



Contribution ID: 55

Type: Oral Presentation

Non-Specialist Lecture: Neutron scattering prospects at the new Multi-Purpose Reactor

Friday, 8 July 2022 11:30 (30 minutes)

The SAFARI-1 Research Reactor is a flagship nuclear facility with exemplary operational, maintenance and management records. Notwithstanding its commissioning stemming from 1965, that classifies it as one of the oldest large research reactors in the world, it occupies high international stature as a prominent producer of medical radioisotopes in conjunction with Necsa business units. To sustain these capabilities and expertise, a project for its replacement with a Multi-Purpose Reactor has high prominence and momentum. This brings with it the prospect of expanded utilisation into fields of scientific and industrial research, primarily through various neutron scattering techniques. Research reactors with dedicated neutron scattering centres feature thermal and cold neutron beams that facilitate research of matter at the atomic level with applications transgressing many scientific and engineering disciplines in material science, physics, chemistry and biology. This report presents the development of the Multi-Purpose Reactor project, featuring neutron scattering facilities as a prominent entity to bring modern world-class large-scale research infrastructure to the benefit of academic and industrial research communities through an active User Access program. Intensive stakeholder engagement is inherent to the process to determine priorities with the instrument suite selection.

Apply to be considered for a student ; award (Yes / No)?

No

Level for award;(Hons, MSc, PhD, N/A)?

N/A

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