



**Los Alamos National Laboratory
PO Box 1663; Los Alamos NM 87545**

SUBJECT: Report on Foreign Travel to (virtual) Paris
DATE: July 15, 2021
TO: Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear Security Administration / NA-511
FROM: Jeremy Lloyd Conlin

MEETING TITLE:
WPEC 2021

MEETING LOCATION:
Meeting was held virtually, but hosted from the OECD/NEA in Paris
<https://oecd-nea.org/download/wpec/meeting2021/>

MEETING DATES:
May 10–14, 2021

ATTENDEES ON BEHALF OF NCSP:

- Jeremy Conlin
- Nick Thompson
- Wim Haeck

MEETING PURPOSE:
International collaboration on the use of nuclear data

MEETING BENEFITS TO THE NCSP:

- Leverage the benefits of international collaboration
- Present updates on work performed at LANL

PURPOSE OF TRAVEL
Attend WPEC 2021

Persons Contacted at Paris
N/A

Presentations, Chair Responsibilities, Etc.:
Presentations:
Wim Haeck

Chair:
SG-45 Chair: Wim Haeck



Sessions Attended:

- Subgroup 45 meeting on the Validation of Nuclear Data Libraries (VaNDaL) Project. Wim Haeck and Kristy Yancey Spencer (now at INL) gave an update on the LANL Benchmark Suite. There was also a good discussion of the QA process for benchmarks for inclusion in VaNDaL.
- Subgroup 50 on Developing an Automatically Readable, Comprehensive and Curated Experimental Reaction Database. Amanda Lewis and Denis Neudecker (LANL) led the meeting and discussed examples of information that would be needed to be put in a database to make experimental data more useful (eg. Energy, detectors, calibration, resolution, analysis methods and tools, etc.).
- Subgroup 47 meeting on the Use of Shielding Integral Benchmark Archive and Database (SINBAD) for Nuclear Data Validation. Ivo Kodeli gave an excellent talk on the ongoing and proposed SINBAD evaluations and Denise Neudecker presented some of the work LANL has done related to pulsed spheres.
- Expert Group on the High Priority Request List. Much of the discussion focused on the running of the HPRL, including nominating of a chair, the fact that there is currently only one US representative on the group that someone from NNDC should be added, and that a new website and CMS are being rolled out.
- Subgroup 46 meeting on the Efficient and Effective Use of Integral Experiments for Nuclear Data Validation. There were multiple talks that discussed correlations between benchmarks, differential die-away, and using Marginal Likelihood Optimization for integral experiments to try to find unrecognized sources of uncertainty and model defects.
- Expert Group on Generalized Nuclear Data Structure. Caleb Mattoon presented some details about comparing thermal scattering data. He pointed to our ZrH data and how it was problematic, but that later versions seemed to be improved. It wasn't clear if the improvement was because of an improved data set or because they were using newer versions of MCNP. He said he was going to look in to this and get back. Doro Wiarda shared her presentation about what they are doing with AMPX/SAMMY. They have their GNDS code available on their site at <https://code.ornl.gov/RNSD/gnds>. We are in the process of doing similar kinds of things with regards to GNDS at LANL

Distribution:

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

Doug Bowen, bowendg@ornl.gov

Marsha Henley, henleym@ornl.gov