



U.S. House of Representatives

COMMITTEE ON ETHICS

EMPLOYEE POST-TRAVEL DISCLOSURE FORM Original Amendment

This form is for disclosing the receipt of travel expenses from private sources for travel taken in connection with official duties. This form does not eliminate the need to report privately-funded travel on the annual *Financial Disclosure Statements* of those employees required to file them. In accordance with House Rule 25, clause 5, **you must complete this form and file it with the Clerk of the House, by email at gifttravelreports@mail.house.gov, within 15 days after travel is completed.** Please **do not** file this form with the Committee on Ethics.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

1. Name of Traveler: Ashley Lund
2. a. Name of Accompanying Relative: _____ OR None
 b. Relationship to Traveler: Spouse Child Other (specify): _____
3. a. Dates: Departure: 10/25/22 Return: 10/26/22
 b. Dates at Personal Expense, if any: _____ OR None
4. Departure City: Washington, DC Destination: Knoxville, TN Return City: Washington, DC
5. Sponsor(s), Who Paid for the Trip: Foundation for Nuclear Studies
6. Describe Meetings and Events Attended:
 Visited Oak Ridge National Lab, Ultra Safe Nuclear, and Watts Bar Nuclear Plant where we met with various ORNL and industry professionals to discuss supercomputers, Molten Salt Loop, nuclear fusion, TRISO fuel, the High Flux Isotope Reactor, small modular reactors, and the future of nuclear energy resources.
7. Attached to this form are **each** of the following, *signify that each item is attached by checking the corresponding box*:
 - a. a completed *Sponsor Post-Travel Disclosure Form*;
 - b. the *Primary Trip Sponsor Form* completed by the trip sponsor **prior** to the trip, **including all** attachments **and** the *Additional Sponsor Form(s)*;
 - c. page 2 of the completed *Traveler Form* submitted by the employee; **and**
 - d. the letter from the Committee on Ethics approving my participation on this trip.
8. a. I represent that I participated in each of the activities reflected in the attached sponsor's agenda.
Signify statement is true by checking the box.
 b. If not, explain:

I certify that the information contained on this form is true, complete, and correct to the best of my knowledge.

Signature of Traveler: *Ashley Lund* Date: 11/01/2022

I authorized this travel in advance. I have determined that all of the expenses listed on the attached *Sponsor Post-Travel Disclosure Form* were necessary and that the travel was in connection with the employee's official duties and would not create the appearance that the employee is using public office for private gain.

Name of Supervising Member: Raja Krishnamoorthi Date: 11/1/22

Signature of Supervising Member: *Raja Krishnamoorthi*



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SPONSOR POST-TRAVEL DISCLOSURE FORM

Original Amendment

This form must be completed by an officer of any organization that served as the primary trip sponsor in providing travel expenses or reimbursement for travel expenses to House Members, officers, or employees under House Rule 25, clause 5. **A completed copy of the form must be provided to each House Member, officer, or employee who participated on the trip within ten days of their return.** You must answer all questions, and check all boxes, on this form for your submission to comply with House rules and the Committee's travel regulations. Failure to comply with this requirement may result in the denial of future requests to sponsor trips and/or subject the current traveler to disciplinary action or a requirement to repay the trip expenses.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

- Sponsor(s) who paid for the trip: Foundation for Nuclear Studies
- Travel Destination(s): Oakridge National Lab and Watts Bar Nuclear Plant, Noxville, TN
- Date of Departure: October 25, 2022 Date of Return: October 26, 2022
- Name(s) of Traveler(s): Alexa Bishopric, Abbey Engelman, Ashley Lund, Chris Avila, Austin Flack, John Lee, Chris Ploch
Note: You may list more than one traveler on a form only if all information is identical for each person listed.
- Actual amount of expenses paid on behalf of, or reimbursed to, each individual named in Question 4:

	Total Transportation Expenses	Total Lodging Expenses	Total Meal Expenses	Total Other Expenses (dollar amount per item and description)
Traveler	\$549.12	\$89	\$103.06	
Accompanying Family Member				

- All expenses connected to the trip were for actual costs incurred and not a *per diem* or lump sum payment. Signify statement is true by checking box.

I certify that the information contained in this form is true, complete, and correct to the best of my knowledge.

Signature: LeeAnn Petersen Digitally signed by LeeAnn Petersen Date: 2022.11.01 14:39:34 -04'00' Date: 11/11/2022

Name: LeeAnn Petersen Title: Executive Director

Organization: Foundation for Nuclear Studies

I am an officer of the above-named organization. Signify statement is true by checking box.

Address: 1323 K Street, SE #202, Washington, DC 20003

Email: leeann@foundationfornuclearstudies.org Telephone: 202-744-6077

Committee staff may contact the above-named individual if additional information is required.

If you have questions regarding your completion of this form, please contact the Committee on Ethics at 202-225-7103.



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TRAVELER FORM

1. Name of Traveler: Ashley Lund
2. Sponsor(s) who will be paying or providing in-kind support for the trip:
Foundation for Nuclear Studies
3. City and State **OR** Foreign Country of Travel : Knoxville, Tennessee
4. a. Date of Departure: 10/25/22 Date of Return: 10/26/22
b. Yes No Will you be extending the trip at your personal expense?
If yes, list dates at personal expense: _____
5. a. Yes No Will you be accompanied by a family member at the sponsor's expense? If yes:
(1) Name of Accompanying Family Member: _____
(2) Relationship to Traveler: Spouse Child Other (specify): _____
(3) Yes No Accompanying Family Member is at least 18 years of age:
6. a. Yes No Did the trip sponsor answer "Yes" to Question 8(c) on the *Primary Trip Sponsor Form* (i.e., travel is sponsored by an entity that employs a registered federal lobbyist or a foreign agent)?
b. If yes, and you are requesting lodging for two nights, explain why the second night is warranted:
7. Yes No *Primary Trip Sponsor Form* is attached, including agenda, invitee list, and any other attachments and Additional Sponsor Forms.

NOTE: The agenda should show the traveler's individual schedule, including departure and arrival times and identify the specific events in which the traveler will be participating.
8. Explain why participation in the trip is connected to the traveler's individual official or representational duties. **Staff should include their job title and how the activities on the itinerary relate to their duties.**
This tour will allow me to learn about nuclear technology to inform my work as a Legislative Aide handling climate and energy.
9. Yes No **Is the traveler aware of any registered federal lobbyists or foreign agents involved planning, organizing, requesting, or arranging the trip?**
10. For staff travelers, to be completed by your employing Member:

ADVANCED AUTHORIZATION OF EMPLOYEE TRAVEL

I hereby authorize the individual named above, an employee of the U.S. House of Representatives who works under my direct supervision, to accept expenses for the trip described in this request. I have determined that the above-described travel is in connection with my employee's official duties and that acceptance of these expenses will not create the appearance that the employee is using public office for private gain.

Signature of Employing Member

Date 9/22/22



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PRIMARY TRIP SPONSOR FORM

This form should be completed by private entities offering to provide travel or reimbursement for travel to House Members, officers, or employees under House Rule 25, clause 5. A completed copy of the form (and any attachments) should be provided to each invited House Member, officer, or employee, who will then forward it to the Committee together with a *Traveler Form* **at least 30 days before the start date of the trip**. The trip sponsor should *NOT* submit the form directly to the Committee. The Committee website (ethics.house.gov) provides detailed instructions for filling out the form.

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001. Failure to comply with the Committee's Travel Regulations may also lead to the denial of permission to sponsor future trips.

1. Sponsor who will be paying for the trip:
Foundation for Nuclear Studies
2. I represent that the trip will not be financed, in whole or in part, by a registered federal lobbyist or foreign agent. Signify that the statement is true by checking box.
3. **Check only one.** I represent that:
 - a. The primary trip sponsor has not accepted from any other source, funds intended directly or indirectly to finance any aspect of the trip: **OR**
 - b. The trip is arranged without regard to congressional participation and the primary trip sponsor has accepted funds only from entities that will receive a tangible benefit in exchange for those funds: **OR**
 - c. The primary trip sponsor has accepted funds from other source(s) intended directly or indirectly to finance all or part of this trip and has enclosed disclosure forms from each of those entities.
If "c" is checked, list the names of the additional sponsors:
4. Provide names and titles of **ALL** House Members *and* employees you are inviting. **For each House invitee, provide an explanation of why the individual was invited** (include additional pages if necessary):

See excel sheet provided
5. Yes No Is travel being offered to an accompanying family member of the House invitee(s)?
6. Date of departure: October 25, 2022 Date of return: October 26, 2022
7. a. City of departure: Washington, DC
b. Destination(s): Knoxville, TN
c. City of return: Washington, DC
8. **Check only one.** I represent that:
 - a. The sponsor of the trip is an institution of higher education within the meaning of section 101 of the Higher Education Act of 1965: **OR**
 - b. The sponsor of the trip does not retain or employ a registered federal lobbyist or foreign agent: **OR**
 - c. The sponsor employs or retains a registered federal lobbyist or foreign agent, but the trip is for attendance at a one-day event *and* lobbyist / foreign agent involvement in planning, organizing, requesting, or arranging the trip was *de minimis* under the Committee's travel regulations.
9. **Check only one of the following:**
 - a. I checked 8(a) or (b) above; **OR**
 - b. I checked 8(c) above but am not offering any lodging; **OR**
 - c. I checked 8(c) above and am offering lodging and meals for one night; **OR**
 - d. I checked 8(c) above and am offering lodging and meals for two nights. If you checked this box, explain why the second night of lodging is warranted:



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10. Attached is a detailed agenda of the activities House invitees will be participating in during the travel (i.e., an hourly description of planned activities for trip invitees). *Indicate agenda is attached by checking box.*
11. **Check only one of the following:**
- a. I represent that a registered federal lobbyist or foreign agent will not accompany House Members or employees on any segment of the trip. *Signify that the statement is true by checking box; OR*
- b. *Not Applicable.* Trip sponsor is a U.S. institution of higher education.
12. For **each** sponsor required to submit a sponsor form, describe the sponsor's interest in the subject matter of the trip **and** its role in organizing and/or conducting the trip:
 The Foundation for Nuclear Studies (FNS) was founded in 2000 to educate and inform policy makers and their staff about nuclear energy, science and technology. FNS sponsors 2-4 facility tours per year to help Congressional staff understand how nuclear energy works. This particular trip is to see all the nuclear projects the Oakridge National Lab is working on.
13. **Answer parts a and b. Answer part c if necessary:**
- a. Mode of travel: Air Rail Bus Car Other (specify: _____)
- b. Class of travel: Coach Business First Charter Other (specify: _____)
- c. If travel will be first class, or by chartered or private aircraft, explain why such travel is warranted:
14. I represent that the expenditures related to local area travel during the trip will be unrelated to personal or recreational activities of the invitee(s). *Signify that the statement is true by checking the box.*
15. **Check only one.** I represent that either:
- a. The trip involves an event that is arranged or organized *without regard* to congressional participation and that meals provided to congressional participants are similar to those provided to or purchased by other event attendees; **OR**
- b. The trip involves events that are arranged specifically *with regard* to congressional participation.
 If "b" is checked:
- 1) Detail the cost *per day* of meals (approximate cost may be provided):
 Day one: lunch \$20, dinner \$50; Day two: breakfast \$20, lunch \$20
- 2) Provide the reason for selecting the location of the event or trip:
 Knoxville is where the Oakridge National Lab is located
16. Name, nightly cost, and reasons for selecting each hotel or other lodging facility:
- Hotel Name: Baymont by Wyndham Knoxville City: Knoxville, TN Cost Per Night: \$97
 Reason(s) for Selecting: Affordable and convenient to the LAB
- Hotel Name: _____ City: _____ Cost Per Night: _____
 Reason(s) for Selecting: _____
- Hotel Name: _____ City: _____ Cost Per Night: _____
 Reason(s) for Selecting: _____
17. I represent that all expenses connected to the trip will be for actual costs incurred and not a per diem or lump sum payment. *Signify that the statement is true by checking the box.*



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18. Total Expenses for each Participant:

<input type="checkbox"/> Actual Amounts <input checked="" type="checkbox"/> Good Faith Estimates	Total Transportation Expenses per Participant	Total Lodging Expenses per Participant	Total Meal Expenses per Participant
For each Member, Officer, or Employee	\$408	\$97	\$112
For each Accompanying Family Member			

	Other Expenses (dollar amount per item)	Identify Specific Nature of "Other" Expenses (e.g., taxi, parking, registration fee, etc.)
For each Member, Officer, or Employee		
For each Accompanying Family Member		

NOTE: Willful or knowing misrepresentations on this form may be subject to criminal prosecution pursuant to 18 U.S.C. § 1001.

19. Check only one:

- a. I certify that I am an officer of the organization listed below; **OR**
- b. *Not Applicable.* Trip sponsor is an individual or a U.S. institution of higher education.

20. I certify by my signature that

- a. I read and understand the Committee's Travel Regulations;
- b. I am not a registered federal lobbyist or registered foreign agent; and
- c. The information on this form is true, complete, and correct to the best of my knowledge.

Signature: LeeAnn Petersen Digitally signed by LeeAnn Petersen
Date: 2022.07.20 08:27:38 -06'00' Date: 09/15/2022

Name: LeeAnn Petersen Title: Executive Director

Organization: Foundation for Nuclear Science

Address: 1323 K Street, SE #202, Washington, DC 20003

Email: leeann@foundationfornuclearstudies.org Telephone: _____

INSTRUCTIONS

Complete the *Primary Trip Sponsor Form* and submit the agenda, invitation list, any attachments, and any *Additional Trip Sponsor Forms* directly to the Travelers.

Written approval from the Committee on Ethics is required before traveling on this trip. The Committee on Ethics will notify the House invitees directly and will not notify the trip sponsors.

Willful or knowing misrepresentation on this form may be subject to criminal prosecution under 18 U.S.C. § 1001. Signatures must comply with section 104(bb) of the Travel Regulations.

For questions, please contact the Committee on Ethics at:

1015 Longworth House Office Building
Washington, D.C. 20515

ethicscommittee@mail.house.gov | 202-225-7103
More information and forms available at ethics.house.gov



U.S. House of Representatives

COMMITTEE ON ETHICS

Washington, DC 20515

October 21, 2022

Ms. Ashley Lund
Office of the Honorable Raja Krishnamoorthi
115 Cannon House Office Building
Washington, DC 20515

Dear Ms. Lund:

Pursuant to House Rule 25, clause 5(d)(2), the Committee on Ethics hereby approves your proposed trip to Knoxville, Tennessee, scheduled for October 25 to 26, 2022, sponsored by Foundation for Nuclear Studies.

You must complete an Employee Post-Travel Disclosure Form (which your employing Member must also sign) and file it, together with a Sponsor Post-Travel Disclosure Form completed by the trip sponsor, with the Clerk of the House within 15 days after your return from travel. As part of that filing, you are also required to attach a copy of this letter and both the Traveler and Primary Trip Sponsor Forms (including attachments) you previously submitted to the Committee in seeking pre-approval for this trip. If you are required to file an annual Financial Disclosure Statement, you must also report all travel expenses totaling more than \$415 from a single source on the "Travel" schedule of your annual Financial Disclosure Statement covering this calendar year. Finally, Travel Regulation § 404(d) also requires you to keep a copy of all request forms and supporting information provided to the Committee for three subsequent Congresses from the date of travel.

If you have any further questions, please contact the Committee's Office of Advice and Education at extension 5-7103.

Sincerely,



Susan Wild
Acting Chairwoman



Michael Guest
Acting Ranking Member

SW/MG:mc



**FOUNDATION FOR NUCLEAR STUDIES STAFF TRIP TO
OAK RIDGE NATIONAL LABORATORY AND WATTS BAR POWER PLANT
October 25 & 26, 2022**

Tuesday, October 25, 2022

7:45 AM EST Meet at the airport near the American Airlines check-in area. You will need to check-in upon your arrival at one of the kiosks or counters. You will need a government issued ID.

8:41 AM EST Flight Departs from DCA (American Airlines Flight: 5412)

10:31 AM EST Flight Arrives at TYS

10:45 AM EST Depart for Oak Ridge National Laboratory's Main Campus

11:15 AM EST ORNL Welcome (Building 8600 & 8700) with Linsey Twardy, Protocol Officer

11:30 AM EST En Route to Historic Graphite Reactor (Building 3001)

11:45 AM EST Tour the Historic Graphite Reactor (Building 3001)

12:15 PM EST En Route via summit and Frontier supercomputers

12:30 AM EST Tour the Consortium for the Advanced Simulation of Light Water Reactors (CASL)
(Building 5600 VOCC)

1:00 PM EST En route

1:15 PM EST Working Lunch Time: ORNL Advanced Reactor Technologies

1:45 PM EST En Route

2:00 PM EST Tour the Spallation Neutron Source (SNS) (Buildings 8600 & 8700)

2:30 PM EST En Route

2:45 PM EST Tour the High Flux Isotope Reactor (HFIR) and Radiochemical Engineering Development Center (REDC) (Buildings 7900, 7970 & 7972) with Alan Icenhour, Associate Laboratory Director for the Nuclear Science and Engineering Directorate (NSED)

4:00 PM EST En Route to ORNL Hardin Valley Campus

4:30 PM EST Tour the Manufacturing Demonstration Facility (MDF)

5:00 PM EST Tour National Transportation Research Center



5:30 PM EST Tour Grid Research Integration and Deployment Center (GRID C)

6:00 PM EST Depart for Baymont by Wyndham, 209 Market Pl Blvd, Knoxville, TN 37922

6:30 PM EST Arrive and Check into Baymont Hotel (+ Staffer Hotel Time)

7:15 PM EST Meet in hotel lobby to travel to Copper Cellar (7316 Kingston Pike, Knoxville, TN)

7:30 PM EST Working Dinner Time: TVA's New Nuclear Program Discussion with Tim Rausch, EVP and Chief Nuclear Officer, Tennessee Valley Authority Manager of SMR Technology

9:00 PM EST Depart for Baymont Hotel | End of Day

Wednesday, October 26, 2022

7:30 AM EST Breakfast Window (Baymont Hotel) (+ Staffer Time)

7:50 AM EST Meet in the hotel lobby to check out and board the bus.

8:00 AM EST Travel to Watts Bar Nuclear Plant Training Center

9:00 AM EST Security Processing and Badging

9:15 AM EST Welcome to WBN (Training Center Classroom 19)

- Tony Williams, WBN Site Vice President
- Beth Jenkins, WBN Plant Manager

9:25 AM EST WBN Overview: Key Operations/maintenance team members

9:50 AM EST Break

10:00 AM EST Walk to plant and process through Access Portal

10:15 AM EST Plant tour begins in Outage Control Center

- Secure PPE in Issues Resolution Center and break into tour groups
- Walk past Maintenance shops
- Turbine Building Level 729' - Unit 1 generating equipment and Unit 1/Unit 2 dividing line
- Turbine Building Deck (Walk Unit 1/Unit 2 Turbines/Generators, balcony to see switchyard and cooling towers)
- Exit U2 side of Turbine Building (conditions permitting) and discuss: Multipurpose Building, MODS building, EQB building, Reactor Buildings,
- Tritium Consolidation Building, Spent Fuel Storage Pad, and FLEX Building
- Return to IRC



11:30 AM EST Drop off PPE, exit plant, return to Training Center Classroom 19

11:45 PM EST Lunch, Q/A with WBN leaders, Watts Bar North American Young Generation in Nuclear group

12:45 PM EST Break, prepare for departure

1:00 PM EST Depart from site and travel to TYS

2:15 PM EST Arrive at TYS

4:15 PM EST Flight Departs from TYS

6:15 PM EST Flight Arrives at DC

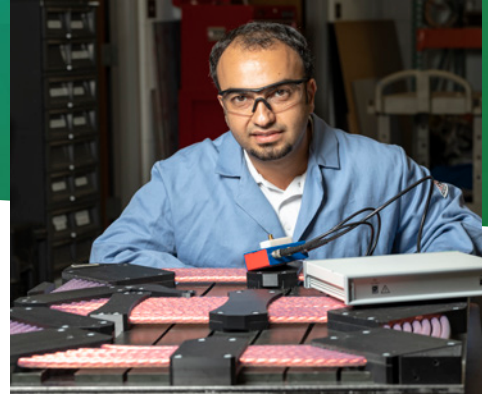
Chris_Avila@coons.senate.gov

Chris	Avila	Sen. Coons	alexav@coons.senate.gov
Alexa	Bishopric	Science Co	alexabishopric@mail.house.gov
Abbey	Engleman	Rep. Lower	Abbey.Engleman@mail.house.gov
Austin	Flack	House Ene	Austin.Flack@mail.house.gov
Lee	John	Rep. Sean	John.Lee3@mail.house.gov
Ben	Kallen	Science Co	ben.kallen@mail.house.gov
Lance	Larson	CRS	LLARSON@crs.loc.gov
Ashley	Lund	Rep. Raja	Ashley.Lund@mail.house.gov
Matt	Murphy	Sen. Cotto	matt_murphy@cott.on.senate.gov
Andrew	Orlebeke	Sen. LA	Marilyn Strickland@chris.ploch@mail.house.gov
Chris	Ploch	Rep. Byron	chris.ploch@mail.house.gov



OAK RIDGE NATIONAL LABORATORY

Energy Science and Technology



The Energy Science and Technology Directorate (ESTD) at Oak Ridge National Laboratory (ORNL) plays a pivotal role in America’s drive toward a flexible, secure, and decarbonized energy future. Our researchers deliver breakthroughs in energy science and technology ranging from generation to distribution, storage, and end use, all in support of US Department of Energy (DOE) priorities. ESTD is intensely focused on developing and demonstrating advanced technologies for at-scale deployment to address the immediate global carbon challenge while performing long-term research and development to enable future technologies at the nexus of energy and security.

ESTD’s researchers draw on the immense scientific and engineering capabilities at ORNL to develop applied solutions to address national energy priorities. Our culture of creativity and innovation in action drives us to partner with some of America’s best innovators, businesses, and academic institutions. This effort is enabled by four unique DOE national user facilities and several collaborative centers within ESTD.

We bring a multidisciplinary focus to some of the biggest challenges in energy, developing new technologies for buildings and transportation, driving innovations to increase US competitiveness in efficient manufacturing, and developing technologies for a flexible and secure future energy grid.



“By utilizing DOE’s national user facilities and our scientific expertise, we’re building a portfolio of world-class applied energy research and technology and leading transformational scientific breakthroughs in clean energy.”

Xin Sun, Associate Laboratory Director, Energy Science and Technology

Our Research

Buildings and Transportation Science—Delivers scientific discoveries to accelerate transformative buildings- and transportation-related technical solutions to ensure a safe, secure, and sustainable energy future

- **Propulsion science**—Drives decarbonized mobility solutions, including electrification and efficient utilization of net-zero carbon fuels with a focus on hard-to-electrify sectors in marine, rail, air, and other off-road applications
- **Vehicle and mobility systems research**—Accelerates development of advanced vehicles and mobility systems through autonomous vehicles, systems integration, and decision science
- **Building technologies research**—Develops and integrates advanced building equipment and dynamic envelope materials to enable affordable, efficient, and resilient buildings

Manufacturing Science—Develops advanced manufacturing technologies through research and scale-up of processes and technical capabilities enabling new materials, systems, and products

- **Composites science and technology**—Develops sustainable advanced fiber and polymer processing to create lightweight structures for multiple applications
- **Energy and industrial decarbonization**—Scales up renewable feedstocks for manufacturing processes to reduce energy use and conducts technoeconomic and life cycle analyses
- **Precision manufacturing and machining**—Designs and implements next-generation manufacturing systems through integration of robotics, automation, controls, and machine tools
- **Secure and digital manufacturing**—Develops a digital manufacturing platform and cyber-secure ecosystem by integrating manufacturing systems enabled by data analytics, process control, and secure communications

Electrification and Energy Infrastructure—Generates innovative capabilities for electric energy devices and systems to improve reliability, sustainability, and efficiencies of energy storage systems, electric grid protections and controls, and power electronics

- **Electrification**—Develops innovative energy storage technology solutions and charging infrastructures at scale for transportation and grid
- **Energy systems integration and controls**—Advances energy systems integration and controls to improve the efficiency and resiliency of systems-of-systems architectures
- **Energy sensing, analytics, and communications**—Creates sensing and communications solutions through advanced sensors, computational sensing, and analytics

By the numbers
2015–2021

1,967 journal publications

767 invention disclosures

243 patent applications

200 issued patents

65 patent licenses

155 cooperative R&D agreements

105 strategic partnership projects

Research Facilities



DOE Manufacturing Demonstration Facility (MDF) houses integrated capabilities that drive the development of new materials, software, and systems for various advanced manufacturing technologies. MDF delivers manufacturing energy efficiency improvements and supports the secure production of clean energy products.



DOE National Transportation Research Center helps industry, academia, and other agencies accelerate the development and deployment of efficient and secure transportation technologies. Research focuses on electrification, emissions reduction, connected and autonomous vehicles, materials, and data and decision science for a decarbonized future.



DOE Building Technologies Research and Integration Center delivers breakthroughs to improve the energy efficiency and environmental compatibility of residential and commercial buildings, focusing on building envelopes, equipment, building systems integration, energy storage, building-to-grid interactions, sensors, transactive controls, and modeling and simulation.



DOE Carbon Fiber Technology Facility (CFTF) provides a platform for evaluating new processing technologies and identifying high-potential, low-cost raw materials including textile, lignin, polymer, and hydrocarbon-based precursors. Leveraging the CFTF's capabilities, ORNL is developing low-cost carbon fiber materials with desired structural properties and co-optimizing feedstocks and processing conditions.



ORNL Grid Research Integration and Deployment Center delivers hardware and software solutions for the grid, including power electronics and battery innovations from concept to deployment, in support of decarbonizing the utility, buildings, and electric vehicle infrastructure sectors while advancing an integrated, secure, and resilient power grid.

CONTACT

Xin Sun
Associate Laboratory Director
Energy Science and
Technology Directorate
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Oak Ridge, TN 37830



www.ornl.gov/estd