SPEECH BY THE PRESIDENT OF INDIA, SHRI PRANAB MUKHERJEE AT THE INAUGURATION OF THE TWENTY EIGHTH INDIAN ENGINEERING CONGRESS

Chennai, Tamil Nadu: 20-12-2013

1. It is a happy occasion for me to be here today to inaugurate the twenty-eighth Indian Engineering Congress, being convened by The Institution of Engineers (India). I thank this renowned organization of professional engineers for inviting me to this annual Congress, which I am attending for the second consecutive year.

2. The Institution of Engineers (India) was established in the year 1920 due to the vision of engineering luminaries of that time. This body was envisaged as a medium for promotion of engineering and technology in the country. This Institution was accorded the Royal Charter in 1935 by virtue of which engineers attached to it came to be known as Chartered Engineers. The Institution of Engineers performed the prestigious task of regulating engineering and technical education in India until the formation of the All India Council of Technical Education in 1987. It now administers an engineering course, which was initiated way back in 1928. This course, leading to the award of a degree, is aimed at the professional enrichment of serving technical personnel, who can undertake this programme while continuing in their employment. I applaud this Institution for all its achievements and urge them to keep up the good work.

Ladies and Gentlemen:

3. Engineers, from time immemorial, have evinced their capability for great technological feats to transform human lives. Our expectations from them have continued to soar. We now look for a cascade of engineering advancements that will enable us to face the challenges of accelerated nation building. The potential of engineering and technology to contribute to economic upliftment and sustainable development has engaged the attention of many today. I compliment The Institution of Engineers (India) for conducting this year's Congress

on a theme of true contemporary value, which is Engineering Advancements and Accelerated Nation Building.

4. This Congress is being organized at a time when the world is beginning to emerge from the second-round impact of the global economic crisis. India too felt the repercussions of global slowdown. Our economic growth declined during the last two years. At 5.0 per cent in 2012-13, it was the lowest in the last ten years. Our immediate challenge is to reverse the deceleration and nurse our growth path back to the eight per cent plus levels often clocked by us in the past. Positive factors such as continuing rise in per capita incomes, expanding middle-class consumers, and a young and energetic workforce gives me confidence that as the global economy revives, we will be able to secure a faster growth.

5. Our country has witnessed great economic transformation during the last few decades. Engineering has played a pivotal role in this change. India's formidable base of heavy engineering and capital goods industries has helped to provide the thrust on infrastructure development and industrial production. Inter-sectoral linkages and proactive government policies have also aided our country's efforts in this direction. Special initiatives have helped to promote key sectors like automotives, electronics, chemicals and petrochemicals, and heavy machinery. Clusters and growth corridors have made our firms more efficient. Such centers at Pune, Chennai and Bengaluru have accorded manufacturers based there, global acclaim for high quality products. The Government has enunciated the National Manufacturing Policy in 2011 to promote the manufacturing sector. This umbrella mechanism has envisaged National Investment and Manufacturing Zones that will bring together state-of-the-art infrastructure, latest technology, skill development facilities, and rapid connectivity to emerge as industrial hubs.

Ladies and Gentlemen:

6. To enable our growing brigade of entrepreneurs to play a bigger role in the global industrial landscape, we have to address their level of competitiveness on top priority. I strongly believe that there is another milestone to be crossed in the quality and productivity journey. New operating models - flexible automation, multi-location production, deferred customization and disposable factories – have to be introduced through innovative engineering. Innovation is a key strategy for growth. In the context of the industrial sector, innovation is multi-dimensional - process innovation, product innovation, business model innovation and new technology innovation. Indian industry has to develop strategic partnerships with universities and research institutions to take forward key innovation ideas.

7. Engineering and technology in the country have to be driven by competent engineers and scientists. The starting point has to be the quality of products emanating from our education system. Engineering is a preferred discipline accounting for one fourth of the total enrolment in higher education. The annual enrolment in engineering tripled during the course of the Eleventh Plan period. We have a formidable set-up of engineering and technical institutions in the country. However, many of them are low in terms of the standard of education imparted. In the pursuit of expanding engineering education in the country, academic excellence must be given equal priority. Our educational standards must be geared to international benchmarks. Every engineering and technical institution in the country must make an all-out effort to help India develop a large pool of proficient scientific and technical manpower. The Institution of Engineers (India), which has a wide network all over India, must think of establishing an Institute of Excellence in Engineering and Technology to create synergy between industry and academia through high quality engineering education and innovative research.

Ladies and Gentlemen:

8. A nation's progress is not guaranteed by its stock of natural resources alone. On the other hand, deficiency of natural resource also does not close the gates of prosperity. The development status of a nation is fashioned by its technological prowess. Japan and Singapore are instances of nations that have developed on the sheer strength of cutting edge technology. We have to leverage our knowledge infrastructure to develop growth-inducing technology. We have to make a choice of technologies for development based on socio-economic, environmental and security factors, and on availability of resource and infrastructure. I call upon the community of scientists and engineers to provide technology foresight.

9. True development entails composite development of the nation, with progress touching all sectors and regions. It enjoins advancing the quality of life in the rural areas. For rural rejuvenation to occur there has to be promotion of technology that caters to their needs. In India, two third of our population reside in rural areas. It is time we give greater emphasis on developing suitable grassroots technologies for empowerment of the rural population.

10. Late Arthur C. Clarke, the influential science fiction writer of the last century, had remarked about technology and I quote: "*Any sufficiently advanced technology is indistinguishable from magic*" (unquote). We need to create that technology which can help fulfill our dream of a developed India. The Institution of Engineers (India), which is the largest body of professional engineers and technologists in our country, has to play an important role in promoting economic development by ushering in technological advancements. With these words, I conclude. I wish you all the very best in your deliberations at this Congress.

Thank you.
Jai Hind.

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