



NCSP Nuclear Data Advisory Group (NDAG) Report

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NDAG Chair

NCSP Technical Program Review
Sandia National Laboratory
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Abstract

We review Nuclear Data Advisory Group activities during FY15.

Acknowledgement

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Outline

- NDAG Mission, Charter and Membership
- Annual Meeting Review
 - DOE Nuclear Data Working Group
 - NCSP Thermal Kernel Review

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Nuclear Data Advisory Group

- **Mission:** “The Nuclear Data Advisory Group (NDAG), through recommendations to the NCSP Manager, enhances the coordination of the NCSP Nuclear Data Element work program with current and future DOE needs and promotes the integration of this work program with the other elements of the NCSP.” – NDAG Charter, July 2014
- **Key Functions:** (paraphrased from the NDAG Charter, July 2014)
 - Identify deficiencies in evaluated differential and integral nuclear data and recommend priorities and specific resources for meeting identified NCS needs;
 - Communicate and work with the other DOE Programs, the various NCSP Program Elements, the National Nuclear Data Center, the Cross Section Evaluation Working Group (CSEWG), the Working Party on International Evaluation Cooperation (WPEC) of the OECD/NEA Nuclear Science Committee;
 - Evaluates and determines high-level concerns for immediate or short-term attention and/or correction and communicates these concerns to the NCSP Manager;
 - Supports the NCSP Manager in approval of Integral Experiment Requests (IER) and Nuclear Data Requests (NDR).

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Nuclear Data Advisory Group

■ Current Membership:

— Chair (10/2014 – 9/2017)

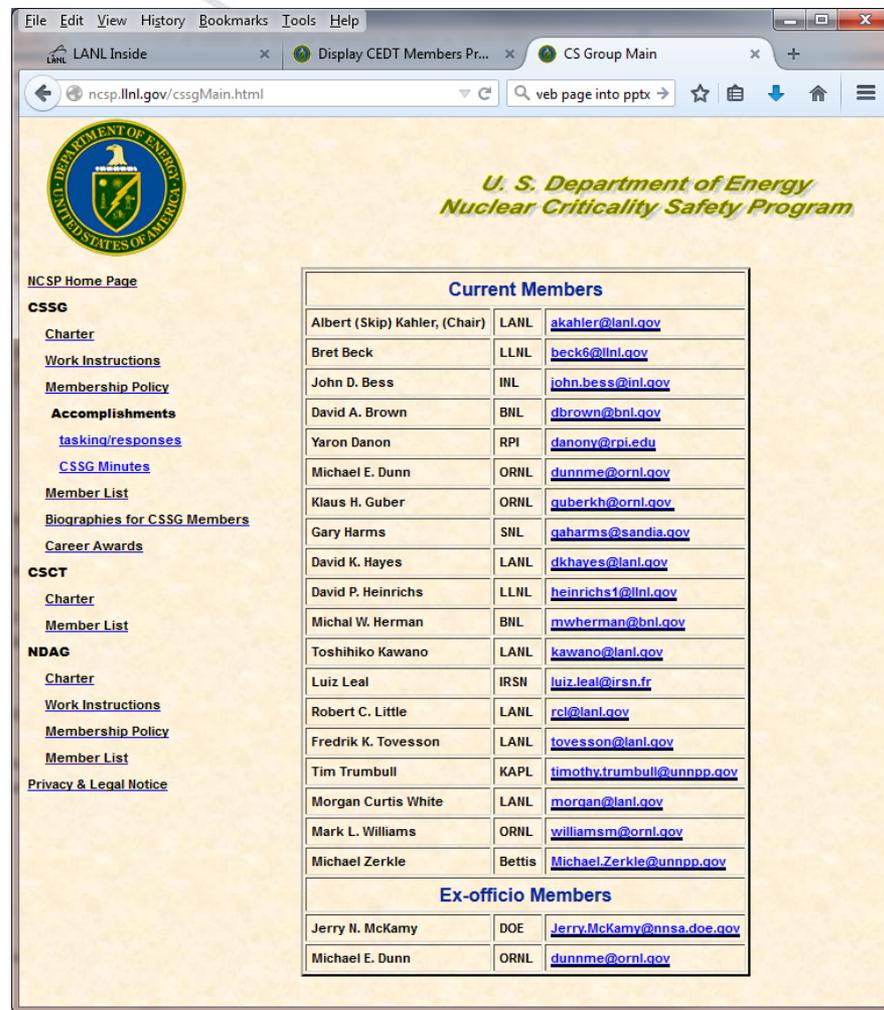
- Skip Kahler (LANL)

— Newly elected:

- Tim Trumbull (Manager, Nuclear Data and Methods, KAPL)
- One unassigned slot
 - To be filled only if the current membership and/or the NCSP Manager sees a need.

— Retired/resigned

- none



The screenshot shows the NCSP Home Page with a navigation menu on the left and a table of Current Members on the right. The table lists members with their names, affiliations, and email addresses.

| Current Members | | |
|-------------------------------|--------|--|
| Albert (Skip) Kahler, (Chair) | LANL | skahler@lanl.gov |
| Bret Beck | LLNL | beck6@llnl.gov |
| John D. Bess | INL | john.bess@inl.gov |
| David A. Brown | BNL | dbrown@bnl.gov |
| Yaron Danon | RPI | danony@rpi.edu |
| Michael E. Dunn | ORNL | dunme@ornl.gov |
| Klaus H. Guber | ORNL | guberkh@ornl.gov |
| Gary Harms | SNL | gaharms@sandia.gov |
| David K. Hayes | LANL | dkhayes@lanl.gov |
| David P. Heinrichs | LLNL | heinrichs1@llnl.gov |
| Michal W. Herman | BNL | mwherman@bnl.gov |
| Toshihiko Kawano | LANL | kawano@lanl.gov |
| Luiz Leal | IRSN | luiz.leal@irsn.fr |
| Robert C. Little | LANL | rci@lanl.gov |
| Fredrik K. Tovesson | LANL | tovesson@lanl.gov |
| Tim Trumbull | KAPL | timothy.trumbull@unnpp.gov |
| Morgan Curtis White | LANL | morgan@lanl.gov |
| Mark L. Williams | ORNL | williamsm@ornl.gov |
| Michael Zerkle | Bettis | Michael.Zerkle@unnpp.gov |
| Ex-officio Members | | |
| Jerry N. McKamy | DOE | Jerry.McKamy@nnsa.doe.gov |
| Michael E. Dunn | ORNL | dunme@ornl.gov |

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Nuclear Data Advisory Group

- Primary topics from the Fall, 2015 annual meeting:
 - Nuclear Data Working Group
 - NCSP Thermal Kernel Work
 - 5-Year Plan Appendix B Review (deferred)

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Nuclear Data Working Group - I

- Where did it come from, who's involved, what are its goal(s) and is this good for NCSP?
 - Started with July, 2014 USNDP review
 - Lead to a “Nuclear Data Needs and Capabilities for Applications Workshop”, May 2015
 - Program Manager meeting to review Workshop recommendation(s)
 - How to foster stronger communication and coordination across the community (DOE/OS, NE, NNSA, DTRA, DHS, ...)?
 - Form a committee!

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Nuclear Data Working Group - II

- Working Group Represented Programs and Technical Points of Contact ...
- NCSP interests are strongly represented with three NDAG members participating (Kahler, Brown, Little)
- Goal ... develop multi-year plan(s) that identify and resolve cross cutting nuclear data needs ...
- It is understood that NCSP and ASC experimental programs are already well defined and potential new work will not impact those schedules.

| Program | Program Manager | Program Area | Working Group Member | |
|--------------------|---------------------------------------|--|------------------------------|------------|
| DNN R&D NA-22 | Dave LaGraffe, Jim Peltz, David Beach | Proliferation Detection | Catherine Romano | ORNL |
| DOE/OS/NP | Ted Barnes, Tim Hallman | Nuclear Data | Lee Bernstein, Dave Brown | LLNL, BNL |
| DNN R&D NA-22 | Tom Kiess | Forensics / Post Det. | Todd Bredeweg Jason Burke | LANL, LLNL |
| DNDO / TAR | Namdo Moon | Nuclear Detection | Doug Mayo | LANL |
| NA-511/ NCSP | Jerry McKamy | Criticality Safety | Skip Kahler | LANL |
| NA-113 | Ralph Schneider Staci Brown | Defense Programs/ Research and Development | Dennis McNabb | LLNL |
| NA-114 | Doug Wade, Adam Boyd | Defense Programs/Physics and Engineering Models | Bob Little | LANL |
| NE | Rob Versluis | Nuclear Energy | Phillip Finck | INL |
| DNDO / NTNFC | William Ulicny Jeff Morrison | Forensics | Richard Essex | NIST |
| NA-45/83 | Tom Black Steve Goldberg | Nuclear Technical Forensics | Bob Rundberg | LANL |
| NA-82 | Rick Christensen | Nuclear Threat Science | John Maenchen | |
| DOE/Isotope Office | Jehanne Gillo, Dennis Phillips | Isotope Production | Meiring Nortier | LANL |

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Nuclear Data Working Group - III

- General observations ...
 - The NCSP Program is often mentioned as a model that the other Offices should emulate.
 - Detailed 5-Year plan and associated Gantt charts that cover measurement, evaluation, validation and inclusion in ENDF.
 - This is a chance for the community to educate Headquarters ...
 - A program to acquire nuclear data to satisfy a specific need isn't done when your beamtime is used up!
 - A technical paper in a peer reviewed journal isn't sufficient to assure these new data are included in anyone's evaluation!
 - Comprehensive data management plans must be part of future funded proposals.

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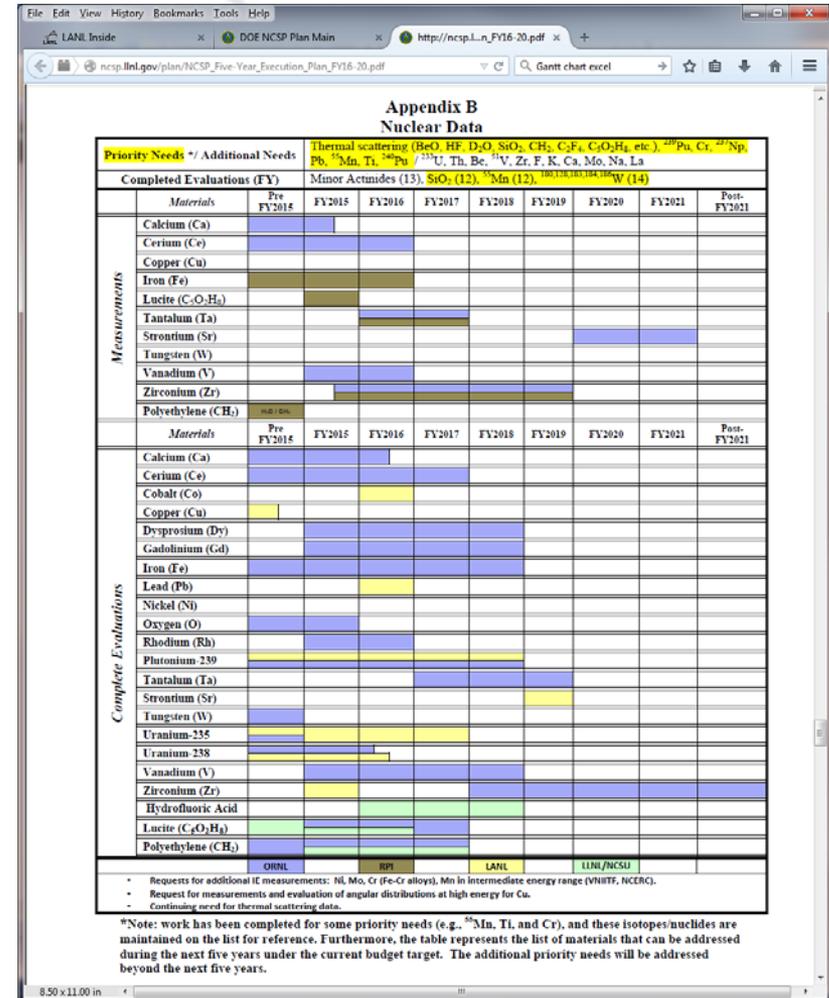
NCSP Thermal Kernel Work

- RPI Experimental Work
- NCSU (Hawari) / LLNL
 - Also supported by Naval Reactors (Bettis)
- ORNL / RPI
- Thermal kernel work is an important component of the NCSP technical program. It represents a specialized technical endeavor that is not easily turned back on when abandoned. The NCSU Program is mature and robust and deserves continuing support. The ORNL Program is less mature, primarily due to funding limitations, but support for a second thermal kernel scattering program is in the best interests of the NCSP.

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5-Year Plan Appendix B Review

A review of Appendix B is the subject of this afternoon's NDAG meeting.



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