Energy Storage Engine
In Upstate New York

INAUGURAL FELLOW POSITIONS

The NSF Energy Storage Engine in Upstate New York is looking for experienced, collaborative and entrepreneurial battery technology experts to serve as its inaugural Fellows in four areas:

- **Battery Safety**
- **Advanced Manufacturing**
- **Power Engineering**
- **AI for Energy Storage**

Fellows will be hired as consultants at 50% to 100% capacity based on the candidate. All engagements are grant funded with the potential for renewal based on availability of funds. The ideal candidate will be instrumental in driving the development and success of the Engine, with the opportunity to transition into longer-term roles if key milestones are achieved.

Selected candidates will work closely with the Engine leadership team and as a cohort. They may work from the Engine core partner locations specified below or remotely. If remote, there will be required regular onsite engagement at the specified location and at other Engine core partner locations as necessary.

Candidates should have advanced degrees in science or engineering, demonstrated expertise in leading RD&E in an academic, corporate, startup or national lab setting, an established network of industry/ academic/ government partners in energy storage and experience in the specific areas of interest– battery manufacturing, battery safety, power engineering, and AI for energy storage.

Scope of contract and compensation are commensurate with experience.

ABOUT THE NSF ENERGY STORAGE ENGINE IN UPSTATE NEW YORK

The NSF Engines Program represents one of the single largest investments in place-based innovation, positioning science and technology leadership as the central driver for regional economic competitiveness. The Energy Storage Engine in Upstate New York, led by Binghamton University, with core partners Cornell University, Rochester Institute of Technology, Syracuse University, Griffiss Institute, NY-BEST and Launch NY, brings together an unparalleled constellation of resources and infrastructure, premier R&D universities, industry, economic development and community organizations, and government agencies to grow a leading battery technology ecosystem in Upstate New York.

The Engine's mission is to accelerate American battery innovation that will give the US a distinct and secure competitive advantage. Its ambitious ten-year vision is to establish Upstate New York as America's Battery Tech Capital. The Engine's strategy and activities are built on the core pillars of use-inspired and industry driven research, technology translation, workforce development, and infrastructure development. With an active coalition of over 60 cross-sector partnerships, the Engine is establishing an end-to-end battery ecosystem in Upstate New York, connecting key industry stakeholders, supporting domestic development and engineering, facilitating faster transition of innovative technologies, and growing an advanced workforce across the battery lifecycle from materials processing to recycling and recovery.

FELLOW POSITION DESCRIPTIONS

1. NSF Engine Fellow in Advanced Manufacturing

Host Institution: Binghamton University
Scope of Work:

- **Open Innovation Management:** Working with the Engine's RD&T pillar leaders and corporate partners, identify high-priority, high-impact technology challenges related to advanced battery and battery systems manufacturing. Act as an open innovation manager matching corporate partner challenges with the right solution providers (including academia and startups) and enable the creation of formal Engine-supported projects.
- **Technology Leadership:** Working closely with the leadership of Battery-NY, the pilot manufacturing facility in Binghamton, NY, and the Engines RD&T leadership, prepare and deliver a roadmap for next-generation battery production with a specific focus on innovations that improve US competitiveness, address safety, and drive cost and resource efficiency, such as dry processing, and critical materials reduction. Roadmap will be driven based on general industry needs and those of key corporate partners.
- **Partnership Building:** Working closely with the Engine's business development lead, RD&T pillar leadership, and Battery-NY leadership, support the expansion of the Engine's regional and national corporate partner base for the advanced manufacturing focus area.
- **Workforce Development:** Working closely with the Engine's Chief Workforce Development Officer, support the identification and selection of industry challenges and student projects for the Engine's Energy Scholar Hubs.

2. NSF Engine Fellow in Battery Safety

Host Institutions: Rochester Institute of Technology, Binghamton University
Scope of Work:

- **Open Innovation Management:** Working with the Engine's RD&T pillar leaders and corporate partners, identify high-priority, high-impact technology challenges related to battery safety. Act as an open innovation manager matching corporate partner challenges with the right solution providers (including academia and startups) and enable the creation of formal Engine supported projects.
- **Technology Leadership:** Working closely with (i) the Engine's Safety Testbed team at the Rochester Institute of Technology (RIT), to support the development of novel test protocols, industry standards and qualification systems; and (ii) the Manufacturing Team and Battery-NY at Binghamton, prepare and deliver a roadmap for safety focused technologies based on the needs of key corporate and government customers; inform investments in technologies that increase customer acceptance
- **Partnership Building:** Working closely with the Engine's business development lead and RD&T pillar leadership, support the expansion of the Engine's regional and national corporate partner base for the Safety focus area.
- **Workforce Development:** Working closely with the Engine's Chief Workforce Development Officer, support the identification and selection of industry challenges and student projects for the Engine's Energy Scholar Hubs.

3. NSF Engine Fellow in Power Engineering

Host Institution: Binghamton University
Scope of Work:

- **Open Innovation Management:** Working with the Engine's RD&T pillar leaders and corporate partners, identify high-priority, high-impact technology challenges in building power systems for energy storage applications. Act as an open innovation manager matching corporate partner challenges with the right solution providers (including academia and startups) and enable the creation of formal Engine-supported projects.
- **Technology Leadership:** Working closely with the RD&T team, prepare and deliver a roadmap for the Power Engineering focus area of the Engine, based on general industry needs and those of key corporate partners.
- **Partnership Building:** Working closely with the Engine's business development lead, support the expansion of the Engine's regional and national corporate partner base for the Power Engineering focus area.
- **Workforce Development:** Working closely with the Engine's Chief Workforce Development Officer, support the identification and selection of industry challenges and student projects for the Engine's Energy Scholar Hubs.

4. NSF Engine Fellow in AI for Energy Storage

Host Institution: Cornell University
Scope of Work:

- **Open Innovation Management:** Working with the Engine's RD&T pillar leaders and corporate partners, identify high-priority, high-impact technology challenges related to the use and integration of AI in energy storage across the product development cycle from accelerated materials discovery to optimized battery design to enhanced production efficiency to efficient recycling. Act as an open innovation manager matching corporate partner challenges with the right solution providers (including academia and startups) and enable the creation of formal Engine-supported projects.
- **Technology Leadership:** Working closely with the RD&T team, prepare and deliver a roadmap for the AI focus area of the Engine, based on general industry needs and those of key corporate partners.
- **Partnership Building:** Working closely with the Engine's business development lead, support the expansion of the Engine's regional and national corporate partner base for the AI focus area.
- **Workforce Development:** Working closely with the Engine's Chief Workforce Development Officer, support the identification and selection of industry challenges and student projects for the Engine's Energy Scholar Hubs.

NSF | Energy Storage Engine In Upstate New York

LEARN MORE OR APPLY

Interested applicants should submit their resume and cover letter to **NSFEngine@Binghamton.edu**