



**Gaerttner LINAC Center, Rensselaer Polytechnic Institute
110 8th St., Troy, NY 12180-3590**

SUBJECT: Report on Foreign Travel to virtual 2021 WPEC meeting
DATE:
TO: Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear Security Administration / NA-511
FROM: Yaron Danon

MEETING TITLE: 2021 WPEC meeting

MEETING LOCATION: virtual (NEA NEA Headquarters, Boulogne-Billancourt, France)

MEETING DATES: May 10-14, 2021

ATTENDEES ON BEHALF OF NCSP: [Only 1 report from the institution for ALL attendees]

Yaron Danon, Emily Liu

MEETING PURPOSE:

The purpose of WPEC and adjacent subgroup meetings is to promote the exchange of information on nuclear data evaluations, measurements, nuclear model calculations, validation, and related topics, and to provide a framework for co-operative activities between the participating projects. That includes the ENDF, JEFF, JENDL and BROND, CENDL projects and other invited delegates.

MEETING BENEFITS TO THE NCSP:

All WPEC and subgroup meetings included topics in which NCSP support research and work performed at RPI and other US labs. NCSP supported work was presented and highlighted and access to other latest data and resources was learned.

The meeting provides an opportunity to collaborate with other ND communities such as JENDL and JEFF. The collaboration allows better planning of NCSP (and NNL) related ND experiments and evaluation activities. In some cases, this meeting enables access to experimental and/or evaluated data obtained elsewhere.

PURPOSE OF TRAVEL

The purpose of the travel is to participate in the WPEC meeting as an official member of the ENDF US delegation, to present a report on US experimental ND work during FY20-21, and to participate in subgroups SG-C (High Priority list), SG-50 (Developing an Automatically Readable, Comprehensive and Curated Experimental Reaction Database), and other subgroups. Prof. Emily Liu participated in Subgroup 48: Advances in Thermal Scattering Law Analysis.



Persons Contacted at virtual meeting

List of participants in WPEC includes 36 participants s provided at:

<https://www.oecd-nea.org/download/wpec/meeting2021/documents/0-Participants.pdf>

Presentations, Chair Responsibilities, Etc.:

Danon is the chair of the CSEWG measurement committee and in the capacity reported to WPEC in the May 13 2021 session on recent US experimental results. The presentation is available at: <https://oecd-nea.org/download/wpec/meeting2021/documents/5.4-ExperimentsUSA.pdf>. This presentation included summaries from:

1. Updates on nuclear data experiments at LANSCE – I, Hye Young Lee (LANL)
2. Updates on nuclear data experiments at LANSCE – II, Keegan Kelly (LANL)
3. New UML capability for measurements of nuclear data – capture gammas from Mn-56, Marian Jandel (UML)
4. Neutron-induced neutron emission from U-235 and Pu-239, Kumar Mohindroo, (RPI)
5. Hf(n,tot) Measurement in the High Energy Region at the RPI LINAC, (NNL/RPI)
6. Berkeley Nuclear Data Measurements Program, Jonathan Morrell, (UCB)
7. University of Kentucky Accelerator Laboratory Activities, Jeffrey Vanhoy, (UKAL)
8. YHx data measured at the SNS, Chris Chapman, (ORNL)
9. Partial and differential (α ,n) cross section measurements on boron, carbon, and oxygen isotopes, James deBoer (UND)

Danon is also the US representative to High Priority list (HPRL) Subgroup C and participated in the meeting of this subgroup. The discussion in SG-C was about updates to different current entries on the list since no new entries were add in the last year. The chair of SG- will change this year and will likely be from France. Danon also participated in SG-50 which is related to storage of experimental data in a proposed EXFOR extension to which RPI contributes.

Distribution:

Angela Chambers, angela.chambers@nnsa.doe.gov

Doug Bowen, bowendg@ornl.gov

Marsha Henley, henleym@ornl.gov