ADDRESS BY THE PRESIDENT OF INDIA, SHRI RAM NATH KOVIND AT THE NATIONAL SCIENCE DAY FUNCTION

New Delhi, February 28, 2020

- 1. I am glad to participate in the National Science Day celebrations. Our nation has a long and glorious tradition of scientific enquiry. From ancient times to the medieval era and then the modern period, this land has been home to exceptional minds who have pushed the frontiers of human knowledge. Their works form a rich treasure of our scientific and cultural heritage.
- 2. Since Independence, India has placed special emphasis on promotion of scientific temper. Our Constitution itself has enshrined this attitude as a fundamental duty. It is, thus, the duty of every citizen of India "to develop the scientific temper, humanism and the spirit of enquiry and reform".
- 3. How did the National Science Day celebrations start? I was told that the Department of Science and Technology received a letter from a science enthusiast suggesting celebration of a 'National Scientists' Day' on the lines of the 'National Teachers' Day'. Acting on this suggestion the Central Government decided to celebrate the National Science Day from 1987.
- 4. The day chosen was February 28. That too has a special importance. It was on this day in 1928 that Sir Chandrasekhar Venkata Raman announced his path-breaking discovery of the phenomenon of the scattering of light, known as the 'Raman Effect'. He was honoured with the Nobel Prize for Physics in 1930, making him the first Asian to win the honour for any science. The 'Raman Effect', led to the growth of a new discipline, 'Raman Spectroscopy', which has now become a powerful tool for a wide range of scientific investigations and industrial applications. I gather India today stands third, after China and the US, in terms of the number of publications in science citation index journals.

Ladies and gentlemen,

- 5. The basic purpose of the National Science Day is to spread the message of the importance of science. There are two aspects to it science in itself, as quest for pure knowledge, and science in society, as a tool for enhancing the quality of life. Both are, of course, interlinked, as scientific attitude is common to them.
- 6. It is through science and technology that we can effectively address challenges of the environment, healthcare, energy for equitable economic growth, food and water security, and communication; to name a few. Challenges before us today are multifold and complex. The increasing mismatch between demand and supply of various resources is likely to lead to conflicts in future. We all will have to rely on science and technology in our search for sustainable solutions to these challenges.

Ladies and gentlemen,

- 7. I am particularly delighted to note that the Department of Science and Technology has chosen 'Women in Science' as the theme for this year's National Science Day. In my view, women empowerment is essential for development of the country. I try to attend functions which are organised to empower the women. I am sure that this function would sufficiently disabuse people of the notion that women cannot excel in the field of science and mathematics. This platform would also spur meaningful discussions, debates and result-oriented actions across the nation on this important and urgent matter.
- 8. Many women have been making impressive contribution in the field of science and technology in India. In my recent visit to Sriharikota Range of ISRO, I came across a woman scientist so dedicated to the Chandrayaan project that she left her six-monthold son with her parents and joined the mission. ISRO's Mars Orbit Mission known as Mangalyan is also an inspiring example of women's capabilities in the areas of science. I also have had the

- opportunity of conferring an honorary doctorate on Dr. Tessy Thomas who is known as the 'Missile Woman' of India.
- 9. Despite the presence of such highly motivated women scientists, India's R&D workforce has less than 15 per cent women, compared to the global average of 30 per cent, according to a National Task Force report. Numbers are no different in science and technology teaching institutions. Only a small percentage of women who study science go on to make a successful career and contribute to this field. In order to encourage women to take to higher studies in science, I have substantially enhanced the representation of women in central universities as visitor's nominee. This step is taken to create a favourable environment of higher studies and employment in faculty positions for women.
- 10. On today's occasion, I am also delighted to launch three new initiatives for gender advancement and equality in our academic and R&D institutions:
 - The first is called 'Gender Advancement for Transforming Institutions', or, 'GATI'. It will assess the progress made by participating institutions in gender advancement based on well-defined parameters.
 - The second initiative is an online portal for science and technology resources for women. It will provide information on government schemes, scholarships, fellowships, career counselling and details of subject area experts from various disciplines.
 - The third initiative called 'Vigyan Jyoti' is to create a levelplaying field for the meritorious girls in high schools to pursue science, technology, engineering and mathematics in higher education.
- 11. I commend the efforts of the Ministry of Science and Technology and Earth Sciences under the leadership of Dr. Harsh Vardhan. I also appreciate the endeavours of the Ministry of

Women and Child Development led by Smt. Smriti Irani, specially in the area of women empowerment. I also congratulate those who receive the national awards today for science and technology communication and popularisation, and for excellence in application of technology for social benefits as well as augmenting writing skills for articulating research.

Ladies and gentlemen,

- 12. On the National Science day, let us resolve to enhance quality and relevance of our scientific enterprise. Our science must work for our people by contributing to their development and wellbeing. One of the ways to do so is to increase the direct interface of science with society. We should aim to reach all the stakeholders of science and indeed society at large with all the tools, knowledge, manpower and infrastructure in our universities and laboratories.
- 13. I am happy to learn that the DST has been working on this path. On the lines of corporate social responsibility, the Department is developing the concept of 'Scientific Social Responsibility' and turning it into a policy. It will involve voluntary activities like sharing scientific infrastructure, mentoring college faculty, fostering research culture, and organizing young students' visits to top laboratories. Public lectures and dissemination of popular science through various media can greatly enhance such public outreach.
- 14. Let us remember that the fruits of scientific research will make the best impact only when they reach our less-privileged institutions, our youth, our women and our socio-economically weaker segments. On this day, let us resolve to make science an instrument of inclusive progress that respects and indeed harnesses the power of diversity of 1.3 billion people.
- 15. You, and the young students and scholars in the audience, will do well to remember the advice C.V. Raman offered to young graduates in 1969:

[I Quote] "We need a spirit of victory, a spirit that will carry us to our rightful place under the sun, a spirit which can recognize that we, as inheritors of a proud civilization, are entitled to our rightful place on this planet. If that indomitable spirit were to arise nothing can hold us from achieving our rightful destiny." [Unquote]

16. My best wishes to all of you for all your scientific endeavours!

Thank You.

Jai Hind!