Hearty congratulations to the graduating class!

Nothing gives me greater joy than participating in the 52nd Annual Convocation of IIT Kanpur in this Diamond Jubilee year of the founding of the institute. I graduated from this institute in 1973 and today, I come back to my alma mater to deliver this convocation address! It is indeed a matter of personal pride, and I am deeply indebted to this institute for everything it did to shape my career.

Every educational institution, regardless of its character and students’ intent, has a two-fold purpose. The first is knowledge dissemination, and the second is character-building. Perhaps, the second aspect is even more important. It is gratifying to see IIT Kanpur ceaselessly continuing the spirit of imparting education on par with the best institutes in the world. In addition, it is inculcating the right values and beliefs in the students. This is truly commendable.

This premier institution has set a benchmark par excellence for several others to emulate. The first principles approach, interdisciplinary programs, innovation and incubation facilities, partnerships with renowned academic and research institutes, the synergies with industry, government, and civic organizations are some of the best practices that built the reputation of the institute.

When I moved from a small town of Andhra Pradesh to Kanpur in the early ’70s, this institution opened my eyes to the world of computers.
Computers amazed me no end and I decided to pursue my career around them. After my stint in IIT Kanpur, I studied in the US, worked in technology industry, and prepared myself for my dream endeavor to be an entrepreneur.

My dear friends, of late, we are hearing contesting narratives about the employment opportunities or lack thereof in the country. The one potent solution for this challenge is entrepreneurship. Allow me to share my experiences and learnings with you today.

In the early 1990s, economic liberalization and globalization opened up new opportunities for start-ups. The cost of designing products was prohibitively expensive in the Western world. I saw a business opportunity in exporting design and engineering services from India as cost arbitrage would reduce product development costs dramatically.

I set up a company and started operations with four engineers working in my modest home on my dining table. That’s the beginning of our global journey of providing “design as a service.” We were uncompromising about building the company on the foundation of values, or Values FIRST (Fairness, Integrity, Respect, Sincerity, Transparency) as we call it. I ensured that we are equitable to all the stakeholders – customers, associates, investors, and society.

Bringing success by making the enterprise scalable and sustainable was a big challenge. We addressed the challenge systematically. First, we evolved processes to maintain high quality at scale. We built a tool that went beyond quality and measured cost, productivity, customer satisfaction, and associate satisfaction that led to business excellence. Second, we continuously re-discovered ourselves and our service offerings with innovation. From services, we migrated to sub-system design and started offering engineering solutions. Innovation became the DNA of the organization.

Third, we invested in our people, nurtured capable leaders, and implemented a succession plan. Fourth, we started taking care of the needs of society. We currently help over 16,000 school children with better education and 14,000 adults with IT literacy.
We created 15,000 jobs in 20 countries and earned over three billion dollars in foreign exchange cumulatively.

Each of you has an excellent educational foundation and is rightly qualified to become an employment generator rather than be an employment seeker. Today, the country is nurturing a vibrant entrepreneurial ecosystem, improving ease of doing business, and building strong technological capabilities. I call upon you to further equip yourself with the right skills and expertise, become an entrepreneur, and lead yourself and the country to glory.

Let me now share a few of my thoughts on the accelerating technology change and its implications. Technology is the lens through which we experience much of our world today. The synergies between fundamental technology research and its applications are facilitating the democratization of technology and making the fruits of technology accessible and affordable for everyone.

A number of forces are enabling technology to create this profound impact on life and living. The falling computing costs, growing computing power, miniaturization of sensors, increasing density of communication networks, the involvement of new economies and globalization are immensely accelerating innovation. Further, humanity is on the cusp of a new revolution today, being brought about by new-age digital technologies such as artificial intelligence, block chain, data analytics, robotics, 3D printing, internet of things, and cloud computing. This new revolution, or Industry 4.0 as we call it, is multifaceted and its implications transformational across industries.

Let me elaborate with a few industry examples. Digital manufacturing technologies are transforming every link in the manufacturing value-chain. Right from R&D, supply chain, factory operations, and safety to marketing, sales, and service, digital is at play. Digital technologies are transforming aircraft’s performance. Airplane health management systems are using real-time data analytics to reduce fuel consumption, improve uptime, and boost efficiency. Connected healthcare is enabling effective integration of healthcare, social care, and wellness and making them accessible, affordable and holistic.
Precision agriculture tools and connected crop techniques are making field operations more insight-driven, boosting yield and improving financial performance.

Whichever industry you may choose to work in, please be aware that moving forward, the opportunities and challenges associated with Industry 4.0 are coinciding with the rapid emergence of ecological constraints, increasingly multipolar international order and rising inequality. Whether the human condition will improve in this complex scenario will depend on whether corporate, local, national and international bodies can cooperate and adapt in time.

Friends, please remember, the only mantra to succeed and thrive in these times is to learn continuously, adapt swiftly, be inclusive, and stay hyper-relevant. Ideas, innovation, and attitude will steer you in the right direction. They are indeed more valuable than material possessions. So, invest in knowledge and innovation and make values the foundation of your life. Please build meaningful collaborations with people, organizations, and society and contribute your best for the growth of this great nation.

I wish each one of you in the graduating class enduring success! Good luck!