

SCIENCE

Gov. Bill Haslam visits ORNL to highlight tennessine discovery

Tennessee Gov. Bill Haslam visited ORNL Jan. 27 to congratulate the team involved in the discovery of the element tennessine, named in recognition of the vital contributions of the state of Tennessee to the international search for new superheavy elements.

ORNL marked the discovery by announcing more than 1,000 public middle schools and high schools in Tennessee are receiving new charts of the periodic table. Tennessine—the official name for element 117—completes the seventh row of the table and the column of elements classified as halogens. The charts will include the signatures of Haslam and ORNL Director Thom Mason.

"We had two very significant announcements in Tennessee this fall as it relates to science," Haslam said during a ceremony in the Iran Thomas Auditorium at the SNS.

"In October, the Nation's Report Card announced that Tennessee students are the fastest improving in the nation in science.

In November, Tennessee became only the second state to be recognized in the periodic table of elements. Having an element named in our honor is further evidence of the scientific excellence that exists at Oak Ridge

National Laboratory, the University of Tennessee, Vanderbilt University and other institutions throughout our state. By UT-Battelle donating new periodic tables to every middle and high school in Tennessee, students can feel proud of our state's important role in the scientific community and inspired to play a role in its future." Haslam spoke after Yuri Oganessian, the Russian scientist who developed the "hot fusion" method of creating superheavy elements, delivered a Eugene P. Wigner Distinguished Lecture to ORNL staff. Oganessian was joined by Victor Matveev, director of the Joint Institute for Nuclear Research (JINR) in Dubna, Russia, where the experiment was performed.

"We appreciate Gov. Haslam's (ORNL recognition of the laboratory's research and support staff who helped add this historic experiment to the long list of Tennessee's scientific achievements," Mason said. "We also welcome Dr. Oganessian and Dr. Matveev to ORNL to mark the culmination of our long partnership to expand the horizons of physics and chemistry."

The state of Tennessee made several contributions to tennessine's discovery. The experiment to discover element

"We appreciate Gov. Haslam's recognition of the laboratory's research and support staff who helped add this historic experiment to the long list of Tennessee's scientific achievements." 117 required the radioisotope berkelium-249. The only source of berkelium-249 is ORNL's High Flux Isotope Reactor and adjoining Radiochemical Engineering

Development Center. When a campaign to make the industrially important radioisotope californium-252 began in 2008 under the auspices of the DOE Isotope Program, Oganessian contacted Jim Roberto, ORNL's director of science and technology partnerships. Roberto (continued on page 3)



ORNL Director Thom Mason, left, and Tennessee Gov. Bill Haslam stand beside the updated periodic table including tennessine, Ts, located on the next to last row from the bottom and third from the right. (ORNL photo by Jason Richards)

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FEATURE



Four with ORNL connections playing with Knoxville Pipes and Drums organization



Pictured from left are Mark Coletti, Bryan Crable, Andrew Payzant and Andrew Kerr. (ORNL photo by Carlos Jones)

"During 2016, our group finished in the top five among Grade 4 bands in the Southeast."

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Fred Strohl Editor (865)574-4165 strohlhf@ornl.gov

Bill Cabage Jeff Gary Heidi Hill Contributors

Cindy Johnson Design and Layout If you have ever heard a bagpipe band perform the tune "Amazing Grace," you can't help but be inspired.

The bagpipe sound echoes in East Tennessee thanks to the Knoxville Pipes and Drums, an organization of approximately 35 members practicing weekly in Maryville and performing several times a year in East Tennessee and throughout the Southeast. Four members of the band have ORNL connections, including Mark Coleti, Bryan Crable, Andrew Kerr and Andrew Payzant.

"I was signed up to play in the Knoxville band before I even got an apartment here," said Mark Coletti of the Computational Sciences and Engineering Division. "I played in a bagpipe band when I was at Penn State. When the folks up there found out I was heading to Oak Ridge, they contacted the folks in Knoxville. I actually knew what I was going to be doing with the band before I knew what my job would entail at ORNL."

Geography did not stop Bryan Crable from continuing his love of playing the bagpipe as he moved around the country.

"I played in Pittsburgh before I moved to Oklahoma for the next three years and really enjoyed playing the bagpipes there, said Bryan, formerly of the Biosciences Division. "When I found out Knoxville had a band, I got involved quickly."

Andrew Kerr, whose parents were from Scotland and who played bagpipes in the United Kingdom while serving in the U.S. military for seven years before moving back to the United States, has been a bagpipe fixture for years.

"I got into Knoxville Pipes and Drums after meeting the members at the Smoky Mountain Festival & Highland Games held at Maryville College. "I have been playing the bag pipes all of my life and I'm glad to have the opportunity to assist and help inspire our musical art in the East Tennessee bagpipe scene for years to come."

Andrew Payzant of the Chemical and Engineering Materials Division is the senior citizen of ORNL bagpiping as he has performed during a number of ORNL events, including Veterans Day, during his 22 years at the lab. Andrew started piping as a youth in Canada and was at least partially responsible for recruiting most of the other three into the Knoxville band.

"Before I arrived here, I learned via a usenet group that there was a big interest in bagpipes in East Tennessee, which is why the Knoxville band started," Andrew Payzant said. "I've been at it ever since."

The Knoxville Pipes and Drums started 25 years ago through the Scottish Society of Knoxville. Many of the players during the early years were beginners, but the group has grown and musically matured over the past quarter century.

"During 2016, our group finished in the top five among Grade 4 bands in the Southeast," Andrew said.

The Knoxville Pipes and Drums have also performed at some special local events.

"We have performed at halftime of some UT men's basketball games," Andrew Kerr said. "We were honored to perform at the memorial service for Coach Pat Summitt."

The Knoxville Pipes and Drums is a 501(c)(3) non-profit corporation. Its mission is to foster and promote Scottish bagpiping and drumming and the related Celtic arts within the East Tennessee community.

More information about the organization is available at: http://www. knoxvillepipesanddrums.org/.

You may also view a performance of the band during the Stone Mountain Highland Games at: https://www.youtube.com/watch?v=8TDwnKOgJhI –*Fred Strohl* *****

ORNL Director Thom Mason taking new position at Battelle headquarters in Ohio

ORNL Director Thom Mason announced Feb. 24 he will step down effective July 1 — exactly 10 years after becoming director of the nation's largest science and energy laboratory.

Mason is taking on a new role as senior vice president for laboratory operations at Battelle in Columbus, Ohio. Battelle, in partnership with the University of Tennessee, has managed and operated ORNL for DOE since April 2000.

"Thom has been an exemplary scientific leader and we're fortunate that he will continue to be engaged with Oak Ridge National Laboratory as he uses his experience and expertise to benefit DOE, Battelle and other labs where Battelle has a management role," said Joe DiPietro, UT president and chairman of the UT-Battelle Board of Governors.

Battelle has a substantial management role at six DOE labs and one lab for the Department of Homeland Security.

Mason is an experimental condensed matter physicist by training and came to ORNL in 1998 to work on the Spallation Neutron Source (SNS). He soon assumed responsibility for completion of the \$1.4 billion project.

SNS and the High Flux Isotope Reactor, solidified ORNL's role as the leading source of neutrons for scientific research in the U.S. and recently welcomed their 20,000th scientific user.

Mason will work with Ron Townsend, executive vice president of global laboratory operations, and participate in governance at each Battelle-managed lab, engaging sponsors and leading strategic planning for lab operations integrating a strategic plan. *–Bill Cabage* ¥

Gov. Bill Haslam visits ORNL to highlight tennessine discovery (continued from page 1)

pulled together a team of scientists and engineers to produce berkelium-249 (Bk-249) as a byproduct of the californium production, for the experiment and to collaborate in the international research effort.

After a year-long process, the discovery team had detected six atoms of element 117 at JINR's atom smasher, which the team including JINR, ORNL, Vanderbilt and Lawrence Livermore National Laboratory reported in early April 2010. Follow-up experiments to confirm the discovery, which included nuclear physicists from UT, have identified 16 more of the "superheavy" atoms. The DOE Isotope Program produced and contributed the additional amounts of Bk-249 to the nuclear physics research community for these follow-up experiments.

The International Union of Pure and Applied Chemistry (IUPAC) announced its final approval of tennessine as the name for element 117 last November. IUPAC also announced the naming of element 115, which is a decay product of element 117, as moscovium after the Moscow region where JINR is located, and element 118 as oganesson, honoring Oganessian.

Although the superheavy elements at the bottom of the periodic table are extremely short lived, scientist believe an "island of stability" may exist as the atomic numbers of newly discovered elements increase, which could revolutionize physics and chemistry. The discovery of tennessine represents strong evidence of the existence of the island of stability.

"The discovery of tennessine is an example of the potential realized when nations combine their resources and work together in the pursuit of knowledge that could be of tremendous benefit to society," Roberto said.

The periodic tables to be issued by UT-Battelle to the schools represent an approximately \$25,000 corporate gift to public education in Tennessee. –*Bill Cabage* *****



ORNL Director Thom Mason explains neutron science research at ORNL to U.S. Rep. Nita Lowey, D-N.Y., during the congresswoman's recent visit to ORNL, which included a tour of the SNS. (ORNL photo by Carlos Jones)

Seeking multigenerational families who worked at ORNL as part of 75th anniversary event

ORNL's 75th anniversary commences Feb. 1, 2018 to mark the 75th anniversary of the groundbreaking at the Graphite Reactor.

A number of activities related to ORNL's 75th anniversary are being discussed and events will be announced as the time draws closer.

In the meantime, did your mother or father work at ORNL? How about your grandparents? Or perhaps an uncle or aunt? Do you know of multigenerations of families that worked at ORNL.

ORNL's Communications Directorate is interested in learning about families with multiple generations of ORNL employees.

Contact April Denning (denningar@ ornl.gov) if you're willing to talk about your family's ORNL history. Communications Directorate staff members later will reach out to some of these families to share their stories during the 75th anniversary year. –*Jeff Gary*

PEOPLE



Service Anniversaries

December 2016

35 years: George B. Ulrich, Materials Science & Technology; **Glenn M. Cross**, Integrated Operations Support; **Bryan L. Broadhead**, Reactor & Nuclear Systems

30 years: Ann L. Stanton, PSD Integrated Research Operations; **Charles L. Britton Jr.**, Nuclear Security & Isotope Technology

25 years: Donna Isham, Business Management Services; Thomas John Karaus, Information Technology Services; Cynthia Lee Terry, Computational Sciences & Engineering; Elizabeth M. Schilling, Acquisition Management Services; Andre Omer Desjarlais, Energy & Transportation Science; Mark J. Peterson, Environmental Sciences; Judi M. Noe, F&O Modernization Project Office; Robert Ihle, EESD Safety & Business Operations; William J. Toth, Nuclear Security & Isotope Technology

20 years: Kenneth R. Martin,

Nonproliferation, Safeguards & Security; Sylvia Milanez, Environmental Sciences; Patricia W. Payne, Computational Sciences & Engineering

January 2017

40 years: Bobby R. Whitus and Raymond W. Tucker Jr., Electrical & Electronics Systems Research; Thomas J. McLaughlin, Directorate Operations; Dennis E. Boyd, Logistical Services; Gregory P. Zimmerman, Environmental Sciences

35 years: Lynn M. Smalley, Center for Nanophase Materials Sciences

30 years: George W. Hill, Information Technology Services; Anthony Vito
Palumbo, Biosciences; Gyula Eres, Materials Science & Technology; Cindy
L. Mayfield, Internal Audit; Natalie L.
Crippen, Oak Ridge Counterintelligence

25 years: John Benjamin Czachowski, EESD Safety & Business Operations; Pamela C. Rohde, Laboratory Protection; Ronald Allen Crone, Neutron Sciences; Kathy Davidson, Logistical Services; Marci W. Howard, Accounting Services; Howard H. Oberholtzer Jr, Research Reactors; Michael Joe Mitchell, Facilities Management

20 years: Bruce A. Pint, Materials Science & Technology; **Krzysztof Piotr Rykaczewski** and **Vince Cianciolo**, Physics; **Peter J. Wiegand**, F&O Modernization Project Office

February 2017

35 years: Ellen D Smith, Environmental Sciences

30 years: Lisa Violet Patt, Office of Integrated Performance Management; **Anthony Wayne King**, Environmental Sciences

25 years: Donald J. Merical, Information Technology Services; Amanda J. Denton, Integrated Operations Support; Denise Overton, Energy & Transportation Science; Gregory Roy Larson, Transportation & Waste Management; Gary L. Bell, Fusion & Materials for Nuclear Systems; Gregory Allen Johnson, Nonreactor Nuclear Facilities; Joann Leinart, Health Services

20 years: E. Andrew Payzant, Chemical & Engineering Materials

Club ORNL events

Get the details and latest news online via https://info.ornl.gov/sites/ clubornl. Request an XCAMS account, which will allow you to participate in these events or contact Lara James at 865-576-3753 or jamesla@ornl.gov.

FORNL promotes science in Oak Ridge, East Tennessee

If you are looking for a way to stay in touch with other ORNL employees and retirees, keep up with activities at ORNL or help promote science in the community, then join Friends of ORNL (FORNL).

FORNL is a non-profit organization founded in 1991. Membership is open to anyone with an interest in ORNL and its programs. You do not have to be retired or to have worked at ORNL.

FORNL holds monthly lunch meetings on the second Tuesday of each month (except December) in the University of Tennessee Center on the Turnpike in Oak Ridge. Meetings feature a speaker describing current scientific topics or activities at ORNL. Lunch is available for purchase at 11:30 a.m. with the program beginning at noon. Several times a year, the organization sponsors an evening Dick Smyser Community Lecture, with topics of more general interest.

FORNL members are currently working with the National Park Service on historical information for the Manhattan Project National Park, maintaining the ORNL History Room, hosting bus tours of the DOE facilities and co-sponsoring and assisting with local science fairs and the Tennessee Science Bowl.

Membership is \$20 per year or \$200 for a lifetime membership. Members who are U.S. citizens can request an annual pass to the ORNL campus to attend lectures or meet friends for lunch in the cafeteria. For more information and a membership application form, see www.fornl.info, or just come to a monthly meeting and sign up.

TREASURES FROM THE ARCHIVES



A Publication for the ORNL Employees of Union Carbide Nuclear Company, a Division of Union Carbide and Carbon Corporation

Vol. 9 - No. 38

OAK RIDGE TENNESSEE

To Feature Papers

Friday, March 29, 1957

Snell Is New ORNL Assistant Director;

Shipley Will Head New ORNL Division

Fowler Appointed Physics Division Director;

Bell Appointed Associate Director of TED

Important organizational changes in the staff at Oak Ridge National Laboratory were announced this week. E. D. Snipley, assist-ant director of ORNL, has been appointed director of the newly-

Cameron, Drury, Livingston Will Attend Annual APS Meet Amsterdam Symposium on Isotopes

A. E. Cameron and J. S. Drury of the Stable Isotopes Division and R. S. Livingston, director of the Electronoclear Research Division, will travel to The Netherlands next month to participate in the Symposium On Isotope Separation to be held in Amsterdam April 23-27. The symposium is beings sponsored by the International Union of Pure and Applied Phys-ics.

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Tenth Safety Mark Ended by Accident

The first 1957 disabling accident, severing the Oak Ridge National Laboratory's safety record at 2, 264,266 labor hours, occurred at 11 AM on March 18 on White Wing Nucl

AM on March 18 on White Wing Road. An empty dump truck was trav-eling south on White Wing Road south of Bethel Valley Road. It was beginning to rain and the blacktop was wet. The driver of the truck to st control of the ve-nical while executing an S curve on a fairly steen slope and skidded seventy-nine faet before leaving the road. After the vehicle left the pavement, it skidded an additional twenty feet on the embankment and overturned coming to rest on the right side with the driver's head pinned between the door and the ground. the gr und. As the injured man's condition

As the injured mans contain did not warrant attempting to free him by pulling the truck upright and thus risking a possible slip of the truck, dirt was removed by a shovel from beneath the man's head to free him. Miraculously the extent of injuries appears to be only a slight skull fracture and head lacerations

oratory in late January. It is expected that the jet engine will be operated both intermit-tently and over a period of several hours in a test series which is a part of the continuing effort of ORNL to study the effects of nu-clear radiation on materials and equipment. The engine to be used will be a standard type using con-ventional chemical fuels and will be similar to jet engines used to power many types of aircraft.



THE UNITED STATES MILITARY LIAIS D. C., made a routine visit to Oak Ridgi nesday and Thursday, March 20 and 21 shown in the above picture as they vi Reactor Test facility.

By ORNL Members Several members of Oak Ridge National Laboratory will present invited and contributed papers at the annual meeting of the Southeastern Section of the American Physical Society, which will be held on April 4, 5, and 6, at the University of Kentucky, Lexing-300 Physicists Expected

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Hollaender, Carson





of the Laboratory. J. L. Fowler, associate director of the Physics Division, will suc-ceed Dr. Snell as director of the division P. R. Bell, also a mem-ber of the physics division, will become associate director of the new Thermonuclear Experimental Division which has been formed to engage in activities concerned with the release of controlled ther-monuclear energy. monuclear energy

The second secon



- Important ORNL organizational changes are announced as E.D. Shipley is appointed director of the newly-formed Thermonuclear Experimental Division, A.H. Snell is named assistant laboratory director, J.L. Fowler is selected to become director of the Physics Division, replacing Snell, and P.R. Bell is appointed associate director of the Thermonuclear Experimental Division.
- A jet engine is periodically tested at ORNL as part of a continuing study of the effects of nuclear radiation on materials and equipment.
- Members of the U.S. Military Liaison Committee and a delegation of foreign employees of the U.S. Information Agency make separate visits to ORNL's Homogeneous Reactor Test Facility.
- Oak Ridge Postmaster Van Hicks announces air mail service to and from Knoxville is being enhanced, including improved service to Oak Ridge .- prepared by ORNL History Room volunteers

NEWS



On any given shift, Maureen might find herself monitoring the reactor up in the control room or testing the reactor's water chemistry down on the ground floor. Other days she can be found working in the reactor bay loading experiments into the reactor core or, every so often, changing the reactor core's fuel supply.

One of the most rewarding parts of her job is training new operators to work with the "pool tools" used to manipulate reactor-core components and experiment capsules known as "rabbits."

"The only thing I can compare reactor-pool work to would be playing the board game 'Operation,' but here the board is underwater and 25 feet away from me," Maureen said. "It can be difficult and sometimes frustrating, but I love it."

The Pennsylvania native began her college education in Georgia at the Savannah College of Art and Design and then transferred to the University of Pittsburgh to finish her degree in art and architectural history after graduation, she was intent on applying to graduate school and decided to turn to the military to help with the cost.

Maureen signed on for training as a nuclear electronics technician in 2004 and completed the 12-month training at Nuclear Field "A" School and Nuclear Power School at the Naval Nuclear Power Training Command in Goose Creek, S.C. Upon graduation from power school, she was transferred to the Navy's Nuclear Prototype Command in Ballston Spa, N.Y., for six months to complete her reactor operator training.

"My work as a nuclear electronics technician in the Navy gave me a solid foundation in reactor theory and principles, as well as physics and chemistry, but it could not completely prepare me for my position at HFIR because this reactor is unique and, therefore, different from any I've trained or worked on before," she said.

In her six years of service, Maureen carried out her duties as a nuclear reactor operator on board the USS John C. Stennis, an aircraft carrier based in Bremerton, Wash. During her enlistment, she was able to earn a second bachelor's degree in nuclear engineering technology from Excelsior College.

After six years in the military and a four-year stint in Washington, D.C., working in federal records declassification, a friend at HFIR encouraged Maureen to apply for a position as a nuclear reactor controller.

"Although D.C. is an exciting place to live, the high cost of living, the population density and the traffic were not things I saw myself enduring long term," she said. "I was hesitant to return to the nuclear field because I feared that I had forgotten too much and had perhaps lost my ability to perform well under pressure. When given the chance to interview for the job, I decided that, despite my reservations, I had to take it. That was absolutely the right decision because being hired to work at HFIR was the best thing that could have happened."

Maureen hopes women in STEM fields will continue to debunk stereotypes and would like to see a greater emphasis on education for girls who want to pursue careers in science and technology.

"I think that we as women need to believe more in ourselves and our abilities," Maureen said. "Had I doubted myself, played it safe and refused the opportunity to go into nuclear science, I wouldn't be where I am now." *–Heidi Hill* *****

First trained as a nuclear electronics technician and reactor operator in the U.S. Navy, Maureen Searles has worked on HFIR's operations team since February 2015. (ORNL photo by Genevieve Martin)

Spring nature walks are scheduled in May, June, on Oak Ridge Reservation

Late spring nature walks are scheduled Friday, May 19 and Sunday, June 4 on the Oak Ridge Reservation.

Reservations must be made by calling Tracy Clem, 865-574-5151, bodinetm@ornl.gov.

The May 19 frog calls and bat monitoring event runs from 8 until 10 p.m. as participants will visit some small impounded waterbodies along the Freels Bend causeway.

The June 4 reptiles and amphibians inventory will take place from 1:30 to 4:30 p.m. in Solway Bend.

Participants to each walk should dress in layers, wear sturdy shoes, bring bug spray and water. Most walks are along dirt and gravel trails of about two miles. Service animals are permitted, but must remain under the control of the owner at all times.

More information is available by calling Trent Jett of ORNL's Environmental Sciences Division at 865-574-9188, jettrt@ornl.gov. *–Fred Strohl*

From the Lab Director

I have accepted a new position with Battelle as senior vice president for laboratory operations. I'm privileged to take on the challenges that lie ahead.

The work begins July 1, 2017, so I have a few months of transition before I really say good-bye.

It has been an honor and a pleasure to work with everyone at ORNL. I take great pride in the accomplishments of the lab for our community and nation. I am especially grateful as I look back on the many successes our team has accomplished. During the almost 19 years I have called Oak Ridge home, we have:

- Completed and brought to full scientific operation the Spallation Neutron Source and greeted the 20,000th neutron user to SNS and HFIR.
- Fielded two successive No. 1 supercomputers and brought the power of high performance computing to a wide range of science and engineering problems.
- Revitalized the laboratory infrastructure and recruited and mentored many outstanding new staff.
- Defined a substantial role for ORNL's nuclear enterprise in fission, fusion, isotopes, and nuclear security.
- Developed and demonstrated game changing technologies in support of clean energy and manufacturing and taken those innovations to the private sector.

I know that this team will have many more successes in the future. It is an important benefit of my new role that I will remain connected to the work here.

The UT-Battelle Board of Governors is conducting an open, deliberate search for my replacement. In the meantime, ORNL will not slow its ongoing efforts to solve big problems and support national missions in energy, scientific discovery and national security.

Thomas Mason

Thom

Bob Hightower elected CORRE president

Bob Hightower was elected president and chair of the Executive Committee of the Coalition of Oak Ridge Retired Employees (CORRE) during the organization's annual meeting in October.

Pete Peterson, Dave Whitehead and Gary Whitley were elected vice presidents. Dave Whitehead, also serves as planning committee chairman, and Gary Whitley also serves as legislative liaison chairman. Other officers are Tony Angelelli, secretary; Dave Rupert treasurer; Judy Kibbe, communications; and Dave Mason, past president.

The following were voted to remain on the board of directors and act as chairs of the following: Mike Bradshaw, nomination committee; Bill Brock, Y-12 contractor contacts; Mike Emery, ORNL contractor contacts; Gerald Johnson, NSPS contractor contacts; Pete Peterson, UCOR contractor contacts; Dwight Morrow, information from other DOE sites; Joe McGrory, Ken Moore, Dave Reichle and Bob Sadlowe. New board members are Tom Conley, website chairman; Joe Sherrod, annual meeting chairman; and Brenda Tilley. Bob Worrell remains a CORRE advisor.

If you wish to become a contributing member of CORRE, please forward your check for \$20, which is a one-time membership fee. You should mail the check to: CORRE Treasurer, P.O. Box 4266, Oak Ridge, Tenn. 37831-4266.



ORNL honored with four Federal Laboratory Consortium awards

Four ORNL-developed technologies have earned Federal Laboratory Consortium awards for excellence in technology transfer.

Piranha Text Mining Tool, licensed to Vortex Analytics. Piranha is an agent-based technology to analyze text data with unprecedented speed and accuracy. The software suite enables the evaluation of large volumes of unstructured text-based data across many different formats cost effectively and efficiently.

Open Port Sampling Interfaces for Mass Spectrometry, licensed by SCIEX. This innovation dramatically simplifies mass spectrometry, enabling its wider use. The simplicity of the device allows even novices with the means to introduce unprocessed solid or liquid samples into a mass spectrometer without fear of instrument contamination.

Superhydrophobic Transparent Glass Thin Film Innovation, licensed to Samsung. This transparent glass thin film coating provides glass displays that are extremely water repellant, durable and fingerprint-proof for products such as smart phones and tablets, solar panels, optical components and windows.

Miniature Ion Trap Mass Analyzer, licensed by 908 Devices. This technology takes mass spectrometry to a new level, making it elegantly simple, easy to use and more affordable. 908 Devices products based on the laboratory technology have demonstrated important public safety benefits in law enforcement and hazardous materials detection.

The ORNL technology consists of a highly miniaturized implementation of an ion trap mass analyzer 10 times smaller than conventional scale ion traps. Despite its small size, the device offers the same resolving power as conventional-scale ion trap mass analyzers.





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Ex-ORNL researcher Robinson keynotes Black History Month

Larry Robinson, center, Florida A&M University interim president and former ORNL materials scientist, was the keynote speaker during the laboratory's observance of Black History Month. Robinson praised ORNL for its longtime partnerships with Historically Black Colleges and Universities, such as Florida A&M, and urged for the relationships to continue to grow. Robinson, who worked at ORNL from 1984-97, is also a former assistant secretary of commerce for conservation and management at the National Oceanic and Atmospheric Administration (NOAA). Pictured with Robinson are Neil Giffen of ORNL's Facilities and Operations Directorate and Sally Ross, an ORNL Facilities and Operations intern from the University of Tennessee. (ORNL photo by Jason Richards) *****





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