THE CITADEL

Procurement Services

Bond Hall, Room 244
171 Moultrie Street, Charleston, SC 29409
Procurement@citadel.edu

Requirements Packet
Sole-Source Procurement

Under the South Carolina Consolidated Procurement Code, Section 11-35-1560, a sole source procurement may be used only when there is a legitimate need that only a specific supply or service can meet, when competition is not practicable, and only one vendor can reasonably provide that specific supply or service.

This packet documents and supports a non-competitive procurement under the South Carolina Consolidated Procurement Code (SCCPC) § 11-35-1560 and South Carolina Regulation 19-445. This packet must be fully completed and approved under Memo 2-001 before any purchase, contract, renewal, or obligation of funds occurs.

Each Department must complete section 1 and 2 for each soul-source procurement. Once completed, email this form to: procurement@citadel.edu

1. INFORMATION (DEPARTMENT)

Department: Physics

Requestor Name and Title: Hank Yochum, Professor and Dept Head

Date: 10/28/2026

Vendor Name: Zaber

Goods-or-Services Description: Inverted fluorescence microscope

Contract-or-Agreement Title (if applicable): _____

Estimated Total Cost: $36,566.00

Funding Source / FOAP (include grant title and period, if applicable):
Grant, US Army DEVCOM, ends 12/31/26, index 322316

Period-of-Performance (start-end dates): _____

2. SOLE-SOURCE CRITERIA & JUSTIFICATION (DEPARTMENT)

2A. Sole Source Basis

(Check all that apply and provide explanation where indicated)

- ☐ Only one vendor can provide the required goods or services
- ☐ Vendor possesses unique or proprietary capability
- ☑ Compatibility or continuity with existing systems is required
- ☑ Competing would result in substantial duplication of cost or unacceptable delay
- ☐ Other allowable basis (explain below)

2B. Programmatic or Operational Need

(Explain why this requirement is necessary for instructional, operational, research-based, safety-based, compliance-based, or mission-based needs)

The inverted fluorescence microscope will be used by faculty and students to characterize thin films. An important consideration for the inverted fluorescence microscope is compatibility with our existing Zaber UV-VIS absorbance microscope. We have developed custom software to control that instrument and intend to adapt this software for the fluorescence microscope, including modifications for specific research applications. We also anticipate sharing hardware components between the two microscopes.

2C. Consequences of Not Procuring

(Describe what will occur if this requirement is not fulfilled, including disruption, risk, or non-compliance)

Purchasing a fluorescence microscope from another manufacturer would require additional software development and potentially additional hardware components to integrate it with our existing research systems. This would increase costs and delay implementation of the fluorescence microscope.

2D. Prior Use, Historical Context, and Program Reliance (if applicable)

(Describe any prior use of the goods or services, historical reliance on the vendor or solution, incumbent status, continuity considerations, or programmatic dependency. Include relevant contract history or duration of use, if applicable.)

The department has successfully used Zaber Technologies precision motors and integrated motion controllers in its existing custom-designed robotic dipping and laser patterning system and in the UV-VIS absorbance microscope. Continued use of Zaber components ensures compatibility with the existing hardware, software, and operating procedures while maintaining continuity for ongoing research and student training activities.

2E. Market Research Performed
(Describe what sources were reviewed or compared to determine whether other vendors could meet the requirement)

Our UV-Vis absorbance microscope and custom-built robotic systems, use Zaber Technologies motors, motion controllers, and software interfaces. Compatibility with this existing equipment was identified as a primary requirement for the new fluorescence microscope. Purchasing a microscope from another manufacturer would require additional software development and potentially additional hardware to integrate it with our existing systems. The Zaber fluorescence microscope meets these compatibility requirements and allows us to build on our existing equipment and software without duplicating development efforts.

2F. Description of the Requirement
(Describe clearly what is being purchased. Focus on what the goods or services do - not the brand or the vendor)

The vendor will provide an inverted fluorescence microscope system for optical characterization of thin films, including imaging, positioning, and control components.

2G. Explanation of Sole Source Justification
(Explain in plain language why other vendors cannot reasonably meet the requirement. Avoid vendor marketing language)

The department currently operates a Zaber UV-Vis absorbance microscope and has developed custom software for controlling the instrument. Purchasing a Zaber fluorescence microscope will allow us to adapt this software for the new instrument and share hardware components between the two systems. A microscope from another manufacturer would require additional software development and potentially additional hardware to provide comparable functionality and flexibility. These modifications would increase costs and delay implementation of the new microscope. Purchasing the Zaber fluorescence microscope avoids these unnecessary expenses and maintains compatibility with our existing research equipment.

2H. Supporting Evidence Attached (check all that apply)

- ☐ Vendor exclusivity attestation (vendor letter or signed email)
- ☐ Vendor technical or proprietary documentation
- ☐ Comparison of alternative products or vendors
- ☐ Email confirmations or correspondence
- ☐ Prior solicitations or procurement history
- ☐ Other documentation (describe): _____

Department Head Acknowledgement (Department Submission):

Signature: Henry M Yochum Digitally signed by Henry M Yochum Date: 2026.10.29 15:32:47 -04'00'

Name: Hank Yochum, Professor and Dept Head

Date: 10/28/2026

Sole Source
Written Determination

Agency Identification: The Citadel, Military College of South Carolina (H090)

Description of the agency need that this procurement fulfills: *(See instructions on last page for guidance)*

The inverted fluorescence microscope will be used by faculty and students to characterize thin films. An important consideration for the inverted fluorescence microscope is compatibility with our existing Zaber UV-VIS absorbance microscope. We have developed custom software to control that instrument and intend to adapt this software for the fluorescence microscope, including modifications for specific research applications. We also anticipate sharing hardware components between the two microscopes.

Purchasing a fluorescence microscope from another manufacturer would require additional software development and potentially additional hardware components to integrate it with our existing research systems. This would increase costs and delay implementation of the fluorescence microscope.

The department has successfully used Zaber Technologies precision motors and integrated motion controllers in its existing custom-designed robotic dipping and laser patterning system and in the UV-VIS absorbance microscope. Continued use of Zaber components ensures compatibility with the existing hardware, software, and operating procedures while maintaining continuity for ongoing research and student training activities.

Describe the Market Based on Research Performed: *(See instructions on last page for guidance)*

Our UV-Vis absorbance microscope and custom-built robotic systems, use Zaber Technologies motors, motion controllers, and software interfaces. Compatibility with this existing equipment was identified as a primary requirement for the new fluorescence microscope. Purchasing a microscope from another manufacturer would require additional software development and potentially additional hardware to integrate it with our existing systems. The Zaber fluorescence microscope meets these compatibility requirements and allows us to build on our existing equipment and software without duplicating development efforts.

Sole Source Vendor Name: Zaber

Based upon the following determination, Agency proposes to acquire the supplies, construction, information technology, and/or services described herein from the vendor named above per SC Code Ann § 11-35-1560 and SC Regulation 19-445.2105, Sole Source Procurement.

Description of supplies, construction, information technology, and/or services vendor will provide under the contract: *(See instructions on last page for guidance.)*

The vendor will provide an inverted fluorescence microscope system for optical characterization of thin films, including imaging, positioning, and control components.

Explain why the described solution is the only solution that meets the agency's need and how no other identified solutions were sufficient. *(See instructions on last page for guidance)*

The department currently operates a Zaber UV-Vis absorbance microscope and has developed custom software for controlling the instrument. Purchasing a Zaber fluorescence microscope will allow us to adapt this software for the new instrument and share hardware components between the two systems. A microscope from another manufacturer would require additional software development and potentially additional hardware to provide comparable functionality and flexibility. These modifications would increase costs and delay implementation of the new microscope. Purchasing the Zaber fluorescence microscope avoids these unnecessary expenses and maintains compatibility with our existing research equipment.

Note: *Determination is not complete without required signatures and dates*

Required Signatures:

Prepared by: Henry M Yochum Digitally signed by Henry M Yochum Date: 2026.10.30 14:13:45 -04'00' **Date:** 10/30/2026

Printed Name: _____ **Title:** Prof. and Dept Head

Approved by: Caroline Connolly **Approval Date:** 11/9/26

Printed Name: Caroline Connolly **Title:** Director of Procurement

The last page contains instructions and is not required to be retained.

Sole Source
Written Determination - Instructions

Agency Identification: *(Provide Agency and Number)*

Description of the agency need that this procurement fulfills:
(Do not describe the vendor solution that meets the agency's need. This is often accomplished best by describing the problem the agency is trying to solve.)

Describe the Market Based on Research Performed: *(Enter a description of the market based on research you performed for this procurement including such things as commercially available off the shelf products, vendors providing solutions in the market space, barriers to entry to the market space, benefits and types of customized solutions and how and by whom those solutions are provided.*

- *How were the specifications or scope of work developed?*
- *Will the product be obtained from a third-party vendor or reseller, or the manufacturer?*
- *Will the reseller assist or consult in the implementation?*
- *Length of time and place of delivery?*
- *What types of warranties or other performance guarantees are available in the market?*
- *How and by whom will training be provided?*

Document and retain market research in the procurement workpaper file.)

Sole Source Vendor Name: *(Provide Vendor Legal and dba Name)*

Based upon the following determination, Agency proposes to acquire the supplies, construction, information technology, and/or services described herein from the vendor named above per SC Code Ann § 11-35-1560 and SC Regulation 19-445.2105, Sole Source Procurement.

Description of supplies, construction, information technology, and/or services vendor will provide under the contract: *(Provide a description of the product(s) and/or service(s) identified that will meet the agency's need.)*

Explain why the described solution is the only solution that meets the agency's need and how no other identified solutions were sufficient. *(Provide an informed, objective explanation for the sole source procurement method, including the agency's factual grounds and reasoning as supported by the agency's market research. The agency's explanation should be based on its own conclusions supported by its description of the market space.*

- *Vendor assertions of product differentiation or availability may be obtained as part of market research and are valuable information in the agency's assessment of available solutions, but are not, by themselves, sufficient justification for a sole source determination.*
- *Please do not cut and paste vendor claims, content, or literature in this space.*

Recommend this section be pasted into the required public notice of intent to award without competition.)

Notes:

Authorized Approver signature is the agency head unless the agency head has delegated that authority in writing to someone above the level of procurement officer and provided written notification the MMO.

Approval Date: Sole Source Determinations are required to be approved **prior to contract execution**. The approver should hand write the date at the time of approval.

Drug Free Workplace Act: The agency must obtain a DFWA certification from the vendor if the sole source procurement is $50,000 or greater.

Cost or Pricing Data must be addressed and documented in the file for any sole source procurement exceeding $500,000