



The Vanguard Lecture

Guest	Dr. Ashok Kumar Yadav Scientist G Associate Director Defence Laboratory Jodhpur
Date	06 April 2018
Lecture Title	Detection of Nuclear Radiation
Abstract	<p>Nuclear radiation are high energy radiations emitted by the unstable nucleus of an atom. These may comprise of particles like Alpha, Beta & Neutrons or electromagnetic Gamma radiation. The nuclear radiations have immense applications in science and technology, medical imaging, industrial radiography etc. In a nuclear battle field scenario, the nuclear radiation is one of the lethal environment which primarily comprises of neutrons and gamma radiation.</p> <p>The detection and quantization of these radiation is hence very important. The nuclear radiation can be detected by their property of causing direct or indirect ionization in the medium of detector. Some of the detectors include- Gas filled detectors, Scintillators, Semiconductor radiation detectors, Thermo luminescent detector, Film badges etc.</p> <p>The talk will cover various types of nuclear radiation detectors, their working and use in making nuclear radiation monitoring instruments.</p>
Attendees	<p>I Year ME B.Tech. Students + II Year ME B.Tech. Students + III Year ME B.Tech. Students + M.Tech. ME Students + Ph.D. ME Students + Any other interested student + All faculty members are cordially invited</p>
Venue	Room No. 105, Lecture Hall Building
Time	<p>12:00 – 13:00 Hrs. 45 minutes lecture + 15 minutes interaction with Questions & Answers</p>

Speaker's Bio-data

Shri Ashok Kumar Yadav, Scientist "G" is working in the Defence Laboratory Jodhpur as Associate Director. He has done M.Sc. Physics with specialization in electronics from University of Jammu and M.Tech. in Microelectronics from IIT Kanpur.

He is working in the field of Nuclear Instrumentation and is involved in the development of various radiation monitoring instruments for our armed forces. The successful development and production of these items has resulted in the self reliance of our country in the field of Nuclear Defence. He has also designed and developed an innovative computerised high level radiation test/calibration facility for nuclear radiation monitoring instruments

Shri Ashok Kumar Yadav has been awarded "Vikas Puruskar" – Seven times, "DRDO Technology Group Award" - Three times and the "DRDO Shakti-98" Cash Award for his contributions during the Pokhran-II nuclear tests. He is recipient of National Science Day Oration Award in 2009. He has been awarded DRDO's "Scientist of the Year Award" for the year 2007 by the then prime minister of India- Dr. Manmohan Singh in recognition of his exemplary scientific achievements.