Respected Director \_\_\_\_\_\_\_\_, professors, academic and administrative staff members, and my dear young friends.

First of all, a heartfelt thank you for inviting me on this opportune occasion. l feel truly privileged to be invited here as a speaker/chief guest for the convocation ceremony of a prestigious institute like IISER Bhopal.

Now, when I use the adjective ‘prestigious’, I have done my ‘research’ before saying that. I have been hearing a lot of rave reviews about how IISERs are among the top Indian educational institutes for research education, especially for aspiring scientists. About how they are among the only few institutes in the country to offer a rare blend of training programme that enables the students to pursue a career in academia, R&D institutes and science based industries. I believe this unusual blend of science, engineering and research is what makes this institute and each one of you truly precious for the country. No wonder, the Government of India has awarded IISER the status of ‘Institute of National Importance’. It is indeed a proud and deserving achievement and I congratulate you all for that.

With a strong reputation like that, all you students present here are undoubtedly among the chosen ones destined to shape the future of this country in the coming years. Mind you, when you go out in the world outside as an IISER graduate, you would be perceived through a different glass. The expectations from you are bound to be much higher than other average engineering graduates. In your case, there would simply be no room for errors. You would be expected to be perfect in your job and knowledge right since the day you walk out of this prestigious institute. And mind you, living up to these expectations indeed is a big sense of responsibility. But then the invaluable experience gained during fulfilling these set of high expectations and responsibilities is exactly what will groom you for the future. Higher the expectations that you meet, the more you learn and the more confident you become. Every student present here is blessed with the power of knowledge. I strongly believe that each one of you has the skills and power to shape the destiny of India.

Talking about the destiny of India, we all know that the persisting conditions in the country over the last few months have been really tough. Ever since the onset of the Coronavirus pandemic, the entire world has virtually come to a standstill. The national lockdown announced by the government surely helped flatten the Covid-19 curve and protect lives, but it also resulted in an inevitable economic slowdown. These are challenging times for all of us and our resolute behaviour towards following the guidelines in fighting this pandemic will decide when we would be able to recover from this crisis. India, so far, has shown remarkable committed resilience and resistance in this fight. Governments and pundits across the globe are applauding India and our government for the way we have been cautiously but assuredly adapting to the new “Post-Covid Way of Life” over the last few months.

Unlike many other countries, India has so far been able to stave off community transmission of COVID-19 and life is slowly getting moving back on track since the declaration of the concerned lockdown relaxations by the administration. This gives me the confidence that things are moving towards a “new normal”. People are gradually learning to live with this Covid-19 menace. I see it to be a long drawn battle and we need to learn the art of progressing within these constraints. We must keep our morale high and fight against this menace by exercising self-discipline, following a healthy way of living and having a positive outlook.

The entire way of doing business is getting transformed. As the country recovers from this crisis, the overall competitive and peer pressure seems to mounting across all levels. After all, it is more about survival than profit now for both the employers as well as the employees. While the organisations are preparing themselves to be ahead of the curve in putting their business back on track in the least possible time, the workforce is going all guns to justify their salary, job and position in the organisation. The Darwinian evolutionary theory of “Survival of the Fittest” could never have been more relevant than today, though this time we may call it the “Survival of the Smartest”. The current situation challenges us to Survive, Thrive and ultimately Rise.

You all, today, are at the cusp of entering the professional world with the knowledge and experience that you have gained over the last four years in this institute. I would not mince my words when I say that this is a challenging phase to make your foray into the corporate world from students to professionals. However, that is what life has always been about- **Challenging Yourself**. I am sure all of you must have faced several challenges and hurdles throughout your academic journey before you reached this level. Consider this as another challenge. And as they say, **An Adversity Always Brings Out The Best In Us.** The thought holds true in many ways in the prevailing situation. For instance, the use of video technology for remote communication was available earlier also but today it is obviously being used than ever before. I am happy to see the way we all have adapted to the new way of working from home. Organisations earlier were sceptical of offering the WFH options to their employees. But now, there are claims that more and more organisations continuing to realign majority of their business operations remotely, via the WFH options for the employees as it is resulting in substantial cost savings for them. This change in business approach and operations is expected to open doors for new horizons and possibilities.

In India, the onset of the Covid-19 pandemic has opened up doors for new business setups and ideas. For instance, earlier India imported the PPE kits, which are part of the safety measures distributed to our frontline Covid workers. Today, India is producing more than three lakhs PPE kits daily. In fact, India, in the near future, is expected to further strengthen its position as a leading exporter of PPE kits. Even, when it came to the pharmaceutical sector, India, over the last few months has emerged as one of the biggest producers and suppliers of the ‘hydroxychloroquine’, an anti-malarial drug being touted as ‘game-changer’ in the fight against [COVID-19](https://www.thehindu.com/sci-tech/science/all-about-the-china-coronavirus-covid-19/article30692734.ece?homepage=true)  being sought aggressively even by the US. Thus, the COVID Pandemic has opened up many new opportunities for the Indian industry. In fact, despite the economic collapse, India is expected to register a positive GDP growth this year as a result of the relatively lower impact of the Coronavirus outbreak in our country as compared to the other major globally economies such as United States, UK, Japan and European countries like Italy, Germany and Spain. India’s projected growth is also associated with the reduced global confidence in China. With the increasing global anti-China sentiment, the world may seek other manufacturing hubs. In such a situation, India with its emergence as a credible economy and the support it has provided to the global community during the pandemic is well equipped to step in as an alternative global manufacturing hub for the world. There are speculations that more than 1000 companies are shifting their manufacturing base from China. The Indian Government is already taking various prominent steps to capitalise on this opportunity. The increasing efforts to …. Wheels of the ‘Make in India’ initiative through programmes like Athmanirbhar Bharat Abhiyaan and Vocal for Local campaign is a major step in the same direction. Probably after 1999, this would be the first time that such radical reforms are being carried out in the country. So, all and all, this adversity has opened the doors for an opportunity for us. Now, it is up to us, to take it in our stride and move further on a positive note leveraging the available growth possibilities.

Now, all these prospects talks are on a broader national level. On an individual level, you may think, “What are the things I can do to broaden my personal growth curve amidst this situation?” Primarily, I strongly feel that the best thing you can do while facing such an unstable situation that is rapidly changing is to stay as much informed as you can be. My advice to all of you would be to use this time in enhancing your awareness about all the things happening around the world, be it related to the current pandemic, different innovations taking place around us, or the way economy and businesses are trying to cope up. It will also be enriching to understand what other professionals, students and contemporaries in your position are thinking and doing.

While you await the situation to normalise, focus on learning new skills during your free time. Broaden your learning curve. There couldn’t have been a better time to look for new ways of learning, exploring, training and studying. Student and college culture needs to flow beyond physical attendance and lectures. Online educational platforms are rapidly evolving to be the new way of learning. Explore and use them for your self-improvement and self-enrichment. You can also indulge in various online trainings, webinars, tutorials, etc. Keep going and, at the same time, keep looking for new learning avenues where you can contribute to your individual as well towards societal and national growth, stability and competitiveness. Life has given you precious additional time and opportunity to emerge better-equipped and knowledgeable post the resurgence from the Covid-19 pandemic. Make the most of it.

You are entering the workforce with whatever you have learned during the last few years in this institute. While your academic education will help you settle quickly in your chosen field, your attitude and ability to keep learning new things will help you to stay ahead with the times and performing consistently in the longer run. Your biggest strength is your young age. Don’t hesitate to learn from anyone, be it from your elders and seniors or even your juniors and other less experienced ones as you may never know when they can also teach you a true life lesson. I believe, what makes us humans different from other species is our attitude to keep evolving and keep improvising through continuous learning. One has to be a STUDENT FOR LIFE. So, make yourself mentally equipped for this transition by increasingly reading, learning and enhancing your knowledge.

Utilise this time to prepare yourselves to bounce back with greater force when things turn around. Which I am sure they will. I believe every industry is using this time to gear up its potential and come back to recover quickly from the setback this pandemic has given to the global economy. Amidst this economic uncertainty, I urge all of you to be very agile to the changing market scenario. Remain prepared to quickly respond and adapt yourself to the changing market dynamics as and when we witness a shift in the persisting global conditions. Overall, it is time to Adapt-Learn-Improve.

When we talk about improvement, research and development play a very important role here. On a broader level, with the world being hit by the worst slowdown since the Great Depression, industries across the globe are bound to revisit their yearly fiscal plan, resorting to strict curtailment in expenditures wherever possible. This may have a major impact on the investment on innovation and R&D. However, even if the investment on R&D is curtailed, I certainly have no doubts that it is still bound to remain the key focus area for all industrial verticals. After all, innovation and research forms the backbone of everything that we do. Being the Chairman and Managing Director (or leader) of Kirloskar Brothers Limited, India’s first and largest pump engineering company with an illustrious legacy of introducing various engineering products for the first time in the country, I can certainly vouch for that thought. KBL and my forefathers who laid the foundation of the company have been attributed for being among the pioneers for bringing industrial revolution in the country. So, being part of a company with such a heritage and history, I am very well aware about the integral role that R&D plays in the success of any organisation and the impetus that it provides eventually in the growth of the country. India’s recovery from this pandemic situation is, again, heavily dependent on our R&D strength, whether for coming up with a breakthrough vaccine or state-of-the-art safety equipment to protect us from the virus. And when we talk about the need to further strengthen the R&D capabilities of our country, who better to spearhead the crusade than all you future research science experts present here today.

India needs the services of brilliant and capable minds like you to recover from this crisis as soon as possible, reinforce its engineering capabilities, capitalise on the available growth opportunities and eventually establish itself as a global super-power. So, if you wish, each one of you present here can play an integral contributory role in the progress of our country today. Having said that, I know, many among you, many be more inclined towards pursuing a career outside India, though in the prevailing global situation, especially in the preferred immigration regions like the US and Europe, the stats related to aspiring student and young professional immigrants, this year, may portray a completely different picture altogether. However, even after the global condition improves post the recovery from the pandemic, I urge all such immigrant aspirants to still give it a second thought. We all dream of earning more and leading a plush lifestyle with the best of the amenities at our service. However, how many of us have ever felt that we have a certain responsibility towards our country which somewhere has been integral in making us who we are and it’s about time now to return the favour by contributing towards the betterment of the country in whichever way we can? It’s not necessarily about being patriotic but more about being righteous, being thankful. And as an engineering graduate from IISER, the best way you can do that is by working in India and towards the betterment of India. I feel that the IISER graduates will play an integral role in laying the foundation of a Better India, Developed India and more importantly, fulfilling the dream of a Self-reliant India.

India, today, is at the cusp of a major transformation from a ‘progressing’ country to a ‘progressed’ country. I see this economic debacle as a temporary setback and I am sure that our country, sooner than later, will be back on its feet. If we wish to see India in the same league as the other global superpowers, it is the responsibility of bright engineers like you to create breakthrough ideas. And let me tell you, we are doing it. We all know how, over the past few years, ISRO has achieved what no one has done before. The intellectual capital of India, which goes back to tens of thousands of years right to the times of Aryabhatta or Chanakya, is its biggest asset. I believe that we have always had the brain and the skills but somewhere have lagged behind when it comes to the intent. That is where top engineers like you can make the difference taking our country to greater heights in the future.

Now, although intelligent minds like you certainly possess the skills and intent to further fortify the pillars of a more self-reliant and progressed India, you would need the necessary technological support to realise the vision. After all, be it research or innovation, it is technology that enables its realisation and execution. We are all aware how technology, over the years, has been transforming everything around us. However, one thing that really astonishes me is the pace at which it is happening. Be it technologies like Artificial Intelligence (AI), Virtual Reality (VR), Internet of Things (IoT), machine learning, robotics or the latest gadgets and services that we come across in our personal day-to-day lives like smartphones and 24X7 Internet connectivity – all these technologies are changing everything, right from our day to day behaviour and perception to our work culture, outlook and even the way the industry operates today.

In the prevailing condition today, it is all about making the optimum use of available modes of technological resources. Since the enforcement of the social distancing and remote working culture globally, dependence on external communication platforms has been felt like never before. As they say that necessity is the mother of invention, but in our world these days, it's often actually exactly in reverse: **Invention Is Increasingly Becoming the Mother of Necessity**. It is not that these technologies were not there earlier, it’s just that the greater need for these communication platforms was created during the period with the circumstantial decline in personal or physical contact. Even when we talk about this online convocation ceremony. This is the first time that I am attending and addressing such a ceremony online and, I guess, so is it the first instance ever for this institute as well. I feel it is different but surely exciting.

While on a personal front, we are connected to the world 24X7, we can get information about almost anything from any part of the world at our fingertips. An analytic software can even predict your future buying behaviour. In fact, I have even read that, in future, Google Assistant will be able to read and reply to your messages from WhatsApp and other apps. Considering the rapid pace at which technology is evolving, I earlier wondered if this is affecting us negatively; however, when we look at the larger picture, I strongly believe that it is only helping us humans become better and better with our decision taking abilities by making us more and more informed.

When it comes to business operations, including the “Manufacturing” industry in which I operate, technology is not only changing the way internal processes are driven but also transforming the way external relations or communication with external stakeholders is being carried out. This has been all the more relevant and evident since the onset of the lockdown period following the onset of the Covid-19 pandemic. Internally, automation is replacing the repetitive jobs done by humans earlier. The importance and benefit of automation is felt all the more in the persisting “Remote Working” conditions today. Everybody today is striving towards facilitating ‘Contactless’ business operations wherever possible. Companies, under the pressure to stay a step ahead of their competitors, are deploying these technologies to bring down the cost and increase the pace of output. The whole point that I am trying to make here is that when you join an organisation, you will be expected to play the role of a creator. In the coming days, while technology will take care of the mundane job chores, the work force would be expected to work towards duly executing automation management or supervision which cannot be replaced by machine. Therefore, the key to your success lies in gaining more and more knowledge about the various ways to make the optimum use of available technologies or facilitate its upgradation and development and that is where your contribution and role will come into picture. If I have to give an example – In KBL, we are using a dedicated 3D printing machine (we are the only one in India to have such a large machine) which is helping us reduce defects, improve quality of the product and reduce our manufacturing time. It is helping our engineers to try new designs as well as in developing products with better efficiency and performance, thereby helping us serve our customers better.

Today’s technology will be redundant tomorrow. It will be replaced by a better one. Hence, you must find creative solutions to challenges that you may come across and find ways to unlock and explore new opportunities. This attitude is what differentiates a winner from the herd. Follow your own path, be a passionate student for life who is always eager and yearns to learn and explore new things and, most importantly, someone who is not afraid of failure.

Always believe in yourself and back your capabilities. Do what you love, because if you love what you do, you will always end up giving your 100%. Don’t run behind money, it is something which will eventually come with your success. Be it Sachin Tendulkar, Abdul Kalam or Steve Jobs, all these legends simply followed their passion and did what they loved. When you love doing something, you will be passionate about it, and in the process will always strive towards exceling in it. Having said that, it is not easy as simply following your passion may come with certain setbacks or failure in the initial stage. But history tells us that the ones who remain focused and never lose faith in themselves and their goals have ultimately always tasted success. So, DON’T BE AFRAID TO FAIL. And this is all the more important during the initial stage of your career when you would be entering the arena without any particular baggage or tag and so can afford to make mistakes. In my life, I know, failures have always been my biggest teachers. So, try new things, bring new ideas to the table, test your ideas, and if you may fail, don’t stop or get disheartened but simply rise to the occasion and create something worthy. “THINK BEYOND, GO BEYOND”. It is the first step towards “Being Innovative” and “Becoming Better”.

As you embark on your journey towards improving yourself and becoming a better version of yourself, you can always put the knowledge you have gained in the process towards societal upliftment by contributing towards the community in whichever way you can. In fact, talking about a societal cause, you institute, IISER, is an ideal example. It is nice to hear of the work IISER Bhopal has been doing to help the community and the nation as part of the Covid-19 pandemic relief efforts. KBL has earlier worked in association with IISER Pune team to provide face shields for medical personnel in Pune. So, I am aware about the great work that the IISERs are doing across the country and I heartily congratulate and thank you all for the same.

I also earnestly thank all the teachers, professors and the management at IISER-Bhopal for their contribution in nurturing and shaping the careers of all the students over the years and thereby duly fulfilling their role towards the society and country by giving it such precious talent. And I sincerely hope that all you bright students present here will continue with the good work by living up to the expectations and exceling in your respective fields.

Lastly, on a concluding note, I would like to reiterate my firm belief across to all you talented engineering students present here today – The **Sky is Not the Limit. Think Beyond. The Possibilities are Endless!**

Stay Safe, Stay Alert and Follow the Government Guidelines.

Thank You.