

Engineers will curb the potential problems : Prof. Bharat Raj Singh

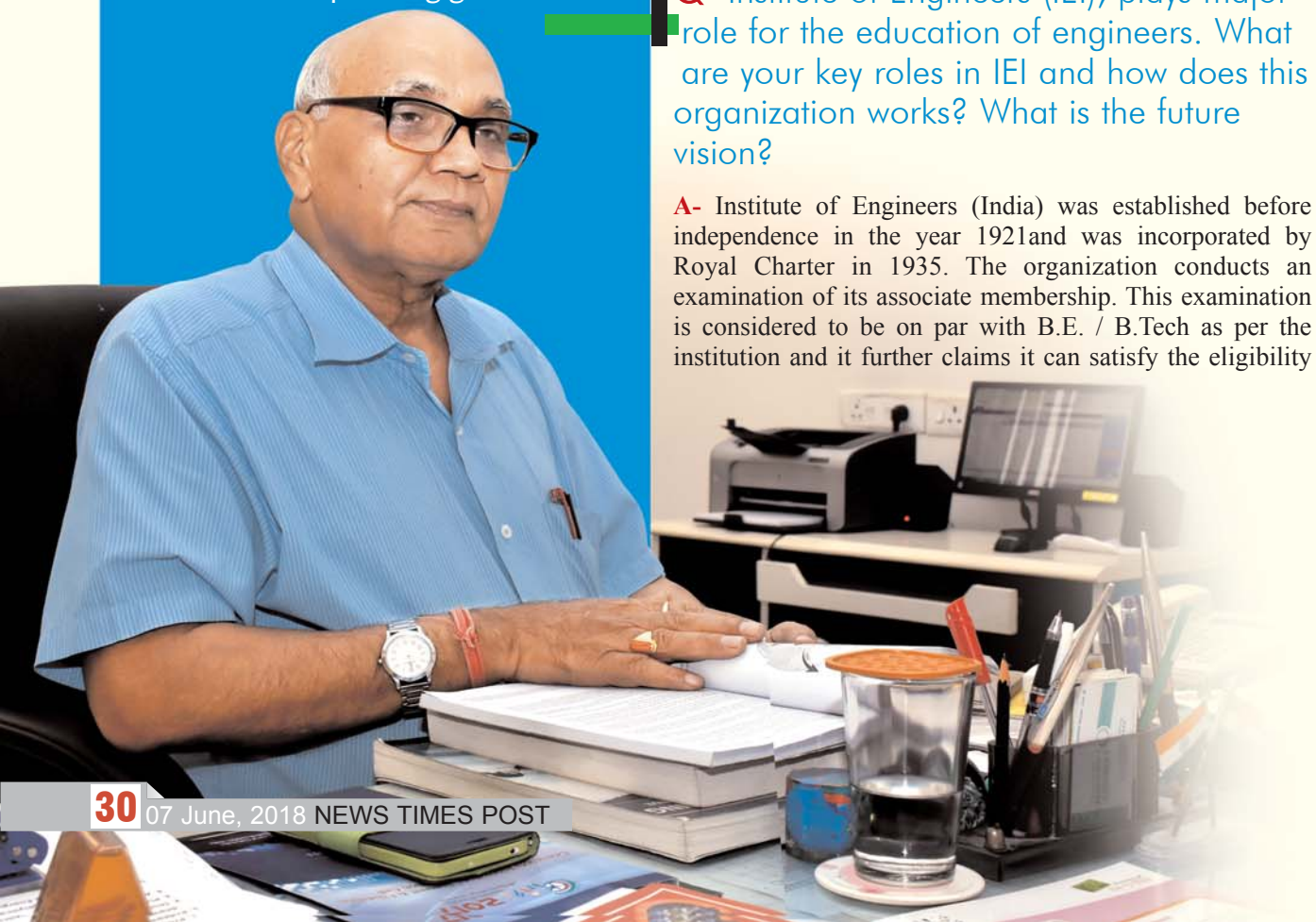
Prof. Bharat Raj Singh, Chairman, Institute of Engineers (I), UP State Centre, is an epitome of creativity and curiosity. He has his own particular special way to look at the universe. According to him, it's a system of thought, a way in which we can organize what we know to better understand the way things work. From predicting natural disasters to design Air-o-Bike, he has excelled in all the fields. In a free-wheeling chat with News Times Post, Resident Editor Radhey Shyam Dixit, Singh lets out his thoughts on changing trend in the engineering sector and how practical knowledge is the key to success for the upcoming generation.

Q- Engineers play a fundamental role in the society, they are the builders of the society. Can engineers play a beneficial role in the society?

A- Engineers play a vital role for the development of society. If they understand their responsibility towards the society and work accordingly for the national interest, then there is no force in the world which can stop us to climb on the ladders of development. Every engineer should keep in mind the requirement of the current generation as well as the needs of the future generation because quality of life and sustainability of world's children in future depends on our decisions today.

Q- Institute of Engineers (IEI), plays major role for the education of engineers. What are your key roles in IEI and how does this organization works? What is the future vision?

A- Institute of Engineers (India) was established before independence in the year 1921 and was incorporated by Royal Charter in 1935. The organization conducts an examination of its associate membership. This examination is considered to be on par with B.E. / B.Tech as per the institution and it further claims it can satisfy the eligibility



qualification to write competitive examinations like the Indian Civil Service, Indian Engineering Services, GATE, etc., and for employment in Government, public and private sectors in India. This qualification is recognized by the Ministry of HRD, Government of India, as equivalent to B.E./B.Tech. The individuals who holds diploma or any other science degree can pass Section A, B and C and work as an Engineer. Government at that time thought skill is must in engineering sector, so they introduced this organisation. To produce engineers of professional excellence, upgradation is must. Present education system includes science and applied science. We try to give them more practical knowledge instead of rotten theory. Government is also coming up with the schemes like Pradhanmantri Kaushal Vikas Yojana to help the young generation to develop their skills, creativity etc. The IEI pioneered non-formal education in engineering. IEI has ten local centres in the state. We have more than one million members and try to connect retired personnel to teach and counsel the upcoming engineers with their experiences.

Being a Director of School of Management Science, my main motive is to generate curiosity and creativity amongst the students. I want them to think for the society and contribute to it with skilled knowledge. Recently, one student from our college has been awarded in AKTU's UP Startup Parikrama. We are the only institution to be selected from all over the Lucknow

Q- What is the major reason for unemployment in Engineering in India? Where they are lacking, why they are not skilled enough?

A- There is an urgent need to upgrade the quality of engineering education in India. The kind of labs they need is not there in the colleges. The type of quality education we want to deliver is not up to the mark, but there are so many colleges who are performing very well. Most of the students come from rural areas so they lack soft skills. They have communication issues. How to do their overall development is the major issue. So, in SMS we have introduced Employability Enhanced Program, where we focus on the personality development of each student. They also learn to work on logical end. To promote the innovation and invention we have C. V Raman Center for Research & innovation. The center propagates Research & Innovation practices based on the theme "Global Techno-Managerial Principles & Practices for Organizational Development, Environmental Protection and Sustainable Development". We have also created Vedic Science Studies in 2015, where students relax and

learn about Vedas. I have also suggested the chancellor to visit the labs of different colleges, so that we can have exchange programs for the student. Government is also coming up with ideas to tackle with unemployment, for instance, Investor's Summit, Start Up, Incubation Centers and many more. The state is on the way of development.

Q- In the era of automation and mechanism, how can we stimulate curiosity and promote learning in students?

A- It's proven that children learn from practical experiences. There is a race in between colleges and universities. Some are actually doing great, but for others it's mere a business of crores. Children are the future of the nation. So, whatever we can do for them is not enough. We should all train and teach them for the future. It is discovered that new information and technology is being discovered and disseminated at a phenomenal rate. It is predicted that 50 percent of the facts students are memorizing today will no longer be accurate or complete in the near future. We must challenge them today to utilize their brain and come up with best ideas to save the environment. Students need to learn new skills for the coming century that will make them ready to collaborate with others on a global level.

Q- An engineer can contribute a lot to the society. But we don't see that spark in them now, everyone is running behind the money. Why so?

A- It's not only the responsibility of the Engineers, this is for all the professions and individuals. We all have our social responsibilities. I am saddened to say that there is a down fall in humanities. It is under the strain around the globe. Earlier we used to have Gurukul but we cannot have it now. There is an immediate need of including human values in the curriculum of all the courses. Environment related issues should be addressed among the young generation.

Q- Why there is shortage of faculties in engineering colleges? How dangerous this can be?

A- We have central bodies who looks over all the legalities. The only suggestion I want to give is universities and colleges should not intake faculties according to the set norms, they must fill in the space according to the enrolled students in the academic year. Government should think about it. This issue needs to be solved soon.