



NCSP Nuclear Data Advisory Group (NDAG) Report

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NDAG Chair

NCSP FY16 Technical Program Review
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Abstract

We review Nuclear Data Advisory Group activities during FY16.

Acknowledgement

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Outline

- NDAG Mission, Charter and Membership
- Annual Meeting Review

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Nuclear Data Advisory Group

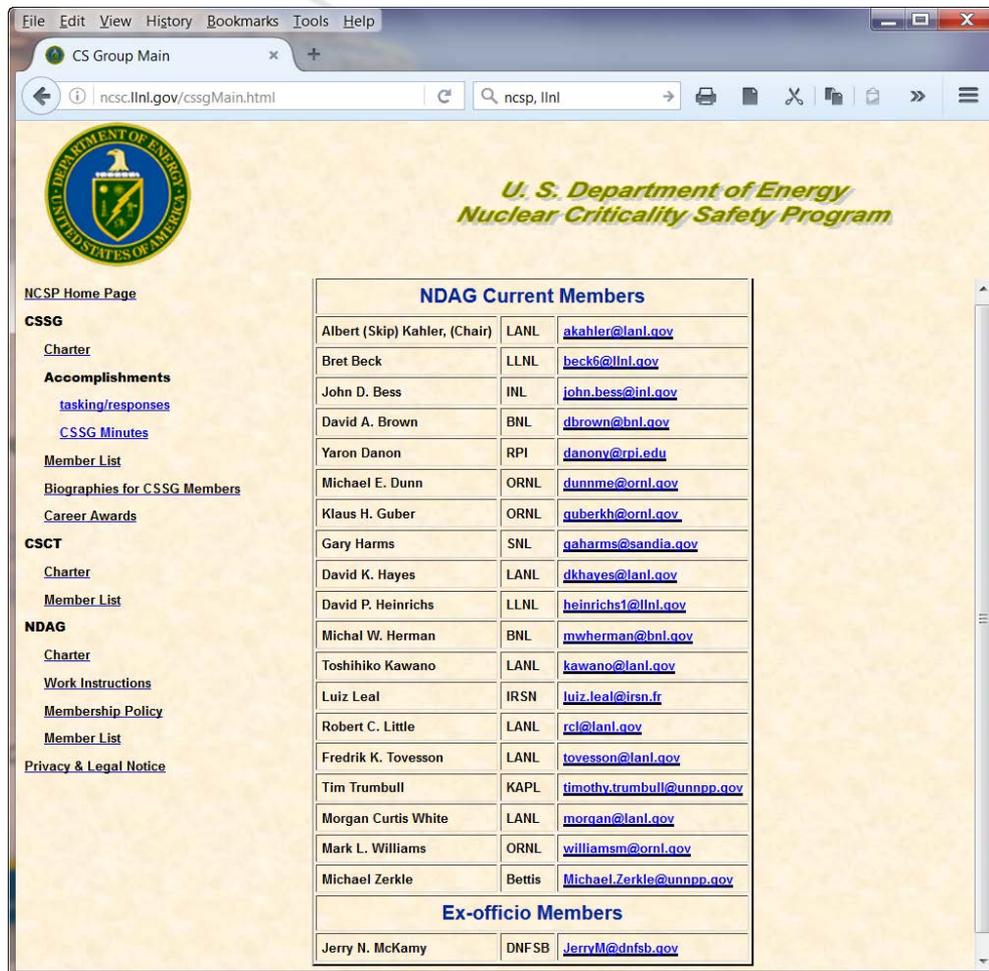
- **Mission:** “The Nuclear Data Advisory Group (NDAG), through recommendations to the NCSP Manager, enhances the coordination of the NCSP Nuclear Data Element work program with current and future DOE needs and promotes the integration of this work program with the other elements of the NCSP.” – NDAG 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 (3 years, beginning of FY15 – end of FY17):
 - Skip Kahler (LANL)
- Chair-elect (3 years, beginning of FY18 – end of FY20):
 - Mike Zerkle (Advisor Engineer, Bettis)
- unassigned slot(s)
 - To be filled only if the current membership and/or the NCSP Manager sees a need.



The screenshot shows a web browser window displaying the NCSP Home Page. The page features the U.S. Department of Energy Nuclear Criticality Safety Program logo and a table of NDAG Current Members. The table lists members with their names, affiliations, and email addresses.

NDAG Current Members		
Albert (Skip) Kahler, (Chair)	LANL	akahler@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	rc1@lanl.gov
Fredrik K. Tovesson	LANL	tovesson@lanl.gov
Tim Trumbull	KAPL	timothy.trumbull@unmpp.gov
Morgan Curtis White	LANL	morgan@lanl.gov
Mark L. Williams	ORNL	williamsm@ornl.gov
Michael Zerkle	Bettis	Michael.Zerkle@unmpp.gov
Ex-officio Members		
Jerry N. McKamy	DNFSB	JerryM@dnfsb.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)

- Primary topic from the Fall, 2016 annual meeting:
 - 5-Year Plan Appendix B Review
 - Summary of NCSU Thermal Kernel Work
 - Its going great!
 - NDAG supports multi-lab/multi-organization efforts to develop uniform critical benchmark models.

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5-Year Plan Appendix B Review

Appendix B Nuclear Data

Priority Needs */ Additional Needs		Thermal scattering (BeO, HF, D ₂ O, SiO ₂ , CH ₄ , C ₂ F ₆ , C ₂ O ₂ , Oil, etc.), ²³⁹ Pu, Cr, ²³⁷ Np, Pb, ²³⁵ Mn, Ti, ²³⁸ Pu, ²³⁵ U, Th, Be, ²³⁵ V, Zr, F, K, Ca, Mo, Na, La									
Completed Evaluations (FY)		Minor Actinides (13), SiC(14), SiO ₂ (14), D ₂ O (15), C ₂ O ₂ (15), SiO ₂ , ⁵⁵ Mn (12), ^{180,181,182,183,184,186} W (14)									
	Materials	Pre FY2015	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	Post-FY2021	
Measurements	Calcium (Ca)										
	Cerium (Ce)										
	Iron (Fe)										
	Tantalum (Ta)										
	Vanadium (V)										
	Zirconium (Zr)										
	Polyethylene (CH ₂)										
	Lucite (C ₅ O ₈ H ₈)										
Complete Evaluations	Materials	Pre FY2015	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	Post-FY2021	
	Calcium (Ca)										
	Cerium (Ce)										
	Cobalt (Co)										
	Copper (Cu)										
	Dyprosium (Dy)										
	Gadolinium (Gd)										
	Iron (Fe)										
	Lead (Pb)										
	Nickel (Ni)										
	Oxygen (O)										
	Rhodium (Rh)										
	Platinum-239										
	Tantalum (Ta)										
	Uranium-235										
	Uranium-238										
	Vanadium (V)										
	Zirconium (Zr)										
	Hydrofluoric Acid (HF)										
	Lucite (C ₅ O ₈ H ₈)										
	Polyethylene (CH ₂)										
	Oil (Texaco #522)										
	Hydraulic Fluid (Biolhyd-28c)										
	Reactor Graphite										
	Paraffin (C ₁₀ H ₂₂)										
	Beryllium (metal)										
	Beryllium Oxide (BeO)										
	Uranium Oxide (U ₂ O ₇)										
Tritium Oxide (T ₂ O ₂)											
Uranium Silicide (U ₃ Si ₂)											

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Appendix B is a multi-year nuclear data acquisition and evaluation plan.

Updated annually.

Reviewed at the annual NDAG meeting, typically held during the Fall Nuclear Data Week/CSEWG meeting.

Allows for coordination among the major NCSP nuclear data groups.

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