



Reactor Physics Division Meeting

American Nuclear Society

Hyatt Regency Hotel – Atlanta, Georgia

Sunday, June 14, 2009

Affirmed Quorum Present

Minutes from the last meeting were distributed. Vote for approval was confirmed prior to end of the meeting.

Thanks to Ben Forget for the preparation and distribution of the RPD Spring Newsletter.

Bob St.Clair provided a copy of the proposed RPD strategic plan for the previous RPD Goals and Planning Committee Meeting. He requested the Executive Committee members review these to support an electronic vote within the next few days.

Jim Warren ANST made a request seeking RPD support/approval for them to achieve Division Status. The RPD Exec Comm voted approval with direction for the Chairman to vote accordingly at the next Professional Divisions Committee meeting.

Treasurer's report was given by Ivan Maldonado. Notable items were a change to submit a single disbursement for student travel support as previously requested by the Student Sections Committee chairwoman, Darby Kimball. Also, RPD supported the Student Conference in Florida and the Division and reactor physics as a topical area were strongly represented at the conference. A sum of \$1750 has been budgeted and will be used to update the RPD website using Hannah Shapiro from Oak Ridge, TN. Hannah has provided web support for several RPD meetings including the recent Advances in Nuclear Fuel Management conference. Hannah has been contracted to re-design the website and provide maintenance at an ongoing cost expected to be less than \$500 per year. RPD Exec Committee members will still be responsible for providing information to populate the site with data.

Jess Gehin reported on the status of RPD scholarships. Jess requested clarification from the committee that awarding the RPD scholarship to a single individual more than once was an acceptable practice (i.e. once a student receives an RPD supported scholarship, they are not precluded from applying for and receiving the scholarship in future years). Jess noted that a secondary purpose of the award is to influence student interest in reactor physics. Jess will document the policy and guidelines and distribute for vote by e-mail. RPD is still pursuing actions to establish a second endowed scholarship.

Chris Pellini from the University of Florida Student Conference gave a brief report on the success of that meeting and thanked RPD for their support.

The 2009/2010 election results were as follows:

Secretary Ali Haghighat

Exec Comm: Dumitru Serghiuta

Glenn Sjoden

Mark DeHart

David Griesheimer

A NOTE to future RPD Nominating Committee Chairs to CAREFULLY CHECK election ballots prior to finalizing with ANS headquarters was made. Errors have been identified.

Travis Trahan from the University of Michigan introduced the arrangements for the next ANS Student Conference to be hosted by their student section and held at the Marriott at Eagle Crest. Financial support from RPD was requested and granted as budgeted.

Program Committee report was given. In the June 2009 Atlanta meeting there were 42 papers presented in RPD sessions. The 2009 Winter meeting is still in need of additional summaries to be submitted. There are special sessions to be held on Fuel Isotopic Benchmarks and Validation, HTGR Fuel Design, Advanced Burnable Poisons and a panel session on Experience with International Collaboration. There is currently only one special session identified for the San Diego meeting. The Program Comm will be organizing a panel session on Reactor Engineering and utility issues. Concerns were expressed about the organization of MCNPX Tutorials by Radiation Protection and Shielding Division without coordination with RPD. The burnup calculations included in these tutorials are within the scope of the RPD. This concern was to be reported to both the Professional Divisions Committee and the National Program Committee with the intent of fostering integrated support of these tutorials in the future.

Ivan Maldonado reported on the success of the ANFM-IV meeting at Hilton Head. John Siphers was the chairman of that meeting and Jeff Bradfute was the agenda chair, attendance was 220+ and was profitable for the Division.

Another successful Topical meeting with significant RPD involvement was the M&C 2009 meeting held in May. There were 285 papers and 350 attendees including 90 students. The expected revenue for RPD is approximately \$5K.

The current status of the PHYSOR2010 meeting was reported by Mike Zerkle. All NPC approvals have been received. There are 14 tracks each with three co-track leaders (North America, Europe, and Asia).

Dimitrios Cokinos reported on ANSI/ANS standards supported by RPD. ANSI/ANS-19.10 on Neutron Fluence has been approved and issued. ANS-19 continues to work with the International Standards Organization (ISO) to identify and develop reactor physics standards to be established as international standards.

Honors and Awards reported that Ed Larsen had been selected to receive the distinguished Wigner Award. The presentation of the award will be at either the 2009 Winter meeting in Washington, DC or at the PHYSOR2010 meeting based on Larsen's preference. Cokinos stressed that we need more applications for the Wigner Award and requested that any suggestions for nominees be sent to him.

A reminder to identify potential Fellow nominees was also given. It was noted that Nam Zin Cho is currently a member of the Honors & Awards Committee.

Joint Benchmark Committee- Russ Mosteller announced that Mark DeHart would be taking over as the RPD co-chair for the Joint Benchmark Committee. RPSD (Radiation Protection and Shielding) and MCD (Math and Comp) also have co-chairs on the committee.

Goals and Planning: The strategic plan is being updated and will be distributed with a request for e-mail voting.

Actions for the Chairman at the PDC meeting:

Exec Comm approval granted to vote for the ANST (currently a Technical Group) request to be established as a Professional Division.

Exec Comm approval granted to support Education and Training Divisions request to change their name and scope to include workforce development (Education, Training and Workforce Development Division).

Exec Comm approval granted to support the scope change for Robotics and Remote System Division (RRSD) to include “immersive simulation” (i.e. 3-D modeling) as it applies to robotics and remote systems.

Bob St Clair also reported that a succession plan had been established for the Professional Divisions Committee. Don Hoffman will be chairing the Membership Committee and Mikey Brady Raap will be transitioning to the chairmanship of the PDC.

It was also noted that this was the end of term for Brady Raap on the board of directors so a new Board Liaison for RPD will be appointed at the end of this meeting.

Requests for proposals should be solicited for the 2012 RPD Topical and the selection of a host made by the Program Committee by the next Annual Meeting.

The subject of a liaison with the Young Members Group was discussed. Jessee Klingensmith, newly elected to the RPD Program Comm is also an YMG member and agreed to serve as liaison for the Division. Bob St. Clair will discuss the role of YMG liaison with him.

Motion and approval of the minutes from the last meeting was made.

No items were identified under New Business.

Motion and approval to adjourn at 6:10pm.

RPD Exec. Comm. Mtg. Attendees

6/14/09

Name	Position <small>(officer/ EC Comm Member/ Committee/Attendee)</small>	Email
Robert St. Clair	Vice-Chair	brstclai@duke-energy.com
Paul Edelmann	EC Member	edelmann@lanl.gov
Eleodor Nichita	EC member	eleodor.nichita@uort.e
BEN ROUBEN	PAST-PAST CHAIR	ROUBENB@ALUM.MIT.EDU
DAVID GRIESHEIMER	EC MEMBER-ELECT	dgrieshe@umich.edu
Nam zin Cho		nzcho@kaist.ac.kr
Russ Mosteller	JBC Co-chair	mosteller@lanl.gov
RON ELLIS	EC MEMBER	ellistj@ornl.gov
Dimitri Cokinos	Standard Chair	cokinos@bul.gov
Fausto Franceschini	PC chair	franceff@westinghouse.com
Glenn Sjoden	EC Member	sjoden@ufl.edu
Bojan Petrovic	Past PC chair	bojan.petrovic@gatech.edu
Mike Zerkle	PLASOR 2010 TPC	zerkle.m@bethis.gov
IVAN MALDONADO	TREASURER, VICE-CHAIR-ELECT	IVAN.MALDONADO@UTK.EDU
Gale Hauck	Proxy for Chair	hauckge@westinghouse.com
Jess C. Gehin	Scholarship Cont. Chair	gehinjc@ornl.gov
Germina Ilas	EC member	ilasg@ornl.gov
DUMITRU SERGHIUTA	EC member - new	dumitru.serghiuta@cusc-ccsn.g.c.ca
Mickey Brady Raap	BOD liaison	michael.bradyraap@pnl.gov
Alireza Haghghat	invig Secretary	haghghat@ufl.edu
Farzad Rahnama	past officer	farzad@gatech.edu
MARK DEHART	Attendee / JBC chair	dehartmd@ornl.gov

AMERICAN NUCLEAR SOCIETY
BUDGET 2009

Treasurer's Report (Revised on 18 May 2009)
Created by: G. Ivan Maldonado (updated from that presented at 2008 Winter Meeting)

REACTOR PHYSICS

	ACTUAL 2003	ACTUAL 2004	ACTUAL 2005	ACTUAL 2006	ACTUAL 2007	NINE MONTHS ACTUAL 2008	TWELVE MONTHS ACTUAL 2008	PROPOSED BUDGET 2009
BUDGET FUNDS								
CURRENT YEAR MEMBER ALLOC.	1311	1457	1492	1589	1651	3434	3434	3500 (2)
CARRY FORWARD, PRIOR YEAR	16751	8995	9505	9483	31345	29059	29059	28493 (2)
DIVISION INCOME /OTHER	690	11131	1430	24388	-3937	0	0	2000 (3)
TOTAL BUDGET FUNDS	18752	21583	12427	35460	29059	32493	32493	33993
BUDGET EXPENSES								
NEWSLETTERS	0	0		115		0	0	
AWARDS, PLAQUES	257	78	73			0	0	100
NATIONAL MEETING COSTS	0	0	246			0	0	
DIVISION OFFICER EXPENSE	0	0				0	0	
STUDENT SUPPORT	2000	2000	2000	4000		2000	4000 (1)	2000 (4)
SCHOLARSHIP/NEED FUNDING	7500	10000				0	0	
OTHER EXPENSES	0	0	625			0	0	1750 (5)
TOTAL EXPENSES	9757	12078	2944	4115	0	2000	4000	3850
EXCESS (DEFICIENCY) OF BUDGET FUNDS OVER EXPENSE	8995	9505	9483	31345	29059	30493	28493	30143

- (1) \$1000 Student Support for Reno'08 + \$1000 for Atlanta'09 + \$2000 already accrued
(2) Actual from ANS budget provided by Larry Grabowski (05 May 2009)
(3) Estimate of 2009 Topical Meetings Income (ANFM IV and MCD)
(4) \$2000 disbursed for UFL Student Conference
(5) \$1750 Approved for website upgrade & support (Hanna Shapira)
Note: \$5000 potentially reserved for ANS Journal Scanning Project

PHYSOR 2010

Pittsburgh

Sheraton Station Square Hotel
Pittsburgh, Pennsylvania, USA
May 9-14, 2010

Advances in Reactor Physics to Power the Nuclear Renaissance

CALL FOR PAPERS

Full Papers are solicited in the following technical areas: Nuclear Data; Deterministic and Monte Carlo Methods; Reactor Analysis and Optimization; Reactor Design and Operations; Nuclear Fuel Cycle; Nuclear Criticality Safety; Transient and Safety Analysis; Research Reactors and Spallation Sources; Integral Experiments and Facilities for Safety Research; Verification, Validation and Uncertainty Analysis; Fuel, Materials and Mechanical Analysis; Radiation Applications and Nuclear Safeguards; Nuclear Power and Sustainable Development.

For more information and latest news, please visit
www.physor2010.org.

Important Deadlines

October 31, 2009
February 28, 2010
April 16, 2010
May 9-14, 2010

Submission of Full Papers
Accepted / Revised Final Paper Submission
Registration Deadline
PHYSOR 2010 Topical Meeting



www.physor2010.org
May 9-14, 2010
Sheraton Station Square Hotel
Pittsburgh, Pennsylvania, USA



Exelon.

FirstEnergy



University of Pittsburgh

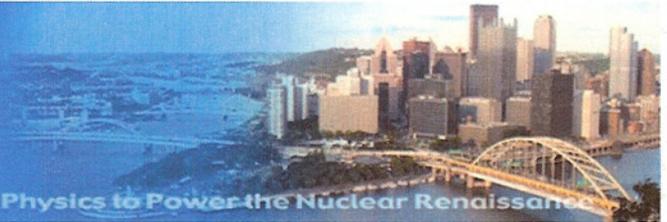


PHYSOR 2010

Pittsburgh

Sheraton Station Square Hotel
Pittsburgh, Pennsylvania, USA
May 9-14, 2010

Advances in Reactor Physics to Power the Nuclear Renaissance



Technical Topics and Tracks

Full Papers are to be submitted to one of the following tracks:

Track 1	<p><u>Nuclear Data</u></p> <ul style="list-style-type: none"> • Nuclear Data Measurements • Cross Section Evaluations & Libraries • Nuclear Data Testing & Validation • Covariance Data 	Track 8	<p><u>Transient and Safety Analysis</u></p> <ul style="list-style-type: none"> • 3D Transient Analysis Methods • Multi-Physics Reactor Simulations • Developments in Probabilistic Risk Assessments • Severe Accident Analysis and Mitigation
Track 2	<p><u>Deterministic Transport Theory</u></p> <ul style="list-style-type: none"> • Numerical Methods for Deterministic Transport • Iterative Acceleration of Deterministic Transport Methods • Hybrid Methods for Neutron Transport • High Performance Computing for Deterministic Transport • Analytical/Numerical Transport Benchmarks • Verification and Validation for Transport Methods • Deterministic Transport Methods on Unstructured Grids • Transport in Stochastic Media • Charged Particle Transport <p><u>Special Session</u></p> <ul style="list-style-type: none"> • Advances in Neutron Flux and Fluence Computational Methods 	Track 9	<p><u>Research Reactors and Spallation Sources</u></p> <ul style="list-style-type: none"> • Applications of Research Reactors • Design Features of Research Reactors (Recently commissioned or under construction) • Physics Tests at Research Reactors • Code Validation Calculations on Research Reactors • Nuclear Characteristics of Medium and High Flux Research Reactors • International Cooperation on Utilization of Research Reactors • Accelerator and Spallation Physics
Track 3	<p><u>Monte Carlo Methods</u></p> <ul style="list-style-type: none"> • Monte Carlo Source Convergence Acceleration, Issues and Applications • Monte Carlo Depletion and Propagation of Uncertainty • Sensitivity Calculations using Monte Carlo Codes • Monte Carlo versus Deterministic Codes for Safety and Design Assessment • Monte Carlo Methods - General • Monte Carlo Variance Reduction Methods 	Track 10	<p><u>Integral Experiments and Facilities for Safety Research</u></p> <ul style="list-style-type: none"> • Integral Experiments and Analysis • Reactor Physics Benchmarks • Capabilities of Experimental Facilities
Track 4	<p><u>Reactor Analysis and Optimization</u></p> <ul style="list-style-type: none"> • Reactor Analysis Methods • Lattice Physics Methods & Validation • Homogenization & Nodal Methods • Pin Power Reconstruction Methods • In-Core Fuel Management and Optimization • High-Performance Computing in Reactor Physics <p><u>Special Sessions</u></p> <ul style="list-style-type: none"> • 3D Depletion using Transport Methods • Special session in Memory of Rudi Stamm'ler 	Track 11	<p><u>Verification, Validation and Uncertainty Analysis</u></p> <ul style="list-style-type: none"> • Reactor Physics Standards • Verification & Validation Methods • Sensitivity/Uncertainty Analysis
Track 5	<p><u>Reactor Design and Operation</u></p> <ul style="list-style-type: none"> • Light-Water Reactor Design & Analysis • Heavy-Water Reactor Design & Analysis • Fast Reactor Design & Analysis • Gas-Cooled Reactor Design & Analysis • Advanced Reactor Designs • Reactor Operation and Control • Core Monitoring • Space Nuclear Power & Propulsion 	Track 12	<p><u>Fuel, Materials and Mechanical Analysis</u></p> <ul style="list-style-type: none"> • Fuel & Materials Behavior • Fuel Performance Models • Challenges to Extend Burnup and Enrichment Limits
Track 6	<p><u>Nuclear Fuel Cycle</u></p> <ul style="list-style-type: none"> • Current Status: Technology, Policy and Socio-Economical Aspects • Advancements in the Front-End/Back-End of Fuel Cycle Technologies • Design, Analysis and Optimization Methods • Experimental Programs • Plutonium Management • Thorium Fuel Cycle • Transuranic Actinide Management • Fission Product Management • LWRs, CANDU, HTRs, and Fast Reactors in Fuel Cycle Scenarios • Deep Burn Reactor-Based Approaches • CANDLE & Traveling-Wave and Other Approaches • Hybrid Systems for Energy Production and Waste Minimization • Fuel Cycle Scenarios for Nuclear as Sustainable Energy Source • Globalization of the Nuclear Fuel Cycles: Non-Proliferation, Resource Management, etc. • Uncertainty Quantification and Benchmark Efforts 	Track 13	<p><u>Radiation Applications and Nuclear Safeguards</u></p> <ul style="list-style-type: none"> • Radiation Protection • Radiation Measurement and Dosimetry • Nuclear Techniques for Non-Proliferation • Nuclear Techniques for Homeland Security • Safeguards in Generation IV reactor concepts • Medical Physics Applications <p><u>Special Session</u></p> <ul style="list-style-type: none"> • Computational Medical Physics
Track 7	<p><u>Nuclear Criticality Safety</u></p> <ul style="list-style-type: none"> • Nuclear Criticality Safety • Burnup Credit • Nuclear Criticality Safety Benchmarks • Spent Fuel Disposition 	Track 14	<p><u>Nuclear Power and Sustainable Development</u></p> <ul style="list-style-type: none"> • Nuclear Power & Sustainable Development • Process Heat and Hydrogen Generation • Infrastructure Needs to Support the Nuclear Renaissance <p><u>Panel</u></p> <ul style="list-style-type: none"> • Reactor Physics Education & Training Needs

REACTOR PHYSICS DIVISION EXECUTIVE COMMITTEE MEETING

Sunday, June 14, 2009

4:00 – 6:00 PM

**Location: Auburn Room
Hyatt Regency Atlanta Hotel**

AGENDA

1. Secretary's Report – Benoit Forget 5 min
 - a. Approval of Minutes, November 2008 Meeting
 - b. RPD Newsletter Status/Schedule
2. Treasurer's Report and Budget Status – Ivan Maldonado 10 min
3. 2009/2010 Election Results – Farzad Rahnema 5 min
4. Report on RPD Website – Bob St. Clair 10 min
 - a. Status of current and new websites
5. Scholarship Committee – Jess Gehin 5 min
6. Program Committee Report – Fausto Franceshini 15 min
 - a. 2009 June Meeting (Atlanta, GA)
 - b. 2009 Winter Meeting (Washington, DC)
 - c. 2010 June Meeting (San Diego, CA)
7. Reports on Topical Meetings 15 min
 - a. ANFM-IV Summary – Ivan Maldonado
 - b. M&C 2009 Summary – Ray Gamino (tentative)
 - c. PHYSOR-2010 Planning – Mohamed Ouisloumen (tentative)
8. Standards Committee Report – Dimitrios Cokinos 10 min
9. Honors and Awards Committee Report – Dimitrios Cokinos 5 min
10. Joint Benchmark Committee Report – Mark DeHart 5 min
11. Goals and Planning Committee 10 min
 - a. 2009-2013 Operational Plan updates – Bob St. Clair
11. Professional Divisions Committee, Summary – Bob St. Clair 5 min
13. 2010 Student Conference: University of Michigan, - TBD 5 min
14. New Business
15. Adjournment

ANS-19
REACTOR PHYSICS STANDARDS

REPORT TO THE EXECUTIVE COMMITTEE
REACTOR PHYSICS DIVISION

June 14, 2009
Atlanta

Established Standards Under Revision:

ANSI/ANS-19.1	Nuclear Data Sets
ANSI/ANS-19.3	SS Reaction Rate Distributions & Reactivity
ANSI/ANS-19.3.4	Thermal Energy Deposition
ANSI/ANS-19.4	Acquisition & Documentation of Ref. Power Reactor Phys Measurements
ANSI/ANS-19.5	Requirements of Ref. Reactor Physics Measurements
ANSI/ANS-19.6.1	Reload Startup Physics Tests for PWRs
ANSI/ANS-19.11	Calculations & Measurements of MTC in LWRs
ANSI/ANS-5.1	Decay Heat Power in LWRs

New ANSI Standard Completed

**ANSI/ANS-19.10 "Methods for Determining Neutron Fluence in B and P WR
PV & Reactor Internals"**

This new standard, almost 19 years in the making, is one of the most important standards to come out of ANS-19. It reflects state-of-the-art technology and provides a means of determining the best estimate of the fluence on PVs. The latter is one of the most critical components of a reactor since it determines the life of the pressure vessel and hence the *useful* life of the reactor.

Proposed Standards

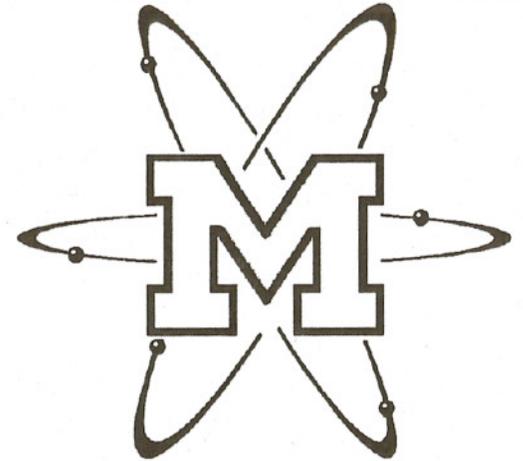
ANS-19.8	Fission Yields
ANS-19.9	Delayed Neutrons
ANS-19.12	Nuclear Data for Isotope Production Calculations

Other Activities

PHYSOR 2008
International Standards (ISO)
Joint Benchmark Committee

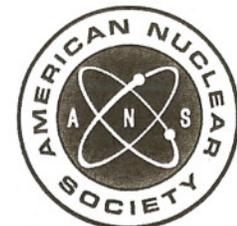
DC 06/14/09

The University of Michigan ANS Student Section Invites You to...



ANS Student Conference 2010: Coming Together to Split the Atom

April 8th-11th, 2010



University of Michigan American Nuclear Society Student Conference 2010



For general
conference questions
contact: Michaela
Eddy (805)459-3048

For sponsorship
questions contact
Travis Trahan:
(512)779-4792

or email:
ANS2010@umich.edu

Fax: 734-763-4540

ANS Student Conference
2355 Bonisteel Blvd.
Ann Arbor, MI 48109

www.studentans2010.org

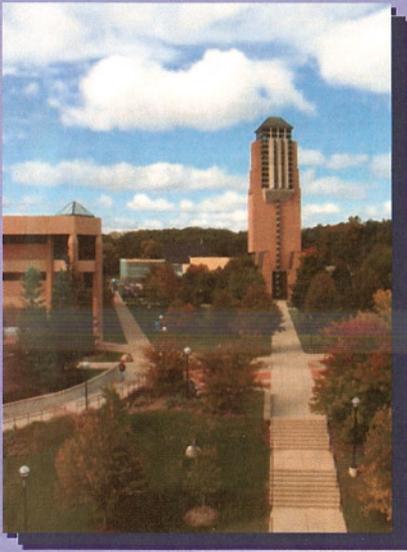
Corporate sponsorship helps make the ANS Student Conference a success year in and year out. Financial contributions will be appreciated by all attendees. Don't miss this opportunity to share your name and ideas with students around the world and hear about the latest university research.

Please let us know about your interest in sponsorship at the levels (reverse side of leaflet) or for sponsorship of particular events. Please return this slip to any University of Michigan ANS representative or mail to UM American Nuclear Society student chapter, 2355 Bonisteel Blvd. Ann Arbor, MI 48109.

Organization: _____ Intended sponsorship level: _____ Contribution: _____

Contact person name: _____ Email: _____ Phone: _____

Comments:



See premier research facilities at U-M:

- Michigan Ion Beam Laboratory
- Michigan Memorial Phoenix Energy Institute & the Co-60 7.5 kCi Source
- Plasma, Pulsed Power, & Microwave Laboratory
- Radiological Health Engineering Lab
- High Temperature Corrosion Laboratory
- Irradiated Material Testing Laboratory
- Low-Temperature Plasma Laboratory
- Hercules Ultra-high Intensity Laser

Conference Venue:

Hosted at the Marriott at Eagle Crest, a member of the International Association of Conference Centers, student attendees will get the full experience of a professional conference while also having the opportunity to explore all that the University of Michigan and Ann Arbor have to offer.



2010 American Nuclear Society Student Conference

April 8th-11th, 2010

Every spring students, professionals, industry experts, professors and public officials come together to share perspectives and discuss the outlook of nuclear science and technology. This conference is the highest concentration of undergraduate and graduate students in nuclear science and technology in the country. The student conference is the optimal venue for students and professionals to interact both formally and casually creating connections that could shape academic and career directions.

Conference points of interest:

- **Technical and professional development workshops** - SCALE, MCNP, Trilinos, nonproliferation, public communications
- **Technical sessions** - learn about student research conducted around the country
- **Mentoring lunch** - overseeing beautiful Ford Lake
- **Networking golf tournament**
- **Public forum** - share your nuclear expertise or learn from the experts in this first of a kind venue for discussing nuclear issues with the public
- **Career and university fair** - this is the premier location to showcase your company or university as it is the largest gathering of students in the nuclear field
- **Cook nuclear power plant tour** - visit a nuclear power plant located right on Lake Michigan and suit up in radiation protection gear
- **National Superconducting Cyclotron Laboratory tour** - visit a world leading facility in rare isotope research in the Michigan state capital
- **Social Activities** - events every evening including continuous transportation to downtown Ann Arbor
- **River Boat Cruise** - the conference will culminate in an awards banquet while cruising on the river between Michigan and Canada



Sponsorship Opportunities

Tritium (\$25,000+)

- ✿ 1 Dinner speaker
- ✿ 4 free registrations
- ✿ Premier career fair booth
- ✿ Priority interview space
- ✿ 1 page ad in conference program
- ✿ Banners/Ads at all major events and technical sessions
- ✿ Advanced access to resume book
- ✿ Logo on conference program
- ✿ Linked logo on conference website
- ✿ Logo on 1 conference giveaway

Deuterium (\$15,000+)

- ✿ 1 lunch speaker
- ✿ 4 free registrations
- ✿ Choice career fair booth
- ✿ Priority interview space
- ✿ 1 page ad in conference program
- ✿ Limited ad space at all major events and technical sessions
- ✿ Advanced access to resume book
- ✿ Logo on conference program
- ✿ Linked logo on conference website

Thorium (\$10,000+)

- ✿ 3 free registrations
- ✿ Career fair booth
- ✿ ½ page ad in conference program
- ✿ Advanced access to resume book
- ✿ Logo on conference program
- ✿ Linked logo on conference website

Plutonium (\$5000+)

- ✿ 2 free registrations
- ✿ Career fair booth
- ✿ ½ page ad in conference program
- ✿ Logo on conference program
- ✿ Linked logo on conference website

Uranium (\$2000+)

- ✿ 2 free registrations
- ✿ Career fair booth
- ✿ 1/4 page ad in conference program
- ✿ Name in conference program
- ✿ Linked logo on website

M UNIVERSITY OF MICHIGAN

Please ask about additional sponsorship opportunities including custom ad space and sponsored conference functions.