### Request for Proposal Number 569852

<table>
<thead>
<tr>
<th>Issued by:</th>
<th>Ship To address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battelle</td>
<td>PO#: XXXXXX</td>
</tr>
<tr>
<td>Battelle Boulevard, K9-15</td>
<td>Battelle for US DOE</td>
</tr>
<tr>
<td>P.O. Box 999</td>
<td>790 6th Street</td>
</tr>
<tr>
<td>Richland, WA 99352-0999 USA</td>
<td>Richland, WA 99354 United States</td>
</tr>
</tbody>
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<tr>
<th>Contracts Specialist:</th>
<th>Anticipated Freight Terms: FOB – Destination Allowed</th>
</tr>
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<tbody>
<tr>
<td>Name: Angela N.S. Welke</td>
<td>Equipment shall be delivered FOB Richland, WA – Battelle Site (Destination); all shipping charges shall be included in the total price. Note: If Foreign Shipped Item – FOB Point shall be Richland, WA – Battelle Site (Delivered Duty Paid); all freight, duties, customs fees, freight forwarder fees, and all other taxes shall be included (door-to-door to Richland, WA – Battelle Site) in Offeror's total price.</td>
</tr>
<tr>
<td>Telephone Number: 509/375-2840</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:angela.welke@pnnl.gov">angela.welke@pnnl.gov</a></td>
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<tr>
<th>Proposal Due Date: March 20, 2020 at 4:00PM Pacific</th>
<th>Required Delivery Date: August 31, 2020</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>(PO anticipated to be awarded by March 31, 2020)</td>
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<tr>
<td></td>
<td>Required Installation Completion Date: September 25, 2020</td>
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<tr>
<th>Payment Terms: Net 30</th>
<th>Anticipated Contract Type: Fixed Price</th>
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</table>

#### Offer

We offer to sell the items (or alternate items as specified) at the prices indicated, on the terms and conditions stated and the referenced General Provisions which will be a part of any resulting contract.

**Offeror shall sign and return with the submitted response**

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Telephone Number</th>
<th>Fax Number</th>
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<tbody>
<tr>
<td>Offer Date</td>
<td>Email Address</td>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Signature</td>
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This is a Request for Proposal for two (2) Automation Systems for Electrolyte Formation, Sample Handling and Materials Synthesis. Proposals should be initially submitted on the most favorable price and technical terms which can be offered because of the possibility that award will be made without discussion of proposal received.

In response to this request, a proposal with all information requested shall be provided. Proposals shall include unit and total prices for meeting the stated required delivery date. If unable to meet stated date, offer best delivery date.

**Technical Specifications**

Appendix A outlines the requirements for this solicitation.

**Documentation, Installation, On-Site Training and Acceptance Testing**

A. The Offeror shall furnish two (2) printed copies of instruction manuals, parts lists, complete wiring diagrams, and one (1) copy of the original equipment manufacturers (IEM) instruction manuals. Additionally, the manuals shall be provided in a non-proprietary electronic format. All instruction manuals, parts lists, and wiring diagrams shall be printed in the English language.
B. The Offeror shall provide on-site installation at the Pacific Northwest National Laboratory (PNNL) in Richland, WA with installation to be completed no later than September 25, 2020. All on-site installation technicians/engineers shall take PNNL’s web-based safety training (approximately two hours per person) prior to initiating any on-site work. During the installation of the instrument, the Offeror shall:

- Perform the unpacking and movement of the instrument to its final location. The laboratory will be configured (by Battelle) for the laboratory service requirements (to be provided by the Offeror) of the instrument.
- Check conformity of laboratory and laboratory services required for proper instrument operations as outlined in the manufacturer provided site preparation guide.
- Perform the installation and connection of instrument peripherals.
- Perform the connection of all services to the instrumentation.
- Perform instrumentation start-up.
- Perform tuning and calibration of the equipment to meet specifications.

C. The Offeror shall provide on-site training of the instruments, software, and any third-part functionalities at PNNL for a minimum of two (2) operators for five (5) days (40 training hours). The training shall be provided within thirty (30) days of delivery. Detailed, up-to-date system schematics shall be provided with the training.

D. A full copy of the field engineer’s acceptance testing performance criteria shall be provided. In addition to the Offeror’s standard acceptance testing performance criteria, post installation validation/acceptance testing shall be conducted by the Offeror in accordance with the testing method and criteria included in Appendix C.

Additional Requirement(s)

Offerors shall note that any resulting contract shall include the following additional requirement(s):

**Electrical Equipment for Measurement, Control, and Laboratory Use Clause** *(cl. QA-159 – January 2014)*

The following equipment designed and manufactured for laboratory use at the Pacific Northwest National Laboratory (PNNL) must be approved by PNNL’s Electrical Authority Having Jurisdiction (AHJ):

a. Electrical test and measurement equipment

   This is equipment which by electrical means tests, measures, indicates or records one or more electrical or non-electrical quantities; also includes non-measuring equipment such as signal generators, measurement standards, power supplies, transducers, transmitters, etc.

b. Electrical control equipment

   This is equipment which controls one or more output quantities to specific values, with each value determined by manual setting, by local or remote programming, or by one or more input variables.

c. Electrical laboratory equipment

   This is equipment which measures, indicates, monitors or analyses substances, or is used to prepare materials, and includes in vitro diagnostic (IVD) equipment.

d. Accessories intended for use with the above (e.g. sample handling equipment).

If any of the above equipment is not approved by a Nationally Recognized Testing Laboratory (NRTL), the electrical equipment will be subject to inspection by PNNL’s AHJ to verify the equipment meets the requirements established in UL 61010-1 or an equivalent safety standard used by an approved NRTL agency. Failure of the equipment to meet such safety standards is cause for the rejection of the equipment. Inspection against an approved standard includes but is not limited to the following:

a. General electrical safety

b. Marking and documentation

c. Protection against electric shock

d. Protection against mechanical hazards

e. Protection against the spread of fire

f. Equipment temperature limits and resistance to heat

g. Protection against hazards from fluids

h. Protection against radiation, including laser source

i. Protection against liberated gas, explosion, and implosion
Environment, Safety and Health Requirements

Offerors shall note that any resulting contract shall include the following provision:

Environment, Safety, and Health Requirements - PNNL Work Sites (AHA) *(ci3113a -- Apr 2015)*

A. In performing any work under this contract on property or facilities owned or controlled by Battelle that are identified as PNNL Work Sites (hereinafter "onsite"), the Contractor shall comply with all applicable federal, state and local environment, safety, and health laws and regulations. The Contractor shall also comply with 10 CFR 851, DOE Worker Safety and Health Program, and DEAR 970.5223-1, Integration of Environment, Safety and Health (ES&H) into Work Planning and Execution (Dec. 2000). In order to comply with the requirements of 10 CFR 851 and DEAR 970.5223-1, the Contractor shall be guided by the principles set forth below.

B. The Contractor shall perform work safely and in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The Contractor shall exercise a degree of care commensurate with the work and the associated hazards. The Contractor shall ensure that management of ES&H functions and activities becomes an integral but visible part of the Contractor's work planning and execution processes. The Contractor shall, in the performance of work, ensure that-

1. Line management is responsible for the protection of employees, public, and the environment. Line management includes those contractor and subcontractor employees managing and supervising employees performing work.

2. Clear and unambiguous lines of authority and responsibility for ensuring (ES&H) are established and maintained at all organizational levels.

3. Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities, and shall retain records respecting such competency and qualifications, making them available upon request.

4. Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.

5. Before work is performed, the associated hazards are evaluated and a set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.

6. Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

C. The Contractor, relative to the Statement of Work and contract specifications, shall be able to demonstrate through documentation and work practices that its performance of work under this contract -

1. Fulfilled the scope of work as outlined in this contract

2. Identified and analyzed specific, task-level hazards associated with the work

3. Developed and implemented hazard controls related to the hazards

4. Allowed the performance of work within the controls

5. Provided feedback to Battelle and Contractor employees on adequacy of hazard controls

D. The Contractor shall work in accordance with a DOE-approved Worker Safety and Health Program (also referred to in the DEAR as a Safety Management Plan) as described below:

1. The Contractor shall demonstrate well-established safety protocols applicable to the scope of work and consistent with the required elements stated in this clause. Prior to the initiation of any onsite work, the Contractor shall either-

   a. Accept and incorporate Battelle's PNNL Contractor Environment Safety and Health (CES&H) Manual as its own. The Battelle Contracts Representative can provide a hard copy of the manual upon request. In those cases where the Contractor's onsite activities are limited to an office or meeting environment, with no additional or unusual hazards, the CES&H Manual requirements can be met through review of the Visitor Orientation Pamphlet. Both the CES&H Manual and the Visitor Orientation Pamphlet are available on-line at [http://www.pnnl.gov/contracts/Forms.aspx?area=Procurement](http://www.pnnl.gov/contracts/Forms.aspx?area=Procurement).

   b. Submit its own 10 CFR 851 and DEAR 970.5223-1 compliant Worker Safety and Health Program (WSHP) document to the Battelle Contracts Representative. The Battelle Contracts Representative will coordinate
the review and approval of the program document by DOE. The Contractor will be notified by the Battelle Contracts Representative of the program document’s approval by DOE. Acceptance of the Contractor’s program document will be at the sole discretion of DOE.

2. The Contractor will be provided a completed Acquisition Hazard Assessment (AHA) checklist by the Battelle Technical Oversight Representative prior to initiation of Contractor’s onsite work. The AHA incorporates elements of effective job planning. Elements include identifying: the scope of work to be performed; potential hazards to Battelle and Contractor staff, the public and environment created by the work performed; hazard control methods and mitigation; and mechanisms to evaluate the adequacy of those controls. The AHA is a key control process in the safe conduct of work at Battelle. The Contractor is expected to possess the completed AHA in order to access Battelle property or facilities and initiate work.

E. The Contractor shall perform the following additional hazard identification tasks consistent with an approved WSHP:

1. The Contractor shall be responsible for identifying all potential occupational exposures that its employees and the employees of its lower-tier subcontractors will be exposed to while performing any work under this contract.

2. The Contractor shall assure that its employees and those of any lower-tiered subcontractor are medically qualified to perform work associated with any potential occupational exposures that have been identified. Medical qualification and medical surveillance programs are the sole responsibility of the Contractor. In addition, the Contractor is responsible for maintaining any records associated with the administration of these programs.

3. For each of its employees and each of its lower-tier subcontract employees that the Contractor has identified as having potential occupational exposures that require enrollment in a medical surveillance or medical qualification program, the Contractor shall provide its Occupational Medical provider with the following information:
   a. Current information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic);
   b. Employee job-task and hazard analysis information, including essential job functions;
   c. Actual or potential work-site exposures of each employee; and
   d. Personnel actions resulting in a change of job functions such that a change of hazards, or exposures results.

4. For each of its employees and each of its lower-tier subcontract employees, a copy of the exposure information provided to the Contractor’s occupational medical provider shall be submitted to the Battelle Contracts Representative and approved by Battelle before any of these employees begin work under this contract.

F. The Contractor shall notify the Battelle Contracts Representative immediately of any OSHA-recordable injuries/illnesses, any "off-normal occurrences," or Government property damaged, that the Contractor determines to have occurred in the course of operations onsite and shall furnish such further information as the Battelle Contracts Representative may require. An "off-normal occurrence" is any unplanned or unexpected event, including near misses, or the discovery of a deficiency in a procedure, plan, or system that has real or potentially undesirable consequences to personnel, equipment, facilities, the environment, and/or programs.

G. The Contractor’s onsite ES&H activities will be subject to review by the Technical Oversight Representative of this contract. Other representatives of Battelle may conduct periodic inspections of the Contractor’s equipment, work and storage areas for compliance with the applicable ES&H requirements. The Battelle Contracts Representative will notify the Contractor by a written Notice of Non-compliance of any observed non-compliance with applicable ES&H requirements. The Contractor shall immediately take appropriate corrective action. The Contractor shall advise the Battelle Contracts Representative, in writing, within five (5) working days of the corrective action taken on any safety non-compliance noted on the written Notice of Non-compliance. If the Contractor fails or refuses to correct the safety non-compliance, Battelle may perform, or cause to be performed, the necessary corrective work and unilaterally charge the Contractor for the cost thereof. Such charges will be deducted from payments otherwise due the Contractor under this contract.

H. The Contractor shall promptly evaluate and resolve any non-compliance with applicable ES&H requirements. If the Contractor fails to provide resolution or if, at any time, the Contractor’s acts or failure to act causes substantial harm or an imminent danger to the environment, or health and safety of employees or the public, the
Battelle Contracts Representative may issue an order stopping work in whole or in part and the Contractor shall be liable for the delay and any costs thereby incurred. Any stop-work order issued by Battelle under this clause (or issued by the Contractor to a subcontractor in accordance with this clause) shall be without prejudice to any other legal or contractual rights of Battelle. In the event that the Battelle Contracts Representative issues a stop-work order, an order authorizing the resumption of the work may be issued at the discretion of the Battelle Contracts Representative. The Contractor shall not be entitled to an extension of time, or additional cost or fee, or damages by reason of, or in connection with, any work stoppage ordered in accordance with this clause.

I. Employee Concerns Program

1. The Contractor, its agents, employees or subcontractors, are entitled to use the Battelle Employee Concerns Program and Hotline (509) 375-3999. The Hotline operates 24 hours per day, 7 days a week. Messages may be left anonymously, and all concerns are handled with confidentiality to the maximum extent possible. Employee concerns may also be submitted in writing to the Battelle Employee Concerns Office, Battelle, Pacific Northwest National Laboratory, P.O. Box 999, K1-42, Richland, Washington, 99352, or in person at the Staff Concerns Office, Battelle's Research Operation Building during normal business hours, Monday through Friday 7:30 a.m. to 4:30 p.m.

2. For the purpose of this document, allegations, concerns, and complaints are handled in a like manner and are referred to collectively as "employee concerns." A concern can consist of a declaration, statement, or assertion of impropriety or inadequacy on the part of one's employer or others at a DOE Site that has affected (or threatens to affect) aspects of operations, such as the environment, health, safety, quality, or security, and may include fraud, mismanagement, waste, or abuse of authority.

3. No retaliation or retribution shall be taken toward any individual as a result of filing an employee concern consistent with 10 CFR 708.

J. Civil Penalties and Indemnification

1. The 2002 Bob Stump National Defense Authorization Act amended the Atomic Energy Act by adding section 234C "Worker Health and Safety Rules for Department of Energy Nuclear Facilities." It required DOE to promulgate a worker safety and health rule, published in the Federal Register on February 9, 2006, as 10 CFR 851. It establishes worker safety and health requirements that govern the conduct of contractor activities at both nuclear and non-nuclear DOE Sites. Contractors that fail to comply with the Rule are subject to civil penalties or contract penalties.

2. The Contractor assumes full responsibility and shall indemnify, hold harmless, and defend Battelle, its directors, officers, and employees from any civil or contractual liability under section 234C of the Atomic Energy Act of 1954, as amended, or the implementing regulations, arising out of the activities of the Contractor, its subcontractors, suppliers, agents, employees, and their officers, or directors. The Contractor's obligation to indemnify and hold harmless shall expressly include attorney fees and other reasonable costs of defending any action or proceeding instituted under section 234C or DOE's implementing regulations.

K. Contractor is responsible to ensure that its direct hired and Subcontractor employees who will work on the Site be free of physical or cognitive impairment resulting from the use of alcohol or drugs, including legal drugs, when working or involved in any activity on Battelle/PNNL premises. In order to achieve the federal Drug Free Workplace Act standards, Battelle/PNNL prohibits its non-staff and subcontractors from illegally manufacturing, distributing, selling, possessing, or using illegal drugs, including marijuana, or being under the influence of alcohol while on Battelle/PNNL premises or during PNNL activities. Individuals suspected of being under the influence of any substance, legal or illegal, that may impair their ability to perform their duties are subject to termination of their work agreements and/or having access to the Battelle/PNNL premises revoked. If Battelle, or the Contractor or Subcontractor believes that a Contractor or Subcontractor employee's job performance is being adversely affected by drug or substance (including alcohol) use, Battelle may direct the Contractor to remove the employee. Examples of behavior or circumstances indicating possible drug or substance abuse are observed use, possession, sale or delivery, or credible information that an individual is using suspected of being impaired by drugs or abusing alcohol, or an accident or injury.

L. The Contractor is responsible for its subcontractors' compliance with the ES&H requirements of this contract. The Contractor shall include a clause substantially the same as this clause in lower-tier subcontracts involving work at on property or facilities owned or controlled by Battelle that are identified as PNNL Work Sites. Such subcontracts shall provide for the right to stop work under the conditions described herein.
Contract Contents
Each proposal submitted shall include a statement of acceptance for the following General Provisions:


Insurance
As required in the referenced General Provisions, a valid insurance certificate must be provided prior to any work performed on-site.

Battelle Contracts Representative
The Battelle Contracts Representative, Angela N.S. Welke, is the sole point of contact for any communications or questions regarding this acquisition.

Solicitation Provisions
In addition to the requirements outlined herein, the Solicitation Provisions, Form A-609-SP (November 2014), available at http://www.pnnl.gov/contracts/contractdocuments.aspx apply to this Request for Proposal.

Submission of Proposals
Proposals should be prepared simply and economically, and provide a straightforward, concise delineation of the information required to be furnished. Emphasis should be on completeness and clarity. Elaborate brochures or other presentations are neither required nor desired.

Each proposal submitted should include:

A. Completed Representation - Certification form found at: http://www.pnnl.gov/contracts/contractdocuments.aspx
   - The NAICS code for section A.1 of the Representations and Certifications is 334516
   - The size standard for section A.2 is 1,000. (If a manufacturing NAICS code is used, a wholesale trade or retail trade business concern submitting an offer or quote is categorized as a "nonmanufacturer" and deemed small if it has 500 or fewer employees and meets the requirements of 13 CFR 121.406)

B. A price offer with all information requested herein including the attached Appendix B: Price Proposal.

C. If this proposal is primarily for goods submit a Technical Proposal prepared in a manner consistent with the attached Appendix A dated January 17, 2020. The Technical Proposal shall definitively indicate compliance, paragraph by paragraph, with the requirements outlined in the Specification and shall be supported by cross-referenced documentation as necessary. If an End User License Agreement (EULA) or Software License Agreement (SLA) is applicable to any software proposed, please include with your proposal.

D. Offeror shall provide in their proposal at least two (2) proposed system workflows for solubility determination, e.g. preparing aqueous solutions fully-saturated with soluble organic molecules (often highly colored and up to 2M concentration) and subsequent treatment of the mixture to yield a homogenous mixture, free of undissolved material, and with a final volumetric transfer of the homogenous, saturated solution into a vial.

E. A Small Business Subcontracting Plan in accordance with the General Provision 52.219-9 (if applicable)

F. Three (3) customer references to include the following information:
   - Company Name/Organization Name
   - Contractual Point of Contact
   - Contract/Purchase Order Number and Award Value
   - Description of type of system sold

Proposals shall be delivered to Battelle on or before March 20, 2020 at 4:00PM PST and shall be valid for a minimum of 90 days.

Proposals are to be submitted via Email to angela.welke@pnnl.gov with a subject line that includes the words "Proposal to RFP 569852".

Contract Award (cl 600 -- Aug 2012)
Battelle may evaluate proposals received in response to this solicitation without discussion (initial proposals should contain the offeror's best price and technical terms). Contract award, if any, will be made to the responsive, responsible offeror whose evaluated proposal provides the lowest price after satisfying all the technical requirements of this solicitation.
Battelle may:

A. reject any or all proposals;

B. request clarification of minor irregularities, informalities or apparent clerical mistakes;

C. waive minor irregularities, informalities or apparent clerical mistakes in offers received

D. accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the proposal;

E. award multiple contracts as a result of this solicitation;

F. reject a proposal as non-responsive if the prices proposed are materially unbalanced between line items or sub-line items. A proposal is materially unbalanced when it is based on prices significantly less than prices for some items and prices which are significantly overstated in relation to prices for other items, and if there is a reasonable doubt that the proposal will result in the lowest overall price to Battelle even though it may be the lowest evaluated proposal, or if it is so unbalanced as to be tantamount to allowing an advance payment;

G. conduct site visits to the home or field offices of offerors determined to be in the competitive range (offerors will be notified with the date and time of arrival, an outline of the duration of the visit and any assistant/information required);

H. require oral presentations from any or all offerors, determined to be in the competitive range (offerors will be notified of the time and place for such presentation);

I. request oral and/or written discussions;

J. determine a competitive range, including all proposals that are judged to have a reasonable chance of being selected for award, and negotiate with all offerors within it. (In the event a competitive range is determined, it will be based solely on Battelle's judgment, and Best and Final Offers will be requested at the conclusion of negotiations); or

K. negotiate only with a single offeror to further reduce the price paid if, in the judgment of Battelle after a review of the technical and price offers, only one offeror has a reasonable chance of being selected for award.

Funding is fully obligated for this action. However, contract award is subject to availability of funds at the time of award.