



# DRDO

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## **Innovation should be the Central Theme of Development**

Innovation should be central theme of Development said Shri Avinash Chander, Secretary, Dept of Defence R&D and Scientific Advisor to the Raksha Mantri while delivering a special invited lecture on the inaugural day of the 101 Indian Science Congress (ISC) at Jammu. His lecture titled "Scientific Innovation in Security" covered the new security threats, innovative steps needed for meeting the existing and emerging challenges, their roll in national development and DRDO's Innovation Ecosystem. For India to become Technology Leader from Technology follower, a grand challenge is needed, he said. Shri Chander also said that we must create our own Silicon Valley and Genome Valley in India. We have islands of excellence; we need to create oceans of knowledge, he said. Giving example of the LCA programme where the threat of technology denial to India after 1998 was converted into opportunity and resulted in home grown world class technologies. He said that innovation paradigm should focus on both incremental as well radical approaches. He cited the example of development of Agni 5 (its maiden flight took-off in just three years of project sanction). Innovative improvements as compared to Agni 3 such as use of composite materials rocket motor for second and third stages, novel conical third stage, miniturisation, integrated avionics among others enabled development of Agni 5 with over 5000 km range in a short span of time. Biodigester, a product developed to address the needs of soldiers where invention was followed by innovation to make it available for Railways and rural sanitation, resulting in technology diffusion for larger benefit of society.

He also mentioned about how DRDO's innovative trench farming technology has resulted in greening of the cold desert region of Leh, Ladakh and improved the livelihood of the local populace apart from providing fresh food to the soldiers stationed at high altitudes. He ended his speech by outlining the new focus areas of research in DRDO to cope with emerging threats such as cyber warfare, unmanned systems and high energy weapons.

Earlier during the inaugural session, Shri Avinash Chander was honoured with the ISCA award for exemplary contribution to Science and technology and received the honour from the hands of Hon'ble Prime Minister, Shri Manmohan Singh.

Dr Sateesh Reddy, Sc H and Director, RCI, Hyderabad was also honoured with the Homi Bhabha Award for 2013.

Earlier, Shri Avinash Chander inaugurated the DRDO Exhibition arranged in Hall 1 of the India Vision 2020 organized as a part of the 101 ISC wherein models of prominent DRDO products such as Agni, BrahMos missiles, torpedoes, radars as well as soldier support systems are being showcased. The 101 Science Congress was inaugurated by the Hon'ble Prime Minister of India on 3<sup>rd</sup> February 2014 at the University of Jammu at Jammu.

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