



UNIVERSITY OF  
ARKANSAS

**Request for Qualifications – General Contractors**  
**MULTI-USER SILICON CARBIDE NATIONAL FABRICATION RESEARCH LABORATORY**

The University of Arkansas Fayetteville, in accordance with the policies of the Board of Trustees, is soliciting responses from qualified firms to provide general contractor construction management services for a *planning, scope, and budget study* for the *Multi-User Silicon Carbide National Fabrication Research Laboratory (MUSiC Lab)*.

**PROJECT DESCRIPTION**

The university has been successful in competing for national funding for research, development, fabrication, and testing of silicon carbide-based semiconductors. There is growing interest in the application of silicon carbide (SiC) technologies in the industrial, defense, and energy sectors because these materials have the potential to solve very difficult power electronics problems. SiC technologies are at the core of next-generation electric power grid modernization, space exploration, and electric vehicle research and development—including passenger vehicles, heavy equipment, and aircraft.

The proposed *MUSiC Lab* will serve as a decentralized solution to the national instrumentation and knowledge gaps that currently impede progress and ingenuity in researching SiC material and inventing new devices, circuits, and applications. This laboratory will enable discovery of new techniques, theory, and expertise within a united community of industrial and academic SiC researchers. It is intended that the *MUSiC Lab* will leverage national research strengths collectively and advance SiC science and technology to re-establish US leadership in semiconductor fabrication. This facility will provide, for the first time, a digital platform that will enable collaborations, and serve as a central clearinghouse for transformational SiC investigations. The lab's research program will be managed by the University of Arkansas Power Group<sup>1</sup>. The group is an interdisciplinary research group currently comprised of 14 faculty members across four departments in the College of Engineering and the Fulbright College of Arts and Sciences, who constitute the nation's largest power electronics program. The proposed laboratory will be accompanied by a significant ensemble of funding acquired by the academic team from a combination of sponsors to fit out the facility with equipment and staff in order to address a competitive and nationally-relevant set of research goals.

Because the precise nature of the space and technology requirements have not yet been determined, the project will involve a two-phase process. First, the project team—including a professional design consultant and construction manager/general contractor—will work with faculty and administration to develop and define the specific facility requirements necessary for the proposed research, which will

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<sup>1</sup> See more about the University of Arkansas Power Group:  
<https://uapower.group>

include high-performance clean room(s), specialized fabrication equipment, and safety and production process systems. The *planning, scope, and budget study* will validate research requirements, facility program, scope, cost, and suitability of lab locations. The team will evaluate existing lab spaces for adaptive reuse and/or expansion, as well as possibilities for new construction at Arkansas Research and Technology Park<sup>2</sup>. It is likely that the final outcome will be some combination of these. Based on the result of the study, the university may decide that the selected professional design consultant and construction manager/general contractor are suitable for continuation into the design and construction phase, or may choose to begin a new selection process for one or both of the teams.

The total project cost may reach up to \$15 million. General contractors and design consultants will work with a university building committee, an independent third-party commissioning agent, and Facilities Management to advance campus master planning and design principles, as well as sustainability requirements.

### ANTICIPATED PROJECT SCHEDULE

<i>Request for Qualifications (RFQ) issued</i>	<i>September 17</i>
<i>Statement of Qualification (SOQ) due</i>	<i>October 7</i>
<i>interviews of shortlisted firms</i>	<i>November 11</i>
<i>Board of Trustees selection announced</i>	<i>November 18</i>
<i>contract negotiations</i>	<i>November 2021</i>
<i>planning, scope, and budget study starts</i>	<i>December 2021</i>
<i>Board of Trustees review of study results</i>	<i>September 2022</i>

### SUBMISSION

**The deadline for responses is 1:00pm local time on Thursday, October 7, 2021.**

All respondents will be notified of the results by EMAIL, so please provide accurate contact information.

**Address ten (10) copies of responses to:**

John Ross, Construction Coordinator  
University of Arkansas  
Facilities Management Engineering and Construction  
521 S. Razorback Road  
Fayetteville, AR 72701

Statements of Qualification will be reviewed by a selection committee using a standardized *Construction Services Shortlist Evaluation* form. This form is available for download at <http://planning.uark.edu/rfq>.

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<sup>2</sup> See more about ARTP at:  
<https://artp.uark.edu>

**Format requirements:**

Printed responses should be no larger than 8.5in x 11in, limited to **50 sheets maximum (100 pages)**, fully recyclable (i.e. no plastic covers, plastic tabs, etc.) and bound with glue, staples, or thread (i.e. perfect bound, saddle stitching, etc.). No metal or plastic coils allowed. **Responses that do not meet these requirements will be disqualified.**

Please send a digital copy of the response via email to [jrr003@uark.edu](mailto:jrr003@uark.edu) in addition to the printed booklets.

*To avoid potential conflicts of interest, respondents should not communicate with university faculty or staff about this project. This document provides the relevant information for assembling a Statement of Qualifications. If you have urgent questions, you can send them via email to [jrr003@uark.edu](mailto:jrr003@uark.edu).*

**Content requirements:**

Include the information below and organize it in an easily accessible manner. You do not need to divide the response into chapters exactly matching the descriptions below. **Responses that do not include the required licensure information will be disqualified.**

1. Proof of licensure in the State of Arkansas
2. Experience of key personnel in Guaranteed Maximum Price (GMP) and fast-track projects
3. Records of management teams on similar projects with timely completion, and with high quality workmanship
4. Current maximum bonding capacity and rate
5. Current and projected workload
6. **Specific project experience** (within the past five years) with university research laboratories and their programmatic, spatial, and technological requirements
7. **Specific project experience** (within the past five years) with clean rooms housing diverse research and fabrication techniques including semiconductor fabrication, and their programmatic, spatial, technological, and safety protocol requirements
8. Prior experience constructing projects under nationally-recognized sustainable rating systems
9. Prior experience with fully-commissioned projects
10. Owner verification and contact information for previous similar projects
11. Statement of diversity in the workforce, if applicable
12. Certificate of women-owned or minority-owned business, if applicable

**PROFESSIONAL SERVICES REQUIRED**

GUARANTEED MAXIMUM PRICE/FAST-TRACK MANAGEMENT, ESTIMATING, SUBCONTRACTOR SELECTION, PROJECT AND CHANGE ORDER PRICING, DEMOLITION, SCHEDULE CONTROL, COST REDUCTION AND CONTROL, PROJECT COORDINATION, BUILDING INFORMATION MODELING (BIM), CLOSEOUT, AND WARRANTY.

## LOCATION

The study will evaluate existing research space within buildings at the Arkansas Research and Technology Park, as well as locations for possible new construction.

