

NeXus at Necsa

Online NDFI NeXus Workshop

18 March 2022

<https://events.hifis.net/event/323/>

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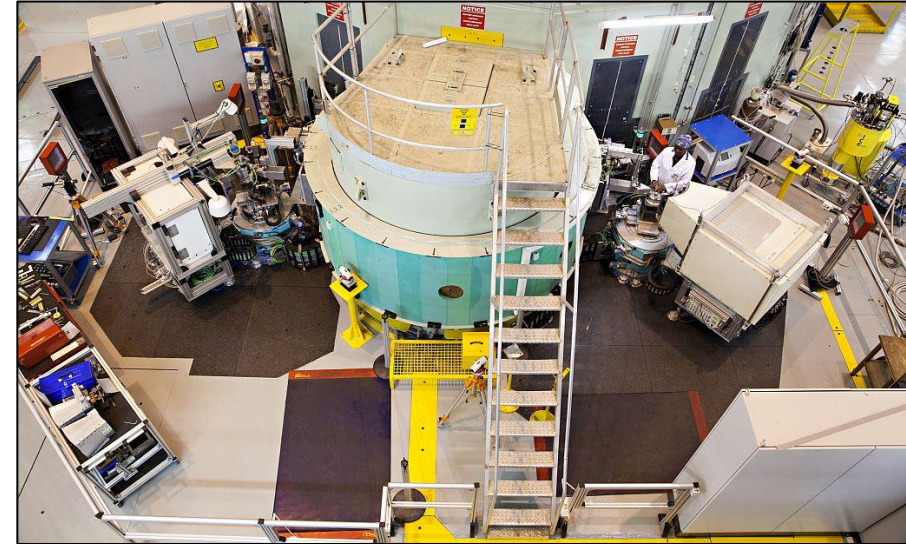
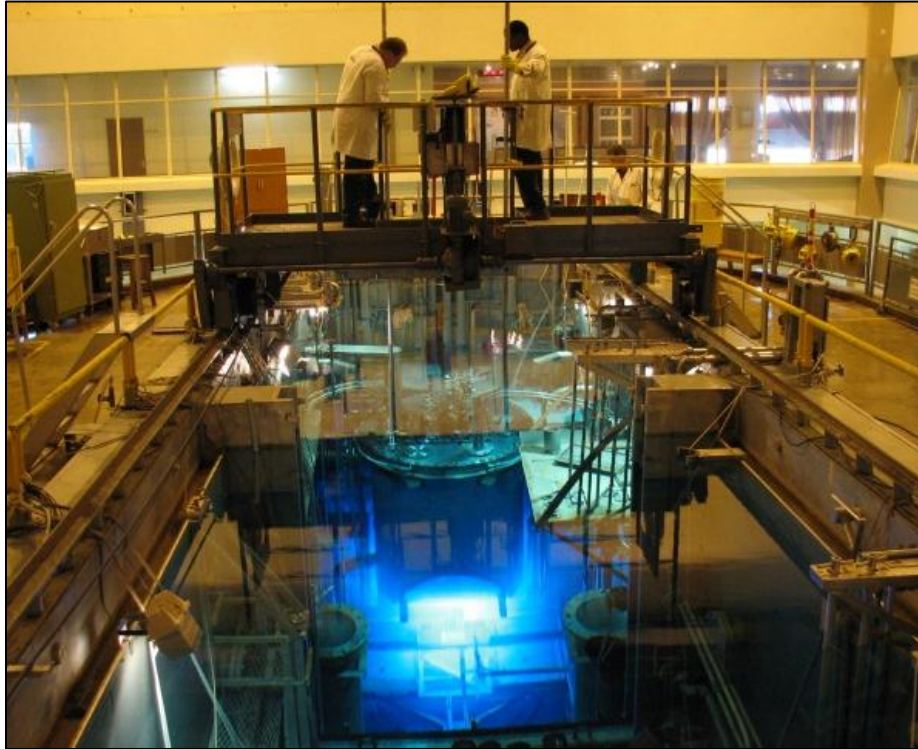
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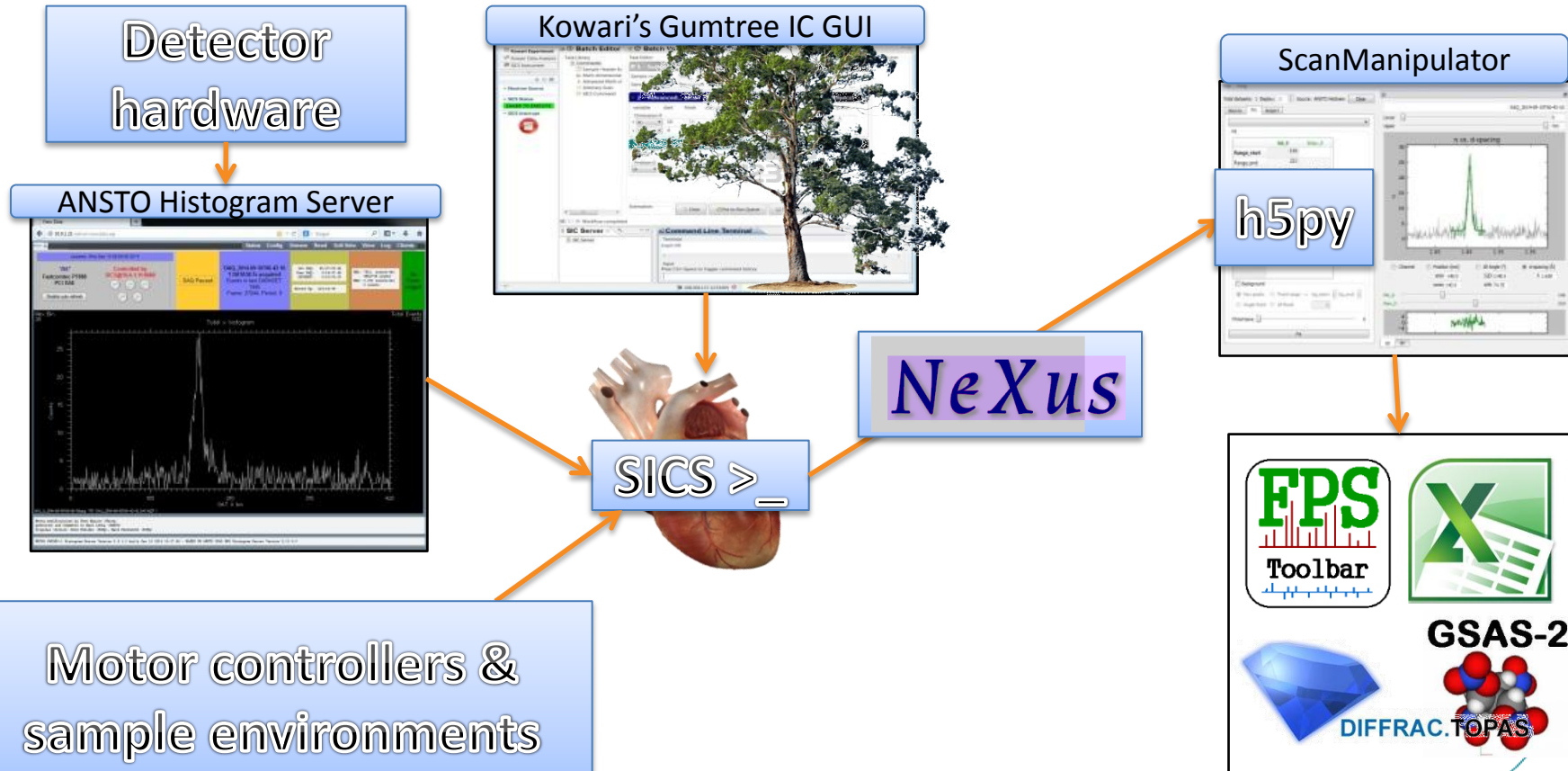
South African Nuclear Energy
Corporation SOC Limited

NDIFF at SAFARI-1



- Strain scanner
- Powder diffractometer

System breakdown



Envisaged Multi-Purpose reactor

– DMRE / Necsa initiative to replace SAFARI-1 by 2030



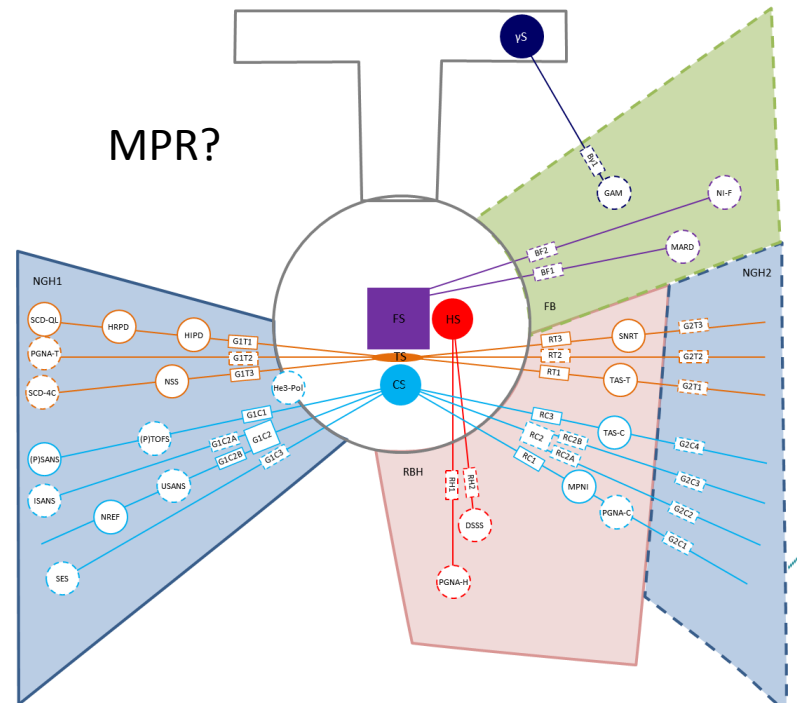
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Abbreviation	Instrument	Beam
HIPD	High Intensity neutron Powder Diffraction	T
HRPD	High Resolution neutron Powder Diffraction	T
NSS	Neutron Strain Scanning	T
SCD-QL	Single Crystal Diffraction: Quasi Laue	T
SNRT	Standard Neutron Radiography and Tomography	T
TAS-T	Triple Axis Spectrometer - Thermal	T
MPNI	Multi-Purpose Neutron Imaging	C
(P)SANS	(Polarised) Small Angle Neutron Scattering	C
NREF	Neutron Reflectometer ToF	C
TAS-C	Triple Axis Spectrometer - Cold	C
SCD-4C	Single Crystal Diffraction - 4 Circle	T
PGNA-T	Prompt Gamma Neutron Activation - Thermal	T
DSSS	Diffraction of Small Scale Structures	H
PGNA-H	Prompt Gamma Neutron Activation - Hot	H
MARD	Medical Applications & Radiation Damage	F
NI-F	Fast Neutron Imaging	F
PGNA-C	Prompt Gamma Neutron Activation - Cold	C
(P)TOFS	(Polarised) Time Of Flight Spectrometer	C
ISANS	Inelastic Small Angle Neutron Scattering (ToF)	C
SES	Spin Echo Spectrometer	C
USANS	Ultra Small Angle Neutron Scattering	C



QUESTIONS