

## **National Transportation Research Center (NTRC) User Facility Research Proposal**

Submit completed proposal package to: NTRC User Facility Administrator, Oak Ridge National Laboratory, email: [danielc@ornl.gov](mailto:danielc@ornl.gov), or fax 865-946-1214.

Your proposal package **must include:**

1. Completed proposal form
2. 1-3 page summary of proposed research (see page 7)
3. CV of principal investigator

For more information on capabilities and equipment at the NTRC, see [www.ntrc.gov](http://www.ntrc.gov).

**Title of proposal:**

**Date submitted:**

**Proprietary or Non-proprietary:**

**Be aware that proprietary user projects, if approved, require the user institution to pay full cost for equipment use and technical support staff effort.**

National Transportation Research Center  
is an Oak Ridge National Laboratory  
National User Facility  
sponsored by the Vehicle Technologies Program  
Office of Energy Efficiency and Renewable Energy  
U. S. Department of Energy  
and operated by UT-Battelle, LLC  
under contract DE-AC05-00OR22725

**1. Principal Investigator**—who will be responsible for progress of the project and primary point of contact for all NTRC correspondence.

<b>Name</b>	
<b>Title</b>	
<b>Company or Institution</b>	
<b>Street Address or P.O. Box</b>	
<b>City, State, Zip</b>	
<b>Phone</b>	
<b>Fax</b>	
<b>Email</b>	
<b>Citizenship</b>	
<b>Will PI participate on-site at NTRC?</b>	

**2. Collaborators**—list all users who will be on-site at the NTRC as part of this project, including students, postdocs, and so forth. If more space is needed, attach as an appendix to your research proposal.

<b>Name</b>	<b>Institution and Address</b>	<b>Citizenship</b>	<b>Email</b>

(Note: From the time the proposal is approved and the paperwork is prepared to request clearance into the NTRC, it can take from 2-5 weeks to obtain clearances for non-U.S. citizens. Please factor that into your schedule.)

**3. Contractual Authority**—someone with authority to sign contractual documents on behalf of your organization. If the principal investigator has this authority, you may leave this section blank.

<b>Name</b>	
<b>Title</b>	
<b>Company or Institution</b>	
<b>Street Address or P.O. Box</b>	
<b>City, State, Zip</b>	
<b>Phone</b>	
<b>Fax</b>	
<b>Email</b>	

**4. NTRC User Center where you will conduct the proposed research:**

- Battery Manufacturing Facility
- Fuel Cell Laboratory
- Fuels, Engines, and Emissions Research Center
- Power Electronics and Electric Motors Laboratory
- Material Science Laboratory
- Transportation Analysis and Visualization Laboratory
- Vehicle Systems Integration Laboratory
- Vehicle Cybersecurity Center

**5. Have you contacted an NTRC staff member to discuss the feasibility of your project? If yes, provide contact name.**

**6. State in your own words the reasons that you propose performing this research at the NTRC as opposed to some other facility, that is, what unique aspects of NTRC facilities and/or expertise are required?**

**7. Scheduling**

Propose a specific date to begin work	
Estimate the total number of days that will be needed at NTRC	

**8. Samples and Identification of Hazards**—Provide a brief description of ALL materials (samples, supplies, equipment, and so forth) that you plan to bring into the NTRC User Facility. Include common name and chemical formula if applicable. If none, enter “None.”

**9. Check any boxes below that apply to materials, supplies, or equipment that you will bring into the NTRC facility.** You must attach to this proposal a complete MSDS for any material in the categories designated by \* address detailed safety procedures in proposal text.

No major safety issues	Corrosive*	Toxic*	High-Voltage Electrical
Flammable*	Radioactive*	Explosive*	Cryogenic Hazard
Carcinogenic*	Biohazardous*	Lasers	High Pressure

**Be aware that, if you transport materials to and from the NTRC, you and your home institution are responsible for abiding by ALL appropriate local, state, federal, and international regulations.**

**It is YOUR RESPONSIBILITY to arrange for transport and/or disposal of all materials you bring into the NTRC. NTRC will not store or dispose of any material unless arrangements are made prior to your arrival.**

**10. Does the technology associated with this proposal involve any activities associated with**

Military, spacecraft, satellites, missiles, and/or their associated hardware, software or technical data

Nuclear reactors and components, nuclear material enrichment equipment, components (trigger list) and/or their associated hardware, software or technical data

Encryption above 128-bit software (source and object code)

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Weapons of mass destruction or their precursors (nuclear, chemical and biological)

Use or creation of proprietary technology information, intellectual property, or licensing

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.....P IC

**11. Principal Investigator's Agreement**—signature is not required if the proposal is transmitted by e-mail from the principal investigator

By signing or by electronic submission, I certify that the information provided herein is correct to the best of my knowledge. I agree to

1. Acknowledge the NTRC User Facility in any publications resulting from use of the facility, in accordance with an acknowledgment statement provided by the NTRC User Facility Administrator;
2. Send a copy of resulting publications to the NTRC User Facility Administrator.

**Signature**

**Date**

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**Printed name/title of person completing this form**

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## DESCRIPTION OF PROPOSED RESEARCH

Provide a narrative summary of your proposed research project in a separate document. Limit your description to not more than 3 pages in 12-point font.

Be sure to address the following questions in your proposal.

1. What is/are the main scientific or technical question(s) you plan to address?
2. Describe very clearly and specifically which part of the work is to be done using NTRC facilities. What unique NTRC tools and/or expertise will be needed to carry out which steps, and on what timeline?
3. Define the expected outcomes from the NTRC component. What are the milestones that NTRC contribution must meet in order for the overall project to succeed?
4. What is your specific experience and expertise that will be used in this approach?
5. What preliminary syntheses, measurements, or tests have been performed to validate the research concept?

All proposals will be evaluated using the following criteria, which closely follow those proposed by the International Union of Pure and Applied Physics in its recommendations on the operation of major physics user facilities. The selection of research proposals and the priority accorded to them are the responsibility of the NTRC.

1. Scientific merit
2. Technical feasibility
3. Capability of the research group
4. Availability of the resources required
5. Availability of required capabilities in the private sector

In the space provided below, enter a non-proprietary, publicly releasable description of your proposed research. (This is not included in the 3-page proposal limitation.)