

A Center for Additive Manufacture of Advanced Ceramics (CAMAC)



Call for Seed Funding – 2nd round!

Research proposals are solicited that address one of the three pillars of the newly formed Center for Additive Manufacture of Advanced Ceramics (CAMAC).

- Materials for ceramic AM
- Ceramic AM processes
- Post-processing of ceramic AM components

Proposals may be submitted by UNC Charlotte, NC State, and NC A&T faculty members. Each project should clearly outline the motivation for the work, the approach, and the expected deliverables. Preference will be given to proposals that address state or national needs, and that offer the potential for pursuing additional external funding. Collaboration with industry is encouraged (though no funds can be transferred to the industrial partner). PIs should refer to the review criteria below in formulating their proposals. Update reports for all seed funding grants will be given at each bi-annual CAMAC meeting during the active life of the grant.

Expected available funding:

Proposal scope and duration may vary in duration, with projects durations of one year favored. Longer maybe considered. Funding is expected to support up to three projects with start dates in August 2022. See the budget section for more details.

Submission deadline

July 11th 2022. Submission details below. To be eligible for funding, proposals must also be presented at the CAMAC proposal meeting on July 26th, 2022. This meeting will be held via Zoom.

Review Criteria

Each seed funding application will be reviewed with respect to the following criteria

Intellectual Merit

- Does the proposal contain creative, innovative ideas that align with one of the three CAMAC pillars (materials, processing, post processing)?
- Is the proposed approach feasible, well conceived, and logical?

Broader Impact

- Does that proposed have the potential to address societal, regional, or national needs?

Potential for Extramural Funding

- Will that proposed support applications for additional funding, commercialization, or improved ceramic AM practices?
- Are targeted follow-on funding opportunities identified within the proposal?

Selection process

The proposal, due July 11th, 2022 must be submitted via email to the center director (bamullan@unc.edu). Proposals will then be circulated to identified external reviewers and the leadership team for review. At the inaugural meeting each PI will have the opportunity to present their

idea followed by a Q&A session (~15 min total per project). The leadership team will then compile the reviewer feedback and rank the proposals. The highest ranked proposals that align with CAMAC mission will be identified and the PIs notified by August 8th. Project start dates are August 2022.

Note: No NDAs will be in place for the July 26th meeting, so be mindful of any sensitive content in your proposal presentation. The written proposals will not be made available for non-reviewers.

Proposal format

The proposal must be clear, readily legible, and conform to the following requirements:

- Minimum font size: 12 points
- Single-line spacing
- 1-inch margin on each side

Cover page (one page)

Contains the project title, 3-5 descriptive keywords, PI and collaborator(s) name and contact information, total funds requested, projected start and end dates.

Project summary (not to exceed 1 page):

Provide a one-page summary of the proposed work that addresses the following:

- A statement of the proposed objectives and methods to be employed.
- A statement regarding the intellectual merit of the proposed activity and the broader impacts of the work.

Project Description (not to exceed 3 pages)

The project description should address the following:

- Motivation and significance of the proposed activities.
- Description of the activities. This includes the methodology, expected outcomes, novel contributions, timeline, and deliverables.
- Broader impact of the work including relevance to industry, state or national needs.
- Potential of the work to support follow-up external grant proposals.
- Research Team: Describe the qualifications, roles, and responsibilities of all research participants

Budget and justification (not to exceed 1 page)

See below for allowable expenses. Note: Typical project totals are about ~\$42/AY (Based on UNCC Student PhD Student rates and 0% F&A).

References (not to exceed 1 page)

Allowable Expenses

- Graduate student support [UNCC – PhDs: Check the compensation package for students, budget 35 hrs per a week during the summer. MSc: compensation package adjusted for tuition and HI (as per compensation package-ask me). NC State and NCA&T will have different student rates.
- Faculty support (summer support ~4k **per project**)
- Materials and supplies to support proposed activities

- Domestic travel.

Unallowable Expenses

- Student tuition or fees (ROI money is State money – them's the rules)
- International travel
- Computers, general office supplies, etc.