



AI, Nuclear, Space, Quantum technologies to determine contours of future growth and global competitiveness: Dr Jitendra Singh

National Quantum Mission Achieves More Than Half of Its Targets Within Three Years; India Advancing Alongside Global Leaders: Dr Jitendra Singh

AI becoming an essential tool across sectors; NEP 2020, a game-changer, laying the foundation for a new generation of innovators and domain experts: Dr Jitendra Singh

प्रविष्टि तिथि: 26 JUN 2026 2:12PM by PIB Delhi

Union Minister of State (Independent Charge) for Science & Technology, Earth Sciences and Minister of State in the Prime Minister's Office, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr. Jitendra Singh today said that AI, Nuclear, Space and Quantum technologies will determine contours of future growth and global competitiveness

India is rapidly emerging as a major force in frontier technologies, with the National Quantum Mission (NQM) already achieving more than half of its targeted outcomes within three years of its launch in 2023, added the Minister.

Speaking in a Fireside conversation during a Media Conclave organised by a leading News Channel here, Dr Jitendra Singh said that India today stands at a stage where it is progressing alongside leading nations in several critical technology domains and is steadily building capabilities that will define the next era of economic growth, national security and global competitiveness.

The Minister said that Space, Nuclear and Quantum Technologies will play a decisive role in shaping the future world order, influencing not only economic advancement but also strategic strength and geopolitical positioning. "Countries that fall behind in these technologies risk falling behind in both development and security," he said.

Referring to the National Quantum Mission, Dr. Jitendra Singh said several key milestones have been achieved ahead of schedule. He said substantial progress has already been made in quantum-secure communication, an area with significant applications in defence, strategic communications, cyber security and protection of sensitive information.

The Minister said the pace of progress achieved under the Mission demonstrates India's growing scientific capabilities and its commitment to becoming a global leader in emerging technologies. He added that India is making rapid advances across the quantum ecosystem, including quantum communication,

quantum computing and related research areas.

On Artificial Intelligence, Dr. Jitendra Singh said AI is becoming an essential tool across every sector and will increasingly influence governance, industry, education, healthcare, research and public service delivery. He said India is simultaneously strengthening the supporting ecosystem through investments in digital infrastructure, computing capacity, data resources and reliable energy systems.

The Minister said technological progress has become the principal driver of growth in the modern world and no nation can sustain long-term development without embracing innovation and frontier technologies. He added that India is pursuing this transformation while remaining committed to inclusive growth, democratic values and social welfare.

Dr. Jitendra Singh said a series of policy reforms undertaken under the leadership of Prime Minister Narendra Modi have expanded opportunities for innovation, entrepreneurship and scientific advancement. He said the opening up of the Space sector has already unleashed a vibrant startup ecosystem, while recent policy initiatives in the nuclear sector are expected to accelerate investments, technological collaboration and capacity creation in a strategically important domain.

The Minister said the growing demand for advanced computing, data centres and digital services will require robust and dependable energy sources. In this context, he said Nuclear Energy will play an increasingly important role in supporting India's technology-driven growth while contributing to the country's clean energy transition.

Speaking on education reforms, Dr. Jitendra Singh described the National Education Policy (NEP) 2020 as a transformational step that has fundamentally changed the way students approach learning, higher education and research. He said the policy has replaced rigid academic pathways with flexibility and multidisciplinary opportunities, enabling students to pursue careers aligned with their interests, aptitude and aspirations.

He said NEP 2020 is creating conditions for a stronger and more vibrant research ecosystem by encouraging students to enter research and innovation out of genuine interest and capability. This, he said, will improve the quality of scientific research and help nurture a new generation of innovators, entrepreneurs and technology leaders.

Addressing the broader research and development landscape, Dr. Jitendra Singh said India is witnessing a structural shift from a government-centric innovation model to a more collaborative ecosystem involving academia, industry, startups and private enterprises. He said scientific advancement requires the pooling of financial, technological and intellectual resources, and the country is steadily creating an environment that encourages such partnerships.

The Minister said the reforms undertaken in recent years have significantly strengthened India's innovation ecosystem and created new opportunities for scientific discovery, technology development and commercialization of research outcomes.

Looking ahead, Dr. Jitendra Singh said Artificial Intelligence and Quantum Technologies are likely to transform societies at an unprecedented pace over the coming decades. He said the institutions, policies and technological capabilities being developed today will determine the trajectory of nations in the future.

Calling upon young people to actively participate in India's scientific and technological transformation, Dr. Jitendra Singh said the current generation has access to knowledge, information and learning resources on a scale never witnessed before. He urged students to harness these opportunities, cultivate scientific temper and contribute to India's emergence as a leading knowledge and innovation-driven nation.

Dr. Jitendra Singh said the foundation laid through reforms in education, research, space, nuclear energy and emerging technologies will strengthen India's journey towards becoming a developed nation by 2047 and position the country among the world's leading innovation-driven economies.



NKR/AK

(रिलीज़ आईडी: 2278162) आगंतुक पटल : 1413
इस विज्ञप्ति को इन भाषाओं में पढ़ें: Urdu , हिन्दी , Tamil