

Keynote Address: Applications of Nuclear Science and Technology

Thursday, 18 April 2024 11:30 (30 minutes)

The mention of the word nuclear still scares off a large number of people, however on a day to day basis, members of the public get to experience the benefits of nuclear technology. There are various applications of nuclear science that are fundamental to human's livelihood, environment and the climate. Application of nuclear science can be found in the medical fraternity (Nuclear technology is applied to various branches of medicine: oncology, cardiology, neurology, pneumology or pediatrics), energy (electricity generation), food and agriculture (improving food quality and food irradiation for longer shelf-life), industry (improved measurements), mining (radiotracers) and even art (carbon dating). This presentation will discuss generation of nuclear energy, nuclear power plants, nuclear waste, research reactors, radioisotope production, accelerators and cyclotrons. The presentation will highlight on the benefits of nuclear technology, radiation protection for both human and the environment, and also the future plans of nuclear energy in South Africa.

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