

**SPEECH BY THE PRESIDENT OF INDIA, SHRI RAM NATH KOVIND
ON THE OCCASION OF CONCLUSION OF PLATINUM JUBILEE
YEAR CELEBRATIONS OF CSIR**

September 26, 2017, New Delhi

It gives me great pleasure to be here on the 76th Foundation Day of the Council of Scientific and Industrial Research, and on an occasion that concludes the platinum jubilee celebrations of India's apex science and technology institution. Congratulations to all of you and particularly to the dedicated scientists of CSIR and the award winners today. Thank you for your hard work. The country is very proud of you.

I have just visited an exhibition of significant achievements of CSIR researchers and technologists. It was extremely impressive. CSIR has been instrumental in bringing about sustainable improvements in the quality of life of our fellow citizens, as well as in helping business and industry with specific applications of science and technology. In the areas of food and agriculture, generic drugs, leather, chemicals and petrochemicals, and biopharmaceuticals, among others, several technologies developed by you have been embraced by the market.

It is very telling that the staff of CSIR constitutes only about three to four per cent of India's scientific manpower – but contributes nearly 10 per cent of India's scientific output. This is extremely creditable and emphasises how important CSIR is to the nation building process. When a scientist works hard in the lab, with integrity and sincerity and with the larger dream of helping society, he or she is playing the role of nation builder.

From the earliest days of our Independence, our country has been clear about the use and deployment of science and technology to achieve the goals of social development. This has meant both exploiting India's rich wealth of traditional knowledge and intellectual property – of which CSIR is the custodian – as well as being open to the latest in science and technology, not being afraid of cutting-edge research and its discoveries, and where possible using these to help our common citizens.

This aspiration remains important as ever as we strive to achieve a New India by 2022, when we complete 75 years as a free country. Our ambitious national programmes – such as Start-up India, Make in India, Digital India, Swachh Bharat, Namami Gange and the Smart Cities Mission – cannot be successful without our scientists and our technology incubators, particularly CSIR, contributing. The true test of scientific research lies in its ability to help our society leap frog social sector gaps, whether in health and hygiene, sanitation, education or agriculture, and make us a middle-income country in one human lifetime.

In all these areas, the need for socially inclusive and yet cost-effective applications and products of science and technology are a national priority. Once these are realised, they can become a model for other developing countries. For us, this has always been and will always be a paramount goal. For India, science and technology is a force multiplier in the quest for development.

In this context, I am pleased to note the widespread social benefits of the two CSIR technologies that are being dedicated to the nation today. The first is a hand-held milk tester that will allow us to more easily identify adulterants in milk. The second is Waterless Chrome-Tanning Technology that eliminates the use of water in two processes before and after tanning – and also reduces the solids dissolved in wastewater during tanning. This has an obvious environmental impact.

I have also been informed that CSIR's anaerobic digester is making a big difference to the Swachh Bharat mission, as it converts biodegradable kitchen waste to biogas and manure that can be used for family kitchen gardens. Each anaerobic digester has the capacity to convert up to three kg waste per day and produce 400 litre of biogas, which can be used as a clean fuel.

Another commendable CSIR creation I have been told about is DivyaNayan - a reading device for the visually challenged. Inventions and innovations such as these provide simple and user-friendly solutions to the most underprivileged and deprived sections of our people. They make science and technology so meaningful – and I should say potentially so magical – as India seeks to achieve the Sustainable Development Goals.

I must point out here that none of our developmental goals has any meaning without gender parity – and without equal opportunities for our daughters and girl-children. In the past seven decades, CSIR as a body and India as a society have made enormous progress. Yet, the participation of women in science in our country is distressingly small. Less than two of every 10 scientific researchers in India are women. Of those who join the Indian Institutes of Technology each year, just about 10 per cent are women.

These numbers are simply not acceptable. We have to take accelerated steps to promote the participation of girl students and of women in science and technology. If this disparity is not addressed, our scientific achievements will always be less than perfect and less than desirable.

Friends

Technology has taken human society to the edge of a brave new age. Dazzling technological products are changing our lives almost in real time. And the Fourth Industrial Revolution is set to transform our world in ways we still cannot imagine. We are entering an era of Artificial Intelligence and robotics, 3D manufacture and custom-made biological and pharmaceutical products, even driverless cars. The relationship between human and machine is evolving before our eyes.

In the midst of all this, we cannot let the excitement of technology and newer and newer products divert our attention from basic science research. For that remains fundamentally important.

In both of these areas – in helping our country navigate and adapt to the arrival of so many new technologies as well as continuing to strengthen basic scientific research – CSIR is the guide we all turn to. It is for CSIR to continue to make new technologies as well as basic research relevant to our developmental hopes, and to the well-being of our poorest and most deprived fellow citizens.

I look forward to this treasured national institution marching proudly towards its centenary

Thank you

Jai Hind!