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Status of imaging with radiation at Necsa

Content

The South African Nuclear Energy Corporation (Necsa) is in the process of establishing a National Centre for Radiography and tomography (NACRAT) that will benefit a wide range of researchers, students, industries and communities in South Africa. The centre will utilize complementary radiation beams such as neutron (cold, thermal, and fast), X-rays and gammas rays. Currently the centre has a well-established facility that has a microfocus X-ray CT scanner. However, the neutron computed tomography facility is still under upgrade. The X-ray CT scan is being utilized to support and fulfil the mandate of Necsa to undertake and promote research and development in the field of material science, nuclear energy, radiation sciences and technology. In the last 10 years, the facility has become a multidisciplinary research facility being utilized for non-destructive testing from disciplines such as; cultural heritage, soil science, energy sector, civil engineering, bio-sciences, metallurgy, and geo-sciences. This talk showcases the capabilities of imaging with radiation at Necsa with respect to instrumentation, software and methodology.

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