Administered by UNIVERSITY OF MAINE SYSTEM
Office of Strategic Procurement

## REQUEST FOR PROPOSALS

# SCANNING ELECTRON MICROSCOPE University of Maine 

RFP \# 04-09

ISSUE DATE:
September 18, 2008

October 9, 2008

DELIVER PROPOSALS TO:

University of Maine System
Office of Strategic Procurement
Attn: Hal Wells
16 Central Street
Bangor, ME 04401

## SECTION ONE

### 1.0 GENERAL INFORMATION:

1.1 Purpose: The University of Maine System acting through the University of Maine is seeking proposals for the provision of a scanning electron microscope (SEM) with energy dispersive spectrometry (EDS), electron backscatter diffraction (EBSD), and live color cathodoluminescence (CL) imaging capabilities to be furnished and installed, as described below.

This Request for Proposals (RFP) states the instructions for submitting proposals, the procedure and criteria by which a vendor may be selected and the contractual terms by which the University intends to govern the relationship between it and the selected vendor.
1.2 Definition of Parties: The University of Maine will hereinafter be referred to as the "University." Respondents to the RFP shall be referred to as "Bidders". The Bidder to whom the Contract is awarded shall be referred to as the "Contractor".
1.3 Scope: Furnish and install an SEM as described for teaching and research use by the Department of Earth Sciences.
1.4 Evaluation Criteria: Proposals will be evaluated on many criteria deemed to be in the University's best interests, including, but not limited to: cost, ability to meet specifications, versatility, ease of use, service, warranty terms, and financial stability of Bidder. The University will measure versatility and ease of use as they relate to the analysis of geological, archaeological, biological, and related materials and as they relate to use of the instrument as a teaching tool.
1.5 Communication with the University: It is the responsibility of the Bidder to inquire about any requirement of this RFP that is not understood. Responses to inquiries, if they change or clarify the RFP in a substantial manner, will be forwarded by addenda to all parties that have received a copy of the RFP. Addenda will also be posted on our web site, www.maine.edu/strategic/upcoming bids.php. The University will not be bound by oral responses to inquiries or written responses other than addenda.

Inquiries must be made to: Hal Wells
Office of Strategic Procurement
University of Maine System
16 Central Street
Bangor, Maine 04401
(207) 973-3302
1.6 Award of Proposal: Presentations may be requested of two or more bidders deemed by the University to be the best suited among those submitting proposals on the basis of the selection criteria. After presentations have been conducted, the University may select the Bidder which, in its opinion, has made the proposal that is the most responsive and most responsible and may award the Contract to that Bidder. The University reserves the right to waive minor irregularities. Scholarships, donations, or gifts to the University, will not be considered in the evaluation of proposals. The University reserves the right to reject any or all proposals, in whole or in part, and is not necessarily bound to accept the lowest cost proposal if that proposal is contrary to the best interests of the University. The University may cancel this Request for Proposals or reject any or all proposals in whole or in part. Should the University determine in its sole discretion that only one Bidder is fully qualified, or that one Bidder is clearly more qualified than any other under consideration, a contract may be
awarded to that Bidder without further action.
1.7 Award Protest: Bidders may appeal the award decision by submitting a written protest to the University of Maine System's Director of Strategic Procurement within five (5) business days of the date of the award notice, with a copy of the protest to the successful Bidder. The protest must contain a statement of the basis for the challenge.
1.8 Confidentiality: The information contained in proposals submitted for the University's consideration will be held in confidence until all evaluations are concluded and an award has been made. At that time, the winning proposal will be available for public inspection. Pricing and other information that is an integral part of the offer cannot be considered confidential after an award has been made. The University will honor requests for confidentiality for information of a proprietary nature to the extent allowed by law. Clearly mark any information considered confidential.
1.9 Costs of Preparation: Bidder assumes all costs of preparation of the proposal and any presentations necessary to the proposal process.
1.10 Debarment: Submission of a signed proposal in response to this solicitation is certification that your firm (or any subcontractor) is not currently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal department or agency. Submission is also agreement that the University will be notified of any change in this status.
1.11 Proposal Understanding: By submitting a proposal, the Bidder agrees and assures that the specifications are adequate, and the Bidder accepts the terms and conditions herein. Any exceptions should be noted in your response.
1.12 Proposal Validity: Unless specified otherwise, all proposals shall be valid for ninety (90) days from the due date of the proposal.
1.13 Specification Protest Process and Remedies: If a Bidder feels that the specifications are written in a way that limits competition, a specification protest may be sent to the Office of Strategic Procurement. Specification Protests will be responded to within five (5) business days of receipt. Determination of protest validity is at the sole discretion of the University. The due date of the proposal may be changed if necessary to allow consideration of the protest and issuance of any necessary addenda. Specification protests shall be presented to the University in writing as soon as identified, but no less than five (5) business days prior to the bid opening date and time. No protest against the award due to the specifications shall be considered after this deadline. Protests shall include the reason for the protest and any proposed changes to the specifications. Protests should be delivered to the Office of Strategic Procurement in sealed envelopes, clearly marked as follows:

## SPECIFICATION PROTEST, RFP \#04-09

1.14 Proposal Submission: A SIGNED original and three (3) copies of the proposal must be submitted to the Office of Strategic Procurement, University of Maine System, 16 Central Street, Bangor, Maine 04401, in a sealed envelope by Thursday, October 9, 2008, to be date stamped by the Office of Strategic Procurement in order to be considered. Normal business hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. Proposals received after the due date will be returned unopened. In the event of suspended University operations, proposals will be due the next business day. Bidders may wish to call (207) 973 -3298 to determine if University operations have been suspended. There will be no public opening of proposals (see Confidentiality clause). Vendors are strongly encouraged to submit proposals in advance of the due date to avoid the possibility of missing the due date because of unforeseen
circumstances. Vendors assume the risk of the methods of dispatch chosen. The University assumes no responsibility for delays caused by any package or mail delivery service.
Postmarking by the due date WILL NOT substitute for receipt of proposal. Additional time will not be granted to any single vendor, however additional time may be granted to all vendors when the University determines that circumstances require it. FAXED OR E-MAIL
PROPOSALS WILL NOT BE ACCEPTED. The envelope must be clearly identified on the outside as follows:

Name of Bidder
Address of Bidder
Due Date
RFP \#04-09
Where possible, all materials submitted should be fully recyclable. Submissions shall be on standard $8.5 \times 11$, letter-sized paper and be clipped together without binding.
1.15 Product Information: The Bidder shall clearly and specifically identify the product being offered and enclose complete and detailed descriptive literature, catalog cuts and specifications with the bid to enable the University to determine if the product offered meets the requirements of the solicitation. Failure to do so may cause the bid to be considered nonresponsive.

## SECTION TWO

### 2.0 GENERAL TERMS AND CONDITIONS:

2.1 Contract Documents: If a separate contract is not written, the Contract entered into by the parties shall consist of the RFP, the signed proposal submitted by the Contractor, the specifications including all modifications thereof, and a purchase order or letter of agreement requiring signatures of the University and the Contractor, all of which shall be referred to collectively as the Contract Documents.
2.2 Contract Modification and Amendment: The parties may adjust the specific terms of this Contract (except for pricing) where circumstances beyond the control of either party require modification or amendment. Any modification or amendment proposed by the Contractor must be in writing to the Contract Administrator. Any agreed upon modification or amendment must be in writing and signed by both parties.
2.3 Contract Validity: In the event one or more clauses of the Contract are declared invalid, void, unenforceable or illegal, that shall not affect the validity of the remaining portions of the Contract.
2.4 Non-Waiver of Defaults: Any failure of the University to enforce or require the strict keeping and performance of any of the terms and conditions of this Contract shall not constitute a waiver of such terms, conditions, or rights.
2.5 Clarification of Responsibilities: If the Contractor needs clarification of or deviation from the terms of the Contract, it is the Contractor's responsibility to obtain written clarification or approval from the Richard Guthrie 207-581-3734.
2.6 Litigation: This Contract and the rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Maine without reference to its conflicts of laws principles. The Contractor agrees that any litigation, action or proceeding arising out of this Contract, shall be instituted in a state court located in the State of Maine.
2.7 Assignment: Neither party of the Contract shall assign the Contract without the prior written consent of the other, nor shall the Contractor assign any money due or to become due without the prior written consent of the University.
2.8 Equal Opportunity: In the execution of the Contract, the Contractor and all subcontractors agree, consistent with University policy, not to discriminate on the grounds of race, color, religion, sex, sexual orientation, transgender status or gender expression, national origin or citizenship status, age, disability or veteran's status and to provide reasonable accommodations to qualified individuals with disabilities upon request. The University encourages the employment of individuals with disabilities.
2.9 Independent Contractor: Whether the Contractor is a corporation, partnership, other legal entity, or an individual, the Contractor is an independent contractor. If the Contractor is an individual, the Contractor's duties will be performed with the understanding that the Contractor is a self-employed person, has special expertise as to the services which the Contractor is to perform and is customarily engaged in the independent performance of the same or similar services for others. The manner in which the services are performed shall be controlled by the Contractor; however, the nature of the services and the results to be achieved shall be specified by the University. The Contractor is not to be deemed an employee or agent of the University and has no authority to make any binding commitments or obligations on behalf of
the University except as expressly provided herein. The University has prepared specific guidelines to be used for contractual agreements with individuals (not corporations or partnerships) who are not considered employees of the University.
2.10 Sexual Harassment: The University is committed to providing a positive environment for all students and staff. Sexual harassment, whether intentional or not, undermines the quality of this educational and working climate. The University thus has a legal and ethical responsibility to ensure that all students and employees can learn and work in an environment free of sexual harassment. Consistent with the state and federal law, this right to freedom from sexual harassment was defined as University policy by the Board of Trustees.

Failure to comply with this policy could result in termination of this Contract without advanced notice.

Further information regarding this policy is available from:

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The University of Maine
Karen Kemble
Director of Equal Opportunity
Alumni Hall
(207) 581-1226
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2.11 Indemnification: The Contractor agrees to be responsible for, and to protect, save harmless, and indemnify the University and its employees from and against all loss, damage, cost and expense (including attorney's fees) suffered or sustained by the University or for which the University may be held or become liable by reason of injury (including death) to persons or property or other causes whatsoever, in connection with the operations of the Contractor or any subcontractor under this agreement.
2.12 Contractor's Liability Insurance: During the term of this agreement, the Contractor shall maintain the following insurance:

## Insurance Type

1. Commercial General Liability
(Written on an Occurrence-based form)
2. Automobile Liability (Including Hired \& Non-Owned)
3. Workers Compensation

## Coverage Limit

\$1,000,000 per occurrence or more
(Bodily Injury and Property Damage)

## $\$ 1,000,000$ per occurrence or more <br> (Bodily Injury and Property Damage)

Required for all personnel
(In Compliance with Applicable State Law)

The University of Maine System shall be named as Additional Insured on the Commercial General Liability insurance.

Certificates of Insurance for all of the above insurance shall be filed with:
Office of Strategic Procurement
University of Maine System
16 Central Street
Bangor, Maine 04401
Certificates shall be filed prior to the date of performance under this Agreement. Said certificates, in addition to proof of coverage, shall contain the standard statement pertaining to written notification in the event of cancellation, with a thirty (30) day notification period.

As additional insured and certificate holder, the University should be included as follows:
University of Maine System
16 Central Street
Bangor, Maine 04401
2.13 Smoking Policy: The University must comply with the "Workplace Smoking Act of 1985" and M.R.S.A. title 22, § 1541 et seq "Smoking Prohibited in Public Places". In compliance with this law, the University has prohibited smoking in all University System buildings except in designated smoking areas. This rule must also apply to all contractors and workers in existing University System buildings. The Contractor shall be responsible for the implementation and enforcement of this requirement within existing buildings.
2.14 Manuals: The Contractor shall provide with each piece of equipment owners manual and/or maintenance instructions and parts lists.
2.15 Condition and Care of Property and Protection of the Work: The Contractor shall continuously maintain adequate protection of all work covered by the Contract from damage or loss and shall protect the property from injury or loss arising in connection with this Contract, and shall make good any such damage, injury or loss. The Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.
2.16 Transportation Charges: Quotations must be F.O.B. Destination. Prices quoted will be considered to include all charges for transportation, packaging, crates, containers, insurance, duty and brokerage charges, etc. necessary to complete delivery.
2.17 Facility Requirements: Special conditions essential to the equipment area must be specified. Appropriate modifications to the area will be the responsibility of the University. Indicate the physical dimension and weight of the largest piece. Floor load requirement must also be indicated.

## SECTION THREE

### 3.0 PERFORMANCE TERMS AND CONDITIONS:

3.1 Contract Administration: The Purchasing Office, Rick Guthrie 207-581-3734 or his designee shall be the University's authorized representative in all matters pertaining to the administration of this Contract.
3.2 Employees: The Contractor shall employ only competent and satisfactory personnel and shall provide a sufficient number of employees to perform the required services efficiently and in a manner satisfactory to the University. If the Contract Administrator or designee, notifies the Contractor in writing that any person employed on this Contract is incompetent, disorderly, or otherwise unsatisfactory, such person shall not again be employed in the execution of this Contract without the prior written consent of the Contract Administrator.
3.3 Payments: Payment will be upon submittal of an invoice to the Purchasing Department by the Contractor on a Net 30 basis unless discount terms are offered. Invoices must include a purchase order number.
3.4 Furnish and Install: The items on this bid will be provided on a Contractor furnish and install basis. The Contractor will have the complete responsibility for the items or system until it is in place and working. Any special installation requirements will be submitted with the bid to the University. All transportation and installation arrangements will be the responsibility of the Contractor. Equipment will be delivered to the installation site at the University of Maine, Room 116 of the Bryand Global Sciences Center.Orono, Maine 04469. Delivery notification must be made to Christopher Gerbi at 207-581-2153 at least 48 (forty-eight) hours prior to delivery. All crating and other debris must be removed from the premises. The Contractor will be solely responsible for correcting damage to premises resulting from the installation process.
3.5 Acceptance Tests: The acceptance tests required to demonstrate that performance specifications can be met must be carried out in exacting accordance with the capabilities as described in the user and technical documentation/operation manual(s) delivered with the equipment or submitted with the bid response. Failure to satisfy this acceptance test may result in rejection of the equipment with no financial obligation incurred by the University. The installing contractor shall be fully responsible for the installation. The installation shall be inspected by representatives of the University and the installing contractor prior to final acceptance by the University.
3.6 Material Safety Data Sheets (MSDS): The Contractor shall provide MSDS sheets for all equipment as applicable.
3.7 Training: Pricing must include complete training for University personnel. Training will include daily maintenance procedures, long-term maintenance practices, and available diagnostic evaluations.
3.8 Group Pricing: The University belongs to or participates in several procurement consortia such as the Educational and Institutional Cooperative Service, Inc. (E\&I), the Massachusetts Higher Education Consortium (MHEC) and U.S. Communities. In addition the System may use State contracts. Bidders are advised to take into consideration these associations when pricing responses to Requests for Proposals.

## SECTION FOUR

### 4.0 PROPOSAL CONTENT:

Bidders shall ensure that all information required herein is submitted with the proposal. All information provided should be verifiable by documentation requested by the University. Failure to provide all information, inaccuracy or misstatement may be sufficient cause for rejection of the proposal or rescission of an award. Bidders are encouraged to provide any additional information describing operational abilities. Responses to each requirement below should be in order and clearly marked with the section number to which they respond.
4.1 Business Profile:
4.1.1 No financial statements are required to be submitted with your proposals, however, prior to an award the University may request financial statements from your company, credit reports and letters from your bank and suppliers.
4.1.2 Please submit with your proposal a detailed history and description of your company.
4.2 Specifications, Features, and Options:
4.2.1 Scanning electron microscope with the following features and specifications:
4.2.1. High vacuum (lower than $10^{-3} \mathrm{~Pa}$ ) and low vacuum (minimum, range $10-2000$ Pa ) capability.
4.2.1.2 Minimum stage movement: 100 mm in X and $\mathrm{Y}, 50 \mathrm{~mm}$ in Z . Stage must also rotate $360^{\circ}$ and tilt $70^{\circ}$ towards EBSD detector.
4.2.1.3 Secondary electron and backscattered electron detectors suitable for the pressure range.
4.2.1.4 Accelerating voltage range minimum of 200 V to 30 kV .
4.2.1.5 Beam current range minimum of 500 pA to $1 \mu \mathrm{~A}$.
4.2.1.6 Resolution better than 5 nm at high vacuum.
4.2.1.7 Specimen holders suitable for a range of geological, biological, and composite materials, including $27 \times 46 \mathrm{~mm}$ and $50 \times 75 \mathrm{~mm}$ thin sections and 25 mm round epoxy mounts.
4.2.1.8 Software login with customizable system access levels.
4.2.1.9 Additional Wehnelt assembly and ten filaments.
4.2.2 Gatan ChromaCL cathodoluminescence system with multi-signal mirror, extended retraction mechanism if necessary, software for data acquisition and analysis, and additional software license for offline data processing.
4.2.3 Integrated EDS-EBSD analysis. Propose system from at least two different vendors,
including Oxford Instruments and EDAX, for instrumentation that meets the following specifications:
4.2.3.1 Ability to use EDS analyses to process EBSD results.
4.2.3.2 EDS and EBSD systems can operate simultaneously.
4.2.3.3 Silicon drift detector for EDS system with MnK resolution of 140 eV or better at $60,000 \mathrm{CPS}$.
4.2.3.4 EBSD camera capable of $>60$ frames per second with $>98 \%$ index rate on Ni .
4.2.3.5 Quantification of EBSD index precision and accuracy.
4.2.3.6 Forward scatter detector(s) on EBSD camera.
4.2.3.7 Touch alarm and auto retraction on EBSD camera.
4.2.3.8 Working distance of 20 mm possible for both EBSD and EDS detectors, with ability to vary EDS working distance to 10 mm or less.
4.2.3.9 Software for data acquisition and analysis that also includes feature and particle analysis.
4.2.3.10 Additional software license for offline data processing.
4.2.4 Additional equipment and software: Bidders must state whether the following are standard with the basic instrument package, included in their proposal as options or unavailable.
4.2.4.1 Peltier or other cooling stage for extended pressure imaging and analysis.
4.2.4.2 Manual user interface (e.g., joystick, knobs, dials) for focus, magnification, and stage movement.
4.2.4.3 Additional license for offline image processing using SEM data headers.
4.2.4.4 Additional software for common geologic analysis tasks (e.g., stage scan with mosaic capabilities to image entire geologic thin section when flat).
4.2.4.5 American Mineralogist EBSD database for both on and offline use.
4.2.4.6 Additional EBSD phosphor screen.
4.2.4.7 Any other significant equipment or free upgrade paths.
4.2.5 Specific Features. For each of the following, state whether the feature is included in your proposal, either in the base package or as an option, and explain or describe as appropriate.
4.2.5.1 Tilt correction and dynamic focus.
4.2.5.2 Split screen viewing in SEM software.
4.2.5.3 Working distance range(s) for EDS and EBSD systems.
4.2.5.4 Stage registration from internal and external images.
4.2.5.5 Number of computers, monitors, keyboards, and mice and nature of their integration.
4.2.5.6 Stage encoders.
4.2.5.7 Location of infrared chamber camera (preference for camera view direction orthogonal to EBSD camera insertion direction).
4.2.5.8 Number and location of vacuum measurements; type of gauge(s).
4.2.5.9 Measurement or estimation of beam current.
4.2.5.10 Field of view at lowest magnification and longest working distance.
4.2.5.11 Chamber access by a door or drawer mechanism.
4.2.5.12 Fixed or retractable BSED detector.
4.2.5.13 Availability of phone support if not under service contract.
4.2.5.14 Port configuration for the CL, EDS, and EBSD systems and the cooling stage.
4.2.5.15 Gas used for pressurizing chamber (e.g., $\mathrm{H} 2 \mathrm{O}, \mathrm{N} 2$, atmosphere)
4.2.5.16 3-D imaging.
4.2.5.17 If port configuration will allow addition of a cryotransfer system at a future date in addition to the detectors requested in this proposal.

### 4.3 Operation and Automation

4.3.1 Lab Management:
4.3.1.1 Specify training options for lab managers. Describe what training is included in proposal on-site at installation, at training centers, or by other methods.
4.3.1.2 Describe on-line help and manuals available to users.
4.3.1.3 Describe automated management features, calibration procedures, and diagnostics.
4.3.1.4 Provide diagram of instrument footprint, including suggested or required buffer space for maintenance access.
4.3.1.5 Describe room conditions required for instrument installation.
4.3.2 Cost of Operation:
4.3.2.1 Specify power consumption of the system during routine operation.
4.3.2.2 Specify the requirements for water cooling and air conditioning of the system
during routine operation.
4.3.2.3 Specify any electrical line conditioning the system may require or any intolerance to interruptions in the power supplies.
4.3.2.4 Specify supplies or components likely to require replacement during routine operation and their approximate costs.
4.3.2.5 Describe after-warranty service costs and service plans.
4.3.2.6 Describe the technical training available to qualified local personnel that may impact long term maintenance of the system.
4.4 Price: Cost of the system and options. The quoted price should be broken down into individual components or systems of components, for both the base unit and options. Use a separate price worksheet. As noted above, price is to be on an F.O.B. Destination basis.
4.5 Delivery Time: State the number of days to delivery after receipt of the order.
4.6 Warranty Terms. Provide warranty information, both on parts and labor, applying to all equipment that may be purchased as a result of this proposal, including units / components not manufactured by the Bidder.
4.7 References: A list of three references is required to be submitted with your proposal. These references should be agencies your firm has done business with in the past three years on projects with a similar scope to this one. Provide company names with contact person and telephone numbers (land line and cell phone, if available) and email addresses.

## SIGNATURE PAGE

COMPANY NAME: $\qquad$

By:
(Signature)
(Print Name)

(Cell Phone)
(E-mail Address)
(Date)

