

# We should have more IIT's: Scientist

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**C**handigarh: "The problem of unemployed engineering graduates can be solved by having more IITs," said Anil Kakodkar, nuclear scientist and former chairman of the board of governors of IIT-Bombay. Kakodkar was present at the Central Scientific Instrument Organization (CSIO) for the national technology day lecture in the city on Wednesday.

"For around 40-50 years, we had six IITs and the number remained same. Now the strength of engineering students has gone in millions and then we worry about the unemployed engineers. Everybody gets employment in IITs. So, going by that logic, we should have more IITs," said Kakodkar while talking to TOI.

On the unemployed graduates that the educational institutions are producing in India, he said that the institutions are not to be blamed for this but the 'cultural makeup' has put us in silos. "For creating technology and people who can deliver things, you need to train the individuals. But that training should not be classroom training but hands-on training, which should not be restricted to hypothetical laboratory work but it has to be in the field," said Kakodkar.

Teaching, research, translation of that research to technology and successfully migrating that to marketplace should happen in a higher education institution, particularly in higher technical institutions, added Kakodkar. He also said that that there is a need to have a very conducive innovation ecosystem, where work is done together to translate idea into innovation faster.

"Translation of research into technology is an issue and a deep one, the problem needs to be addressed by universities, policy-makers, industry and society," said Kakodkar.

Kakodkar is also the architect of the historic Indo-US civil nuclear agreement. Talking about the scenario of nuclear energy in India, he said that nuclear energy as a source of power generation is inevitable in the country, despite countries like France shifting from nuclear to renewable energy.

At a time when France is reducing the emphasis on nuclear energy as a source for power generation, India is focusing more on nuclear energy. On this, Kakodkar felt that we need to move eventually towards the production of non-fossil hydrocarbon fuel.

"Instead of using the nuclear power plants for electricity, France wants to dedicate some of these plants for production of hydrogen. They planned to have a program to produce biomass and process that biomass to generate hydrocarbon substitutes - non fossil hydrocarbon fuels," he said.

There were recent news reports that the Republican presidential front runner, Donald Trump, mentioned Pakistan's nuclear capability as a 'problem' and countries like India could help to resolve it. When asked about this, Kakodkar reflected, "I do not know what he meant. We have been a reluctant nuclear weapon country. If Pakistan and China had no weaponisation, we would not have gone for the same."

BOX:

Kakodkar had resigned in March 2015 from the post of chairman, board of governors, IIT-Bombay after differences emerged between him and the Union ministry of human resource and development (MHRD) over the disagreement to appoint IIT directors.