

Friends of ORNL

2018 Annual Report

Friends of Oak Ridge National Laboratory

March 2019

The officers and board of the Friends of Oak Ridge National Laboratory are pleased to report on the activities of FORNL for the calendar year 2018.

The mission of FORNL is to provide

- A mechanism for members to keep in touch with co-workers, retirees, and current ORNL activities,
- For ORNL, an organization whose members can serve as knowledgeable volunteers for ORNL related activities, and
- Community-wide presentations and events for the public, centered on outstanding developments, awards, and special topics of national interest.

We are scientists and engineers, as well as individuals from varied backgrounds, who believe we can increase the nation's technological awareness by providing information to teachers, students, and the general public.

In 2018 FORNL sponsored and participated in multiple activities in fulfilling these aims.

This year ORNL celebrated the 75th Anniversary of the founding of the Oak Ridge National Laboratory and the startup of the Oak Ridge Graphite Reactor. On June 9, ORNL welcomed the public to its Lab Day and FORNL volunteers assisted with tours of key facilities, particularly the ORNL Graphite Reactor, known during WWII as the “X10 pile.”

At Lab Day, over 4,500 attendees experienced ORNL's Traveling Science Fair exhibits, packed tours to facilities including the High Flux Isotope Reactor, Spallation Neutron Source, Oak Ridge Leadership Computing Facility, the Historic Graphite Reactor Museum and the Building Technologies Research and Integration Center.



"This was our day to 'show off' the laboratory," said ORNL Director Thomas Zacharia. "I was thrilled with the interest and participation by the local community, as well as the family members and friends of our staff members."

Over 4500 visitors attended Lab Day at ORNL on June 9, 2018

The Friends of ORNL sponsor the Dick Smyser Community Lecture Series, a series of free lectures on a wide range of topics of interest to the local community. Dick Smyser, now deceased, was founding editor of *The Oak Ridger* newspaper, president of the Associated Press Managing Editors Association from 1973 to 1974, president of the American Society of Newspaper Editors from 1984 to 1985 and a community leader for many years.



The lecture series is supported by contributions from UT-Battelle, with in-kind support from *The Oak Ridger*, AMSE and The Soup Kitchen. I

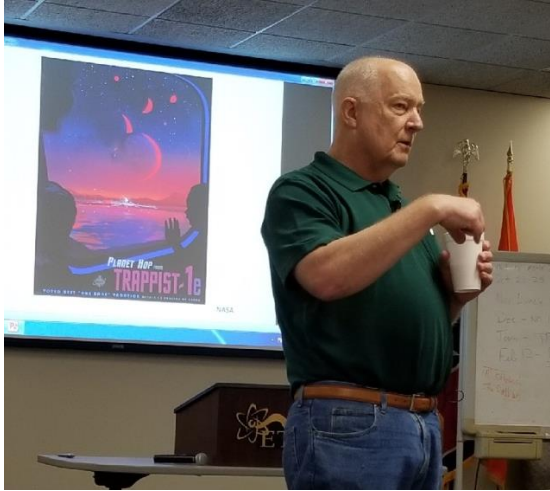
In 2018, Dr. Thomas Zacharia, Director of Oak Ridge National Laboratory delivered a *State of ORNL* address at a July 26 Dick Smyser Community Lecture cosponsored by FORNL and the Oak Ridge Public Schools Education Foundation. Director Zacharia described the exciting and varied scientific and technical agenda at the lab which is now recognized as the United States' leading national laboratory for science. A highlight was the June 2018 announcement that the new Summit supercomputer at ORNL was designated as the fastest computer in the world with a measured speed of 122.3 petaflops per second.

The second Dick Symser Community Lecture was presented by Professor Leslie Wade from Kenyon college. He described his role in the analysis of data from the LIGO facility , the gravity wave detector. The first detections of gravity waves, a prediction of Einstein's Theory of General Relativity, were recognized in 2017 with the Nobel Prize in Physics.

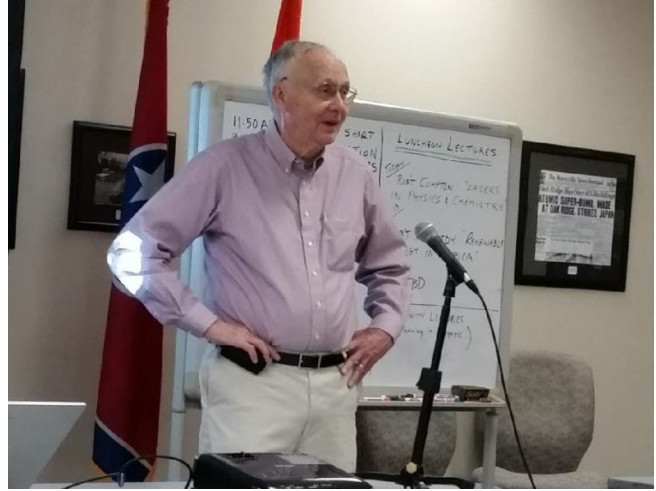
FORNL also hosts a series of monthly meetings for lunch, socializing, and learning about topics of interest to our members at Oak Ridge National Laboratory and other local science and technology- ventures. The meetings are held starting at 11:30 am on the second Tuesday of each month at the UT Center in Oak Ridge. As shown in the following table, in 2017 seven speakers from ORNL were Included in our eleven luncheon lectures.

The 2018 FORNL Luncheon Lectures - Speakers and Topics	
January	Dr. William Peter, ORNL, <i>Progress at the Manufacturing Development Center</i>
February	Dr. Robert Compton, ORNL/UTK, <i>Lasers in Physics and Chemistry</i>
March	Robert Kennedy, Tetratech, <i>Renewable Energy in Africa</i>
April	Barry Stephenson, MCLinc Inc. <i>The History of MCLinc, An Investigative Analytical and Testing Laboratory in Oak Ridge</i>
May	Dr. Geoffrey Greene, ORNL/UTK, <i>The Neutron Enigma</i>
June	Dr. Steven Stow, retired ORNL, <i>...And Some of the Cowboys Wore White Hats; Disposal of Liquid Nuclear Waste at Clinton Laboratories in the Early Days</i>
July	Dr. Raphael Pooser, ORNL, <i>21st Century Information Technology and the Second Quantum Revolution</i>
August	Fred Sloop, ORNL, <i>Fluvial Catastrophes–Megafloods</i>
September	Fred Haywood, retired consultant, <i>Fat Man and Little Boy</i>
October	Ken Roy, retired ORGDP, <i>Terraforming Planetary Systems of Distant Stars</i>
November	Radu Custelcean and Neil Williams, ORNL, <i>Sustainable Approach to CO2 Capture from Air</i>

FORNL Luncheon Lectures



Ken Roy presents *Terraforming Planetary Systems of Distant Stars*



Bob Compton presents *Lasers in Physics and Chemistry*

FORNL members also act as tour guides for the "DOE Facilities Public Bus Tours" and other ad hoc tours that may be scheduled during the year. They speak to tour participants from all over the country about past and present day activities at the three DOE sites, while also sharing information on their personal experiences. Thanks to ORNL the tours have been expanded and additional guides have been recruited. In 2018, 129 tours were conducted for 3636 visitors. Average attendance was 28.2 with a maximum capacity of 32 per tour.

FORNL Volunteer Opportunities				
Opportunity	Date	Contact	Telephone	E-mail
DOE Bus Tour Hosts and Assistants	March through November	Al Ekkebus	865-382-0342	alekkebus@icloud.com
American Museum of Science and Energy Docent	Year-round	Al Ekkebus	865-382-0342	alekkebus@icloud.com
Tennessee State Science Bowl	February 22-23, 2019	Jennifer Tyrell	865-576-3709	jennifer.tyrell@ornl.gov

FORNL offers its members a number of opportunities to participate in the community. Al Ekkebus serves as FORNL's coordinator of volunteers for the Bus Tours, AMSE Docents, and Tennessee Science Bowl judges and assistants.



In 2017, FORNL provided crucial startup funding and technical support to an exciting new Weinberg initiative. Many of Alvin Weinberg's personal papers were donated by his family to the Children's Museum of Oak Ridge (CMOR). Rhonda Bogard, the daughter of the CMOR founder, Selma Shapiro, has undertaken the task to ensure that the Weinberg papers are preserved for future generations.

FORNL contributed \$2000 towards the \$5000 needed to start the project in late 2017. A team of professionals is being assembled by the CMOR to scan and preserve the documents. The software and digitization system is being donated by Consolidated Nuclear Security, the Y-12 operating contractor. FORNL members are assisting the archivist in understanding the context and significance of the documents.

With the formation of the Manhattan Project National Historical Park, FORNL is participating in planning events, encouraging volunteers, and adding support of the Park to our list of activities. "Scientific and Technological Advances" is a focus area for the Manhattan Project National Historical Park.

"Scientific and technological advances made during the Manhattan Project in the pursuit of nuclear weapons contributed to progress in many areas, such as materials science, biology, nuclear medicine, nuclear energy, the nuclear Navy, supercomputing, precision machining, astronomy, and the Department of Energy's National Laboratory System."



Bob Olsen and Dick Rairdon at the DOE's National Science Bowl

FORNL provides financial support and volunteers to the Tennessee Science Bowl, which DOE sponsors at the national level. FORNL also encouraged its members to support the Oak Ridge Public Schools Foundation which supplements public funds to support **Science, TEchnology, Arts, and Mathematics (STEAM)** teachers with special project grants.

In 2018, FORNL paid membership was 130, including 40 life members. This is a 14% increase over 2017. FORNL membership is open not just to retirees from ORNL, but also to others (there are over 200 on our email distribution list). Former and present employees of ORNL, and any other person, organization and company who have an interest in the Laboratory, its welfare, and its programs are welcome members. Many community members attend the luncheon lecture series.

One of the services that FORNL provides its members is arrangements for an Annual Visitor's Badge to the ORNL site. This enables our members to attend seminars and Distinguished Lectures at ORNL without needing to arrange access for each visit. Typically 40 to 50 of our members avail themselves of this service every year.

FORNL is supported by Financial Contributions from UT-Battelle, gifts, members' dues, and in kind contributions from *The Oak Ridger*, AMSE and The Soup Kitchen which caters the events. FORNL members greatly appreciate the continued support by UT-Battelle. We acknowledge UT-Battelle as the sponsor of the Community Lecture Series in programs and announcements. FORNL also appreciates Oak Ridge Associated University making Pollard Auditorium available for Dr. Zacharia's Dick Smyser Community Lecture on July 26, 2018.

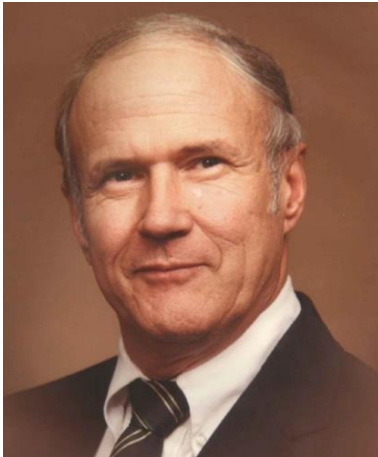
FORNL maintains an informative website (www.fornl.info) to keep members apprised of upcoming events and to share scientific and technical news from ORNL. FORNL has an enthusiastic Webmaster, Shafik Iskander, who keeps the site up-to-date on at least a weekly basis.

FORNL maintains an active calendar of meetings and sponsored events throughout the year. Unfortunately only a portion of the ORNL retirees and other community members take advantage of these opportunities. FORNL activities are generally located at ORNL or in the Oak Ridge community. Gaining members from the entire region, particularly Knoxville, is an ongoing and growing challenge. There is discussion of having some meetings in the Knoxville area. Locating retired members is also a continuing challenge. For reasons of privacy ORNL does not share contact lists for retired employees.

FORNL participates in the ORNL Benefits Fair each year and distributes information about FORNL. ORNL includes a FORNL brochure in the retirement package for each employee.

Finally, FORNL would like to recognize the East Tennessee Economic Council (ETEC) and the University of Tennessee Center in Oak Ridge for their willingness to provide a meeting location for both the monthly luncheon lectures and the FORNL Board Meetings. We are particularly appreciative of the outstanding support provided by Tracy Boatner and Nicole Allen of ETEC.

IN MEMORIUM



Richard Raridon

October 25, 1931 – June 17, 2018

As a member of FORNL and the FORNL Board, Dick Raridon led the recruitment and coordination of Volunteers for the DOE Tour Guides. Dick was active in many community organizations.

FORNL recognizes his enduring contributions to the vitality of Oak Ridge.



FORNL 2018 Board meets monthly
(Santa is only present at the December meeting)



Jim Rushton (on the right) passes the gavel to the new FORNL President for 2019, Kent Willams

March 2019

FORNL Officers 2018

President, Jim Rushton

Vice President, Kent Williams

Secretary, Phillip Sklad

Treasurer, Vinod Sikka

Board of Directors

Jim Rushton

Kent Williams

Gloria Caton

Kathy Gant

Vinod Sikka

John Gunning

Chuck Coutant

Phillip Sklad

Bob Compton

Al Ekkebus

Adjunct Board Members

Herb Krause

Robert Hightower Jr.

Dave McVicker

Connor Matthews

Dick Raridon

Steve Stow

Vic Tennery

ORNL Liaison

Leigha Humphries

Webmaster

Shafik Iskander