Friends of ORNL

2019

Annual Report

Friends of Oak Ridge National Laboratory

March 2020

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 2019.

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 scientific and engineering 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 2019 FORNL sponsored and participated in multiple activities in fulfilling these aims.

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. He also had a strong love of science.)

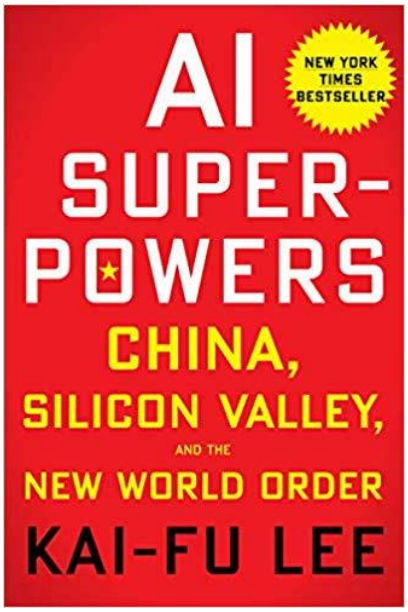
The lecture series is supported by contributions from UT-Battelle, with in-kind support from *The Oak Ridger*, AMSE and The Soup Kitchen.

For the first 2019 lecture, and 22nd in the DSCL series, Mark Uhran of Oak Ridge National Laboratory delivered a talk entitled *An Achievable Vision for Space Exploration: Establishing a Gateway Proving Ground for Space Exploration Technology* at a May 2 event cosponsored by FORNL and the just relocated and reopened American Museum of Science and Energy. Mr. Uhran is an International Program Manager for the ITER Fusion Project and before that had spent many years dealing with multi-country issues associated with construction of the International Space Station.



Mark Uhran Presenting our First 2019 Community Lecture

The Oak Ridge Public Education Foundation (ORPEF) invited FORNL to join with them, UT-Battelle, and ORAU to co-sponsor the Second Community Lecture. This lecture featured Dr. Kai-Fu Lee, an ORHS Alum, who presented a talk entitled *AI Super-Powers: China, Silicon Valley, and the New World Order*. It was held May 6, 2019 at the ORAU Pollard Auditorium with FORNL providing funds for the hors d'oeuvres reception preceding the lecture. Mr. Lee described how, if properly applied, Artificial Intelligence (AI) should enhance our work environment and standard of living rather than massively eliminate jobs.





Kai-Fu Lee: An ORHS Alumnus

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, except December, at the UT Resource Center in Oak Ridge. As shown in the following table, in 2019 eight speakers from ORNL or with a UTK/ORNL joint appointment were Included in our eleven luncheon lectures.

The 2019 FORNL Luncheon Lectures - Speakers and Topics

January	Dr. Karen Lloyd, UTK, *Deep Sea Microbes*
February	Brian Egle, ORNL, *ORNL Stable Isotopes Program*
March	Dr. Donald Spong, ORNL, *Magnetic Confinement Fusion*
April	Dr. Robert Hatcher, UTK, *The Geology of East Tennessee*
May	Dr. Andrew Steiner, ORNL/UTK, *Physics of Gravitational Waves, Neutron Stars, Neutrons, and Protons*
June	Robert Grzwacz, ORNL*, Tennessine, Our Hometown Element & New Era of Super-heavy Element Research*
July	Chuck Feigerle, (UTK/ORNL), *SNS Stripper, Electron Removal & Transmutation From H^- to H^+*
August	Dr. Brenda Prachell, ORNL, *Environmental Information from Bones of Fish: Some Minerological Surprises*
September	Dr. Leah Broussad, ORNL, *Search for Dark Neutrons*
October	Dr. Mark Dadmun, ORNL/UTK, *Organic Photovoltaics: Working to Make Better Solar Cells*
November	Dr. Manas Mukherjee, National University of Singapore, *Trapped-Ion Quantum Information Processor*

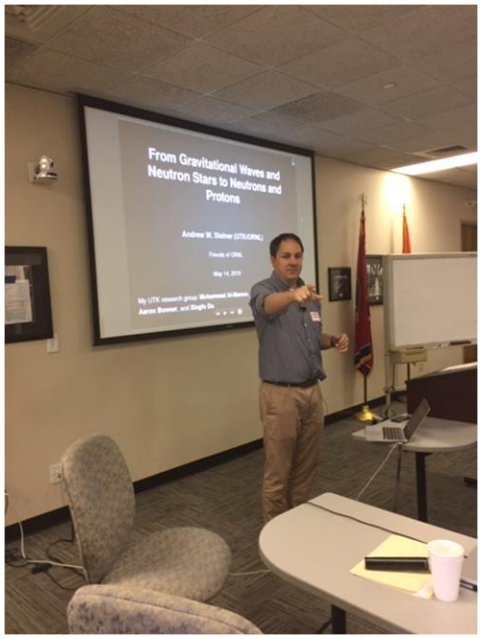


A Typical 2nd Tuesday Luncheon Meeting

Photos from FORNL Luncheon Lectures



Don Spong presents *Magnetic Confinement Fusion*



Andrew Steiner presents Gravitational waves

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 were expanded in 2018 and additional guides have been recruited in 2019. In 2019**,** 130 tours were conducted for 3740 visitors. Average attendance was 28.8 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	Kayla Canario	865-574-9532	Kayla.Canario@orau.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. ORNL volunteer support for this activity continued in 2019, with a FORNL Board member Connor Matthews, serving on the Project's Board of Directors. Phase I scanning and digitization is well underway. Other FORNL members are assisting the archivist in understanding the context and significance of the documents. FORNL is also helping the Weinberg project in raising funds to complete the first phase of the project.

With the formation of the Manhattan Project National Historical Park (MPNHP), FORNL is participating in planning events, encouraging volunteers, and adding support of the Park to our list of activities. "Scientific and Technological Advances", of which our membership has historical familiarity, 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.*"

FORNL also 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 **S**cience, **TE**chnology, **A**rts, and **M**athematics (**STEAM**) teachers with special project grants. Members also provide in-school lectures to local students upon request from teachers.



FORNL President Kent Williams receives Sponsor Recognition plaque for FORNL at the DOE's National Science Bowl Kickoff Dinner in February of 2019 at the Airport Hilton

In 2019, FORNL paid membership was 122, including 43 life members. 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, and some utilize our brief pre-lecture business meeting to promote important community activities.

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. This year saw a change in the conduct of this program, with the Badge Requestor working directly with ORNL's electronic visitor control system. FORNL provides ORNL with a list of eligible names.

FORNL is supported by Financial Contributions from UT-Battelle, gifts, members' dues (still $20 annually or $200 for life), 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 the American Museum of Science and Energy for making their new auditorium available for Mark Uhran's Dick Smyser Community Lecture on May 2, 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 along with his son, Yousef, keeps the site up-to-date on at least a weekly basis. Dave McVicker provided interesting archival ORNL News excerpts from the Oak Ridge History Room on a monthly basis. FORNL's membership Team (Gloria Caton and Kathy Gant) also has constructed a display board for public events such as the Secret City Festival, our Community Lectures, and ORNL Employee Fairs.

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 by providing a representative and a display, and also distributes information about FORNL. ORNL includes a FORNL brochure in the retirement package for each employee.



Part of FORNL's display for public events

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 MEMORIAM



Victor Tennery

June 20, 1932 – November 10, 2019

Vic Tennery was an active FORNL member and Board member. He was also active in many community organizations. FORNL recognizes his enduring contributions to the vitality of Oak Ridge.

Other FORNL members who passed in 2019 are Willis Baker and Joseph Eddleman.

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Date: May 7, 2020