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Imaging with X-rays and prospect of a cold neutron source at Necsa

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The South African Nuclear Energy Corporation (Necsa) is in the process of establishing a neutron beam line center (NBLC) that will benefit South African researcher community and industries. The NBLC will grow and expand its capabilities at a proposed new build of a multi-purpose reactor facility which will include a cold neutron source. Imaging instruments with neutron/X-ray/gamma source, will form part of the NBLC to support and fulfil the mandate of Necsa in undertaking and promoting research and development in the field of nuclear energy, radiation sciences, and technology development. Currently, a facility capable of imaging with X-ray is well-established at Necsa, and a thermal neutron imaging facility is under an upgrade at SAFARI-1 research reactor. The imaging center has become a multidisciplinary research facility with utilization in non-destructive testing, cultural heritage, agriculture, energy sector, civil engineering, bio-sciences, metallurgy, and geo-sciences. This talk showcases the capabilities of imaging with X-rays, and the prospect of imaging with a cold neutron source at Necsa.

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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