



**Central New Mexico  
Local Section  
American Chemical Society**

Albuquerque, NM  
<http://www.acs.nm.org/>



**Trinity Section  
American Nuclear Society**

P. O. Box 5367, Albuquerque, NM 87185  
<http://local.ans.org/trinity/>



**Southwest Regional  
Chapter  
Institute of Nuclear  
Materials Management**

Albuquerque, NM 87111  
<http://www.inmm.org/southwest/>

## JOINT DINNER MEETING ANNOUNCEMENT

### "Nuclear Forensics: The Science and Role in Enhancing Global Security"

**Speaker:** Dr. Carol J. Burns, Chemistry Division Leader, LANL

**Abstract:** Nuclear forensics has been identified as a technical tool in domestic law enforcement and international efforts to control nuclear materials. Forensic science associated with nuclear threats is in fact part of a larger class of needs in materials identification and characterization. This talk will provide an overview of the major categories of nuclear forensics, encompassing a range of possible threat scenarios. An outline will be presented of the technical approach to each of these processes, as well examples of their execution. Some of the current political drivers for material identification will be discussed. Areas of technical development will be outlined, and some current examples of research in these areas will be presented.

**Biography:** Please see next page.

**Place:** Courtyard by Marriott, Santa Fe  
3347 Cerrillos Rd, Santa Fe, NM (505-473-2800)

**Directions:** From Albuquerque, take I-25 North approx. 55 miles to Exit 278 (Cerrillos Rd). Hotel is located 3 miles on the left-hand side of Cerrillos Rd at Richards Ave.

**Date:** November 18, 2011

**Time:** 6:00 Social Hour with Cash Bar  
7:00 Buffet Dinner (featuring spinach stuffed pork loin and rosemary roasted chicken)  
7:45 Speaker

**Cost:** \$30 per person,  $\frac{1}{2}$  price for students and children

We strongly encourage sign up/payment for this event using ANS Trinity on-line payment. From the "Calendar" page (<http://local.ans.org/trinity/calendar.html>) select the appropriate payment button. You may use any credit card and do NOT need to have a PayPal account.

**RSVP:** If you do not use on-line payment, please RSVP no later than Nov 14<sup>th</sup> to:  
Bill Flor: [wjflor@lanl.gov](mailto:wjflor@lanl.gov) (505-665-8768) or  
Markku Koskelo: [mkoskelo@aquilagroup.com](mailto:mkoskelo@aquilagroup.com) (505-338-8083) or  
Donivan Porterfield: [dporterfield@lanl.gov](mailto:dporterfield@lanl.gov) (505-667 4710)

RSVP must be received by 14 Nov in order to give final numbers to the caterers. While we strongly encourage everyone to use on-line payment to sign up and prepay, an RSVP is a commitment to attend/pay at the door. We cannot afford "no shows" after the final count is given to the caterers, as the Section/Chapter are partially subsidizing the cost of this event. If you cancel after 14 Nov, you will still be responsible for paying.

## **Carol J. Burns, PhD**

Carol Burns is a Laboratory Fellow at Los Alamos National Laboratory, and serves as the Division Leader for Chemistry. She received her PhD in Chemistry from the University of California at Berkeley in 1987. She came to LANL as a J. Robert Oppenheimer Postdoctoral Fellow, and has been employed at the Laboratory since that time, serving in a variety of line and program management positions. Dr. Burns served as a Senior Policy Advisor in the Office of Science and Technology Policy in 2003-04, where she provided technical and policy assistance on national and homeland security science and technology issues involving defense infrastructure and threat preparedness, as well as coordination of science and technology policies within the national security and intelligence communities. She continues to support LANL in the coordination of activities in nuclear forensics, including working with the interagency on workforce pipeline and educational program development. She established the first summer undergraduate school in nuclear forensics, funded by the Department of Homeland Security. She was awarded the LANL Fellows Publication Prize in 2002, and was named a Laboratory Fellow in 2003. She was named a Fellow of the American Association for the Advancement of Science in 2009. Dr. Burns is a recognized expert in actinide and radionuclide chemistry, with more than 95 peer-reviewed publications and invited book chapters, and has served on a number of editorial boards, review boards, and advisory panels.