



# THE SECOND SAUDI INTERNATIONAL CONFERENCE ON (NUCLEAR POWER ENGINEERING (SCOPE-2

**Tuesday, 4 November 2025**

**(Ground-103 - Lecture Hall (14:45 - 16:05/60 - Nuclear Materials: Nuclear Fuel and Material**

**Conveners: Rosa Lo Frano; Mohammed Arroussi-**

time	id] title]	presenter
14:45	Invited Talk: Nuclear material and Long Term Operation of nuclear [25460] facilities	LO FRANO, Rosa
15:05	Mineralogical Controls on Radiological Impact in Pegmatites Rocks of [25210] Eastern Desert, Egypt: Implications for Mining Safety and Radiation Protection	
15:20	Evaluating Biaxial Creep and Anisotropic Deformation of Nb-Containing [25321] Zirconium Alloys for Nuclear Cladding Applications	
15:35	Comparative Study of Creep-Fatigue Response in Conventional and [25366] LPBF SS316L	

## Wednesday, 5 November 2025

### (Ground-101 - Lecture Hall (09:30 - 11:00/60 - Nuclear Materials: Nuclear Fuel and Material II

Conveners: Mohamed Mitwalli; Zuhair Gasem-

time	id] title]	presenter
09:30	Influence of Heat Treatment on the Structure and Properties of Passive [25224] Films in Flow-Accelerated Corrosion of Low-Alloy Steel	
09:45	Polyphosphate mesoporous silica nanoparticles performance for [25234] adsorption of Uranium in aqueous solutions	
10:00	,Irradiation-assisted corrosion in structural alloys: advances, challenges [25198] and future directions	

### (Ground-101 - Lecture Hall (11:15 - 12:30/60 - Nuclear Materials: Nuclear Material & Development

Conveners: M. Senousy; Ivan Otic-

time	id] title]	presenter
11:15	An Optimized Gated Recurrent Unit Deep Neural Network Architecture [25222]	
11:30	Development of a Novel Composite Shielding Material for Protection [25183] Against Neutron and Gamma Radiation	
11:45	Axial Compression Performance of Concrete Strengthened Steel [25435] Structures for Nuclear Structures	