

AGENDA

Fourth Sodium Fast Reactor (SFR) Uncertainty Analysis in Modeling (UAM) Benchmark Workshop (SFR-UAM-4)

Host Organization

NINE Nuclear and Industrial Engineering
Lucca, Italy

May 14-15, 2018

**Location – Real Collegio Palace – Piazza del Collegio, 13,
55100 Lucca (LU), Italy**

Day 1: 14 May 2018

Opening Session of SFR-UAM-4, CTF-5, and CANDU-TH Meetings – Workshop Room A (Closter B).

Chair: A. Petruzzi

- 09:00 – 09:20 Welcome and opening remarks from NINE Nuclear and Industrial Engineering
- 09:20 – 09:30 Introductory remarks to OECD/NEA benchmark workshops
- 09:30 - 09:40 Overview and status of the OECD/NEA SFR-UAM benchmark activities after the 3rd workshop – L. Buiron
- 09:40 – 09:50 Overview and status of CTF Users' Group activities – M. Avramova
- 09:50 – 10:00 Introduction to the OECD/NEA CANDU-TH benchmark – D. Novog

10:00 – 10:30 Coffee Break

The rest of the SFR-UAM-4 sessions continue to be in the Workshop Room A (Closter B).

Introduction and opening remarks : All

Best Estimate Results

- 10:45 – 11:00 Status of Best Estimate Results for SFR 3600 MWth and ABR 1000 MWth - L. Buiron (CEA)
- 11:00 – 11:20 Preliminary Results for UAM-SFR Benchmark for Design, Operation and Safety Analysis - I. Trivedi (NCSU)

Discussion on different benchmark sub-exercises

11:30 – 11:50 Specifications of Sub-Exercises for the UAM-SFR Benchmark – W. Zwermann (GRS)

11:50 – 12:10 Sub-Exercises : Cell and Sub-Assembly preliminary results with ERANOS code package – L. Buiron (CEA)

13:00 – 14:00 Lunch

14:00 – 14:30 Sub-Exercises : Sub-Assembly burnup preliminary results with ERANOS code package – L. Buiron

14:45 – 15:00 Status on Best Estimate transient exercises – L. Buiron (CEA)

15:00 – 15:20 Discussions on the different sources of uncertainties including those on the fuel behaviour and the core thermal hydraulic – All

15:30 – 15:50 Processing of Covariance Information from Updated Nuclear Data Library Using NJOY – I. Trivedi (NCSU)

16:00 – 16:30 Coffee Break

16:30 – 16:50 Status on uncertainty propagation on transients – L. Buiron (CEA)

16:50 – 17:15 Sensitivity and uncertainty analysis of sodium fast reactor using the SARAX code system - Pr. Y. Zheng (Xi'an Jiaotong University)

17:20 – 17:45 Uncertainty quantification of ABR transient analysis – K. Zeng (NCSU)

Day 2: 15 May 2018

9:00 – 9:20 Experiments in support to validation exercise – L. Buiron (CEA)

9:30 – 9:50 Update on THORS experimental data and benchmark – M. Avramova (NCSU)

10:00-11:00 Round table on the possible structure of the final report

11:00 – 11:30 Coffee Break

11:30 – 12:00 Discussion on Action List