Center for Clean Energy Materials (CCEM)

Battery Materials Funding Opportunity Announcement (FOA)

FOA issue date	December 16, 2025
Proposal submission deadline	January 20, 2025 at 5 pm MT
Expected selection notification date	January 2025
Contract negotiations and projects begin	February 2025

Please direct questions to <u>s.jones@asu.edu</u>.

1. Funding opportunity description

a. About the Center for Clean Energy Materials (CCEM)

The ASU Center for Clean Energy Materials was established through funding by the US Department of Energy (DOE) to create the capabilities and know-how to accelerate research and development in the production, processing, use, and recycling of critical minerals for batteries. CCEM will strengthen the domestic clean energy materials supply chain through science and technology innovation.

b. Opportunity overview

With this FOA, CCEM is soliciting proposals which seek to develop new pathways to producing critical materials for batteries, reduce the use of critical materials in batteries, test less-critical replacement materials in batteries, and investigate new critical-material recovery methods through battery recycling. These seed projects should result in compelling follow-on proposals for larger awards or partnerships. The seed projects must be 6 months in duration and have a total-direct-cost budget of \$50,000. It is anticipated that 6 awards will be made in response to this FOA.

c. Topics of interest and target outcomes

Proposals are encouraged that carry out research experiments or simulations to design, implement, and test new solutions for reducing or replacing critical materials in batteries or for increasing the supply of critical materials suitable for integration into batteries. Projects may start at low technology readiness level (TRL) and focus on fundamental science or engineering, high TRL and focus on technology translation, or any TRL in between. Projects may begin a new research topic or enhance or expand an ongoing research topic. In all cases, these seed projects should aim to produce impactful publications related to batteries and critical minerals, advance battery technology and reduce dependence on unstable supply chains, and enable follow-on funded projects.

2. Eligibility information

a. Eligible teams

Any team having at least one ASU principal investigator (PI) is eligible. The ASU PI may be in any college, school, or department at the university. Teams may have partners outside of ASU, including at companies, national laboratories, or other universities, but all CCEM funding must be spent at ASU (i.e., the contributions from any non-ASU partners must be voluntary in-kind or cash cost-share).

b. Project duration

Proposed seed projects will be 6 months in duration.

c. Budget

The budget of a seed project must be \$50,000 in total direct costs. An example budget, like that below, includes a nominal amount of summer effort for the PI(s); a part-time GRA and accompanying tuition, materials and supplies; and Core Facility fees. (Most projects are expected to use battery fabrication and analytical equipment purchased by CCEM that is being placed in Core Facilities.) No overhead (F&A) fees are to be budgeted.

PI Effort	[enter % effort based on PI actual salary]	\$
PI ERE	30.4%	\$
GRA Effort	[enter % effort]	\$
GRA ERE	8.5%	\$
GRA Tuition Remission		\$
Materials and Supplies		\$
Core Facility Fees		\$
Total Cost		\$50,000

d. Foreign national participation

ASU must provide DOE with specific information about any foreign nationals working on the project to ensure compliance with the requirements for foreign national participation and access approvals. The volume and type of information required may depend on various factors.

A "foreign national" is defined as a person without United States citizenship or nationality (may include a stateless person). DOE may elect to deny a foreign national's participation in the award. Likewise, DOE may elect to deny a foreign national's access to a DOE site, information, technologies, equipment, programs or personnel. DOE's determination to deny participation or access is not appealable.

Approval for foreign nationals from countries identified on the U.S. Department of State's list of State Sponsors of Terrorism (<u>https://www.state.gov/state-sponsors-of-terrorism/</u>) must be obtained from DOE before they can participate in the performance of any work under this award.

As the amount of time needed to obtain DOE approval for a foreign national is unknown (and approval is not guaranteed), and as these seed projects are limited to 6 months in duration, proposing teams are advised to plan accordingly when designing proposed projects.

3. Proposal submission information

a. Proposal preparation

To prepare proposals for submission, ASU PIs should first complete a proposal intake form or follow their unit's standard proposal intake procedure. PIs should then work with the assigned RA to generate a budget and complete and submit the required proposal documents.

b. Proposal documents

Compliant proposals will include the following two documents:

- Technical volume (use the template on InfoReady), limited to 3 pages
- Budget (work with your RA to complete)

c. Proposal submission

Proposals must be submitted via <u>ASU InfoReady</u> by the date and time specified on the first page of this FOA. **Proposals are** *not* **to be entered into the ASU ERA system.**

4. Proposal review information

a. Review criteria

Compliant proposals will be evaluated based on the following merit review criteria:

- *Alignment with CCEM needs:* The proposed seed project aligns with the CCEM goals, per the first page of this FOA.
- *Potential for impact:* If the seed project is successful, it will result in impactful publications and position ASU to shape and win considerably larger and more comprehensive funding opportunities.
- Approach, plan, and feasibility: The seed project's approach to solving the problem or answering the question is innovative, differentiated from the existing state of the art, and technically sound. The plan to execute the project is clear and well developed, with <u>SMART</u> (specific, measurable, achievable, relevant, and timely) milestones to monitor project progress. The technical risks are identified and the project plan is designed to assess and retire them.
- *Team and stakeholder partner commitment:* The team is qualified to conduct the proposed research and has the capability and resources to complete the project plan.
- *Budget appropriateness:* The proposal is appropriately scoped such that the budget reflects the level of effort and resources needed to complete the project.

b. Reviewers

Proposals will be reviewed and evaluated by at least the Office of Research, Innovation and Entrepreneurship (ORIEN) of the Fulton Schools of Engineering.

c. Award selection

Well-reviewed proposals will be selected for award. The anticipated date for notification of selection is given on the first page of this FOA.

5. Award administration information

a. Project start and end date

Projects are expected to commence at approximately the date given on the first page of this FOA. Nocost extensions will not be granted; all projects will end 6 months after they start.

b. Project deliverables

Awarded project teams must provide a short mid-project written report after 3 months and an end-ofproject written report after 6 months. These reports should describe the seed project goals, progress towards those goals (with supporting data), outcomes (e.g., publications submitted), and next steps.