



Oak Ridge National Laboratory
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Oak Ridge, TN 37831

SUBJECT: Report on Foreign Travel to WONDER 2023 in Aix-en-Provence
DATE: July 25, 2023
TO: Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear Security Administration / NA-ESH-21
FROM: Kemal Ramic

MEETING TITLE: 6th edition of the International Workshop On Nuclear Data Evaluation for Reactor Applications (WONDER-2023)

MEETING LOCATION: Aix-en-Provence

MEETING DATES: June 5th – June 9th

ATTENDEES ON BEHALF OF NCSP: [Only 1 report from the institution for ALL attendees] Goran Arbanas, Kemal Ramic

MEETING PURPOSE: The main objective of the workshop is to review the current modeling and evaluation methods of nuclear data for reactor applications (operational and future nuclear installations) and to debate possible areas of improvement. The following topics were covered: Nuclear Data needs for reactor applications; Microscopic and integral nuclear data measurements; Evaluation of nuclear data (theories, models, codes); Uncertainties and covariance matrices (methodology and impact on reactor calculations); Processing and benchmarking; Thermal scattering laws; Decay data; Nuclear fission, including prompt particle emission and fission yields.

MEETING BENEFITS TO THE NCSP:

As the main objective of the meeting was to discuss nuclear data evaluations for reactor application, this is closely related to the nuclear data evaluations for nuclear criticality safety purposes. Awareness of progress made by others in nuclear data evaluations realm should be extremely useful to NCSP as way of presenting our current methods but also through exposure to other work which may inspire innovation and improvements of our current methods in the US.

PURPOSE OF TRAVEL [Provide a detailed purpose of the travel]: Kemal presented the current work on evaluation and validation of TSLs at ORNL, which should lead to a discussion about improvement to nuclear data in general. Goran chaired a "Evaluation of nuclear data" session as well as presented on advancing the theory of nuclear data evaluations.



Persons Contacted on your trip [If applicable, provide a list of everyone you met with during the trip.]:

Presentations, Chair Responsibilities, Etc.:

The agenda can be seen at <https://indico.cern.ch/event/982643/timetable/#20230605.detailed>

Kemal's presentation was titled "Advancements in Validation of TSLs through Inelastic Neutron Scattering and Transmission Measurements"

Goran's presentation was titled "Advancing the theory of nuclear data evaluations" and he chaired "evaluation of nuclear data" session

Distribution:

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