



National Organization of Test, Research and Training Reactors

Annual Meeting

North Carolina State University
Raleigh, North Carolina

October 17th – 20th 2000

Final Program



Tuesday

October 17

ANS 15 Committee Meeting

NCSU 9 am – 3 pm

Meeting Registration

Velvet Cloak Inn 4 pm – 8 pm

TRTR Executive Committee Meeting

Velvet Cloak 4 pm – 6 pm

Reception

Velvet Cloak 6pm – 9 pm

Wednesday

October 18

Continental Breakfast

Velvet Cloak 7:00 – 8:00 am

Welcome and Opening Remarks

8:15 am

NRC Day – Morning Session

8:30 am – 12:00 pm

Buffet Lunch

12:00 – 1:30 pm

Speaker: TBA

NRC Day – Afternoon Session

1:30 – 5:00 pm

Dinner

Velvet Cloak 6:30 pm

Speaker: Professor Raymond Murray
NCSU, Nuclear Engineering

Thursday

October 19

Continental Breakfast 7:00 – 8:00 am

Technical Session I 8:15 am – 12:00 pm

Buffet Lunch 12:00 – 1:30 pm

Speaker: John Stamos, DOE
Office of Technology and
International Cooperation

Technical Session II 1:30 - 5:00 pm

Progressive Dinner

North Carolina Museum of Natural Sciences
6:30 – 9:00 pm

The new state-of-the art museum in the capital city will be the site for our evening program. Buses will provide transportation to and from the museum and the Velvet Cloak Inn.



Friday

October 20

Continental Breakfast 7:00 – 8:00 am

Technical Session III 8:00 am – 11:30 pm

Business Meeting 11:30 am – 12:00 pm

Adjournment 12:00 pm

PULSTAR Reactor Tours 1:30-4:00pm

Visit: www.naturalsciences.org
triangle.citysearch.com/The_Triangle/
www.ncsu.edu

NC State Fair, Raleigh October 13-22

TRTR 2000

TRTR CONTACTS

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North Carolina State University
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REGISTRATION INFORMATION

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1903 Bishop's Castle Drive
Olney, MD 30832
Phone: (301) 295-1290
Fax: (301) 570-2119
Email: trtr@simelectronics.com

GENERAL INFORMATION

TRTR

The National Organization of Test, Research, and Training Reactors (TRTR) represents research reactor facilities across the nation from government, major universities, national laboratories, and industry. TRTR's primary mission is education, fundamental and applied research, application of technology in areas of national concern, and improving U.S. technological competitiveness around the world. TRTR membership includes managers and directors of research reactors, educators and administrators, and research scientists and engineers.

Begun as a small technical group in the sixties, TRTR quickly grew into a national organization and adopted its current name in 1976. The organization holds annual conferences, hosted by a member institution. The conference is to discuss current technical and regulatory issues, advancements in research and education, operating experience, and development of new applications in medicine, materials health and safety, information technology, and environmental sciences among others.

TRTR provides expert technical assistance to member institutions and others through peer reviews, audits, and assessments. It also publishes a quarterly newsletter, which provides the latest information in all areas of interest to the membership. The newsletter is widely distributed within and outside TRTR, in the U.S. and internationally.

Meeting Sponsors

The following companies or individuals are sponsoring our TRTR meeting. Please pay a visit to them along poolside and express our appreciation for their support. In alphabetical order TRTR recognizes:

EXCEL Services
Gamma Metrics
General Atomics
Imaging & Sensing Technology
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Research Reactor Safety Analysis Services
SCIENTECH NES
Sargent & Lundy

PRELIMINARY ANNOUNCEMENT

TRTR 2000 Meeting, Raleigh, NC October 17 – 20, 2000

The 2000 Annual Meeting of the National Organization of Test, Research, and Training Reactors (TRTR) will be held October 17 – 20, 2000 in Raleigh, NC.

North Carolina State University, Department of Nuclear Engineering, Nuclear Reactor Program will host this year's meeting.

The meeting will begin with the customary first day Nuclear Regulatory Commission (NRC) Non-Power Reactor Seminar. Panel sessions will follow.

REGISTRATION

The registration fee of \$250.00 after September 1, 2000 and includes conference materials, a reception, coffee breaks, lunches, one banquet, and one progressive dinner.

*****TRTR accepts checks or bank drafts only. We cannot process credit card or travelers checks. There are no refunds after payment is made.***

Fees and Deadlines as follow:

- \$ 250.00 Registration fee after September 1, 2000
- Checks should be made payable to: TRTR

MEETING SITE ACCOMMODATIONS

The meeting will be held at the Velvet Cloak Inn located at 1505 Hillsborough Street, Raleigh, NC. This hotel is within a short walk from North Carolina State University. It is close to downtown Raleigh and the capitol.

TRANSPORTATION

The Velvet Cloak Inn provides hourly shuttle service to and from Raleigh-Durham International Airport. Beginning at 7AM until 10PM. Raleigh-Durham International Airport (RDU) serves the Raleigh area.

Taxi Service: Taxis will cost approximately \$20 from RDU to the Velvet Cloak Inn.

DRIVING DIRECTIONS

From Raleigh-Durham International Airport: Go NE on Terminal Blvd. Turn left onto Aviation Parkway. Stay to the left and take the I-40 East ramp towards Raleigh. (Cross over the bridge). Merge onto I-40.

Stay on I-40 East to EXIT 289 (Raleigh, Wade Avenue Exit). Follow Wade Avenue to Oberlin Road – take a Right onto Oberlin – follow Oberlin to Hillsborough Street (4th light) Turn Left. The Velvet Cloak is 1 block on the Right past NCSU.

PROGRAM

The final structure of the program for the 2000 TRTR Meeting is enclosed. The oral presentations and short business meeting will conclude by noon Friday October 20, 2000.

- Final Program is enclosed.
- A spouse's program is being arranged.
- North Carolina State Fair is October 13-22, 2000.

ORAL PRESENTATIONS

The Technical Program for oral presentations is enclosed. Any questions presenters may have should be addressed immediately to Pedro B. Perez at 919.515.4602. Email: perez@ncsu.edu

Meeting Agenda

October 17, 2000

Tuesday, Velvet Cloak Inn

- 8am – Noon ANS-15 Standards Committee Meeting
 NCSU Nuclear Engineering
- 3pm – 6:00pm Executive Committee Meeting Queen Victoria Room
- 4pm – 8:00pm Registration – Second Floor Lobby
- 6pm – 9:00pm Sponsor Reception – Pool Side Atrium

Wednesday, Velvet Cloak Inn

- 7am – 8:00am Continental Breakfast – Pool Side Atrium
- 8:00am Introduction, Pedro B. Perez, Chairman TRTR
- 8am – 12noon NRC Sessions – Ballroom
- 10am Morning Break
- 10:30am - noon NRC Sessions
- 12pm – 1:30pm Lunch Poolside Atrium with Guest Speaker (TBA)
- 1:30pm – 3pm NRC Sessions/Breakout Sessions – Ballroom
- 3pm - 3:30pm Afternoon Break
- 3:30pm - 5pm NRC Panel Sessions
- 6pm - 9pm Dinner - Speaker: Dr. Raymond Murray, NCSU

October 19, 2000

Thursday, Velvet Cloak Inn

- 7am – 8:00am Continental Breakfast – Queen Anne Room
- 8am – 12noon Technical Sessions – Ballroom
- 10am Morning Break
- 12pm – 1:30pm Lunch Poolside Atrium with Speaker, R. Shane Johnson, DOE
- 1:30pm – 3pm Technical Sessions – Ballroom
- 2:50pm - 3:20pm Afternoon Break
- 3:20pm - 5pm Technical Sessions
- 6pm - 9:30pm Progressive Dinner - NC Museum of Natural Sciences, Guest Speaker (TBA)

October 20, 2000

Friday, Velvet Cloak Inn

- 7am – 8:00am Continental Breakfast – Queen Anne Room
- 8am – 12noon Technical Sessions – Ballroom
- 10am Morning Break
- 12:00 – 1:00pm Business Meeting
- 1:00pm - 4:30pm Reactor Tours

TRTR NRC Day Program

Wednesday October 18, 2000

08:00	Welcome and Opening Remarks	TRTR
08:30	Introduction of Non-Power staff - Reduction and Repartition of Inspector=s workforce	Ledyard B. Marsh, Chief Events Assessment, Generic Communication and Non-Power Reactors Branch
08:50	University of Texas - Hydrogen in Reflector	Marvin M. Mendonca, Senior Proj. Mgr.
09:05	University of Mis souri Events	Alexander Adams Jr., Senior Proj. Mgr. Craig Bassett, Senior Inspector
09:25	Operator Licensing Status - Timeliness of Operator License Renewals	Paul V. Doyle, Senior License Examiner Patrick J. Isaac, Senior License Examiner
09:40	BREAK	
10:00	Incident Investigation Program	Theodore Michaels, Senior Project Mgr.
10:20	Allegations	Edward T. Baker III, Allegation Advisor
10:35	Enforcement	Thomas Dragoun, Senior Inspector
10:50	Spent Fuel Storage and Transportation	Patricia Eng, Technical Assistant to the Director for Spent Fuel Project Office
11:15	BREAK	
11:30	Part 71 Rulemaking	Patricia Eng, Technical Assistant
11:45	50:59	Eileen McKenna, Senior Reactor Engineer
12:00	LUNCH	
13:00	BREAK	
13:30	License Transfer	Marvin Mendonca, Senior Project Manager
13:45	ADAMS (Privacy Issues) CITRIX	Thomas Smith, Acting Chief of Public Document Room and Team Leader of NRC Technical Library
14:30	BREAK	
14:45	Breakout Group Sessions	
15:30	Meet and discuss topics from Breakout sessions	Thomas Dragoun, Craig Bassett, Stephen Holmes
16:00	Recap	
16:15	Adjourn	Ledyard B. Marsh

TRTR Technical Program

Thursday, October 19, 2000

SESSION I-A Chair: C.W. Mayo

8:00	8:20	Clement, S.D.	Critical Facilities and Experiments at LANCEF
8:20	8:40	Verkooijen, A.H.	Safety Re-evaluation of the HOR Reactor
8:40	9:00	Snelgrove, J.L.	Progress in Developing High-Density U-Mo Alloy Dispersion Fuels
9:00	9:20	Farrar, M.	HFIR Modification in Support of Neutron Scattering Upgrades
9:20	9:40	West, C.D.	HFIR Scientific Facilities Upgrades and Cold Neutron Source
9:40	10:00	Newton, T.	Installation of the Fission Converter Facility for Epithermal BNCT at MIT

10:00 10:30 Break

SESSION I-B Chair: S.J. Bilyj

10:30	10:50	Wehring, B.	You See Ns at the NC State PULSTAR Reactor
10:50	11:10	Alcala-Ruiz, F.	IAEA Research Reactor Safety Programme
11:10	11:30	Devgun, J.	Decommissioning a Research Reactor in the New Regulatory Climate
11:30	12:00	Ryan, T.J.	The Future of Research Reactors - A Power Industry Perspective

12:00 1:30 Lunch Speaker: R. Shane Johnson, DOE-NE

SESSION II-A Chair: G. Wicks

1:30	1:50	Vinnola, A.	The Status of DOE's URR Fuel Assistance Program
1:50	2:10	Hertel, N.	Georgia Tech Research Reactor Decommission: An Update
2:10	2:30	Rorer, D.	Closure of the BNL Reactors
2:30	2:50	Hanson, R.	R&D Needs to Support Entombment as a Viable D&D Option

2:50 3:20 Break

SESSION II-B Chair: K. Kincaid

3:20	3:40	Slaughter, D.	Redefining an Administrator's Perception of a Reactor Program Through New Paradigms
3:40	4:00	Agasie, R.	Pool Liner Repair at the University of Wisconsin Nuclear Reactor
4:00	4:20	Sease, J.	HFIR Aluminum Clad Corrosion
4:20	4:40	Krahenbuhl, M.	Radiation Doses Associated with the Early Operation of Mayak

6:00 9:00 Dinner: North Carolina Museum of Natural Sciences

TRTR Technical Program

Friday, October 20, 2000

SESSION III-A Chair: S. Lassell

8:00	8:20	Newton, T.	Installation of the Fission Converter Facility for Epithermal BNCT at MIT
8:20	8:40	Brosing, J.	Measuring the Neutron Energy Spectrum at Reed College
8:40	9:00	Wehring, B.	Time-of-flight Measurements of Cold Neutrons and Ultra Cold Neutrons Using a Reactor Pulse
9:20	9:40	Becker, C.W.	Upgrades to the Ford Nuclear Reactor Control Room
9:40	10:00	Frantz, S.G.	Cheaper by the Dozen: How to License 12 Students in One Week

10:00 10:20 Break

SESSION III-B Chair: S. Lassell

10:20	10:40	Trippard, G.	Progress Report on the Washington State University BNCT Facility
10:40	11:10	O'Kelley, S.	UT-TRIGA Reflector Pressurization and Venting
11:10	11:30	Vernetson, W.	University of Florida Unirradiated Uranium Fuel Retrieval Program
11:30	11:50	Wicks, G.	High School Education Programs at NC State Reactor

TRTR Business Meeting

11:50	12:10	Bobek, L.M.	University Support Report
12:10	12:20	Perez, P.B.	Outgoing TRTR Chairman: A Year in Review
12:20	12:30	Miller, S.I.	TRTR Treasurer Report
12:30	12:40	Vernetson, W.	TRTR Secretary Report
12:40	12:50	Richards, W.	Incoming TRTR Chairman Statement
12:50			Meeting Adjourns
1:00	4:00	PULSTAR Tours	

HOTEL INFORMATION

Registration is to be mailed directly to the Hotel. Please use Insert. Deadline: September 20, 2000. Checks from outside the U.S.A. should be written on a U.S.A. Bank.

VELVET CLOAK INN REGISTRATION

1505 Hillsborough Street

Raleigh, NC 27605

WWW.VELVETCLOAKINN.COM

Phone: (919) 828-0333

Fax: (919) 828-2656

LINKS of INTEREST

NC Museum of Natural Sciences

<http://www.naturalsciences.org/>

North Carolina Museum of Art

<http://ncartmuseum.org/>

North Carolina Museum of History

<http://nchistory.dcr.state.nc.us/>

SHOPPING

City Market

Unique shops and restaurants.

Located in downtown Raleigh. Minutes from hotel down Hillsborough St.

MALLS

Crabtree Valley Mall, Raleigh

Shops of Cameron Village

Featuring the Carolina Antique Mall - Walking distance from hotel.

Cary, NC

Close to NCSU

Cary Towne Center

Crossroads Plaza

South Hills Mall

Morrisville Outlet Mall

ENTERTAINMENT

Raleigh Little Theatre and Rose Garden

919-821-4579

Dracula October 18 – 21 8PM

Walking distance from hotel

RESTAURANTS

Foster's and others – Cameron Village

Second Empire – Hillsborough Street Walking distance from hotel

And NC State Fair Opens 9am Friday October 20.

The fair grounds are only minutes from the hotel.

2000 TRTR Registration

Preliminary List (10/04/2000)

Name	Organization
Adams, Al Jr.	NRC
Agasie, Robert	U Wisconsin Madison
Alcara-Ruiz, Francisco	IAEA
Artaud, Clark	Gamma Metrics
Barnes, Robert	Gamma Metrics
Bassett, Craig	NRC
Bastenbeck, Barbara	NES
Becker, Christopher	U Michigan
Benneche, Paul	U Virginia
Bennion, John	Idaho State University
Bilyj, Steve	NC State
Binney, Stephen	Oregon State
Bobek, Leo	UMASS Lowell
Bobik, Paul	NIST
Bonzer, William	Missouri Rolla
Boyd, James	NIST
Brady, Dennis	NIST
Brizes, Cindy	DOE Savannah River
Brosing, Juliet	Pacific University
Broussard, Larry	NC State
Bryan, Mac	Penn State
Bryson, James	Sandia
Burch, Joel	BWX Technologies
Burger, Matt	Sandia National Labs
Butler, Ralph	U Missouri - Columbia
Cashwell, Richard	U Wisconsin Madison
Choe, Dong-Ok	
Clark, James	NIST
Clement, Steven	LANL
Clemons, Wendy	BWX Technologies
Craven, Paul	Cornell
Daobenspeck, Thierry	Penn State
DeBey, Tim	USGS
Devgun, Jas	Sargent & Lundy
Di Meglio, Frank	Consultant
Doyle, Paul	NRC
Dragoun, Thomas	NRC
Eby, Robert	CH2M Hill
Ehrlich, Edward	General Electric
Ely, Paul	GTS Duratek
ErAsian, Warren	NRC
Faircloth, John	General Atomic
Farrar, M.B.	ORNL
Ford, John T.	Sandia National Labs
Frantz, Stephen	Reed College

Gammons, Guy	AFRRI
Gavelek, Michael	U Arizona
Gazit, Menashe	NIST
Glaeser, Wolfgang	Tech University of Muenchen
Hanson, Robert	INEEL
Healy, Kathleen	IST
Heidel, Charles	UC Davis
Heidrich, Brenden	Penn State
Helton, Alison	Penn State
Hertel, Nolan	Georgia Tech
Hobbs, Paul	U Missouri Columbia
Hoffman, Donald R.	Excel Services
Houck, David	
Isaac, Patrick	NRC
Jakes, Edward	Air Force Safety Center
Kim, Chan-Hyeong	Texas A&M Nuclear Science Center
Kincaid, Kerry	NC State
Kirshe, Mark	GTS Duratek
Krahenbuhl, Melinda	U Utah
Lassell, Scott	NC State
Lau, Edward	MIT
Lewis, Bryan	
Lynch, James	IST
Macon, Bill	
Marsh, Ledyard	NRC
Mayo, Charles	NC State
McKena, Eileen	NRC
McKibben, Charlie	U Missouri Columbia
McLennan, Kenneth	Imperial College
Mendonca, Marvin	NRC
Mengers, Tim	NIST
Meron, Alfredo	Aerotest Operations
Michaels, Ted	NRC
Miller, George	UC-Irvine
Miller, Stephen	AFRRI
Morin, Raymond	BWX Technologies
Morrell, Doug	INEEL
Mulder, Robert	University of Virginia
Murray, Raymond	NC State (Guest Speaker)
Myers, Thomas	NIST
Myser, Rick	Ohio State
Nelson, Robert	Research Reactor Safety Analysis Services
Newton, Thomas	MIT
Nguyen, John	AFRRI
NIST	NIST
O'Connor, Thomas	DOE
O'Kelly, Sean	U Texas Austin
Osborne, Sam	AFRRI
Parker, Dixon	NAC International
Patterson, John	NAC International

Peacock, Keith	Nasa Glen Research Center
Perez, Pedro	NC State
Quayle, Paul	
Racino, Roy	
Ratner, Richard	Pacific Northwest National Lab
Razvi, Junaid	General Atomic
Reese, Steven	Oregon State
Richards, Wade	UC Davis
Rigot, Ward	Dow Chemical
Rorer, David	Brookhaven National Labs
Ryan, Thomas	Sargent & Lundy
Saunders, Frank	McMaster University
Sears, Fred	Penn State
Sease, John	ORNL
Shuppe, Janna	
Slaback, Lester	NIST
Slaughter, David	U Utah
Slaughter, Scott	NIST
Snelgrove, James	Argonne National Labs
Spence, Harry	AFRRI
Stamos, John	DOE
Suthar, Mahesh	NIST
Thomas, Jay	Westinghouse Savannah River
Toomer, Doug	
Torrence, James	NIST
Trippard, Gerald	Washington State
Tucker, Bill	Phoenix Sales
Unlu, Kenan	Cornell
Verkooijen, Adrian	Delft Institute of Technology
Vernetson, William	U Florida
Vinnola, Anthony	DOE Idaho
Watson, Ray	IST
Wehring, Bernard	NC State
Weiss, Sy	NIST
West, Colin	ORNL
Wicks, Gerald	NC State
Wilks, William	
Williams, Robert	NIST
Wright, Kevin	NIST