which made all the difference;
- iii. Life's battles are not necessarily won by the person who is stronger or faster or clever but by the person who thinks and has the will to win;
- iv. Every failure will teach you a lesson that you need to learn provided you keep your mind open and are willing to be taught; and
- v. In today's world everyone is rushing to succeed without caring for or even at the cost of others. Don't become a victim of this syndrome.

Convocation is an occasion for looking back and looking forward. In fact, while each one of the students and the faculty may recall the academic performance of the graduating students, what is perhaps more important is to look ahead.

I would like to end my speech by again congratulating the graduates on their successful completion of their academic programs, but reminding them that this is only the beginning of the most important part of their lives: the part in which they are expected to contribute to society. From now on they possess a very valuable thing, a degree from IIT Delhi. Society has great expectations from them to succeed in whatever they decide to pursue. Being beneficiaries of a highly subsidized education, society also expects them to give back in more ways than one.

Thank you and Jai Hind.