# Modelling in Nuclear Science and Engineering Seminar 2020

### 4/5 November 2020

#### 2-day seminar

#### Virtual Seminar

Advances in Materials Modelling

Materials modelling for ageing plants

> Next Generatio n Reactor Modelling

## **Topics will include**

Materials modelling for the next generation of nuclear reactors

Modelling Developments in Accident Analysis

Application of Modelling in Risk Analysis Load Pattern Optimisation, Multi-objective Optimisation of Fuel Assemblies Assimilation & Uncertainty

End of Plant Life studies, and use of multi-physics Fuel Performance Modelling

Application of ROM – a growing area of interest

Applications of Machine Learning to Plant Performance

Digital Reactor/Digital twins