

# Request for Concept Papers

## OVERVIEW

**Purpose:** The Water Quality Research Foundation (WQRF) is issuing this request for concept papers (RFCP) under its research grant program. The grant program allows researchers flexibility for submission of unique study concepts that are topical to WQRF's mission. Concepts with the best likelihood to advance knowledge and the science of high quality, sustainable drinking water will be invited to submit a full concept for funding consideration. **A maximum of two (2) grants will be awarded this cycle.**

**Submission Deadline:** 12/20/2024 by 11:00 AM Central to [foundation@wqrf.org](mailto:foundation@wqrf.org)

**Budget:** Not to exceed \$100,000 of WQRF funds per concept. The applicant may contribute additional resources (cost share, applicant in-kind, or third-party in-kind) to the project award.

### Eligibility Requirements:

- Proposed concept must be within the scope described by WQRF. ***WQRF does not fund technology development-related activities, such as validation testing of new products.***
- Be well-qualified and have experience with POU/POE drinking water treatment technologies
- Have the facilities to accomplish this project

**Format Requirements:** 5-page limit. Instructions provided in [Appendix A](#).

**Award Notification Timeline:** Between 3/31/2025 and 4/30/2025

- The research will start approximately 30 days after award notification depending on the time needed for contract review, unless otherwise mutually agreed upon.

5-page  
limit

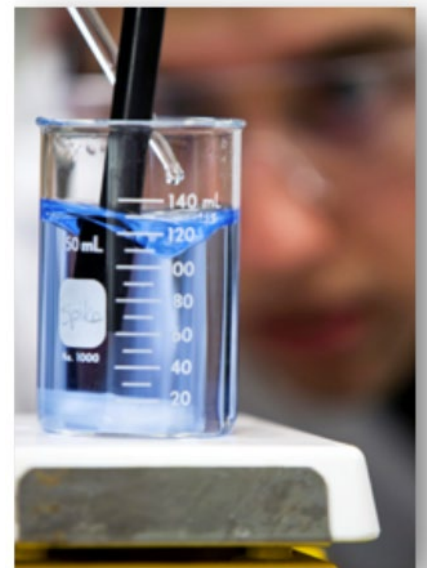


# ABOUT US

## Who is WQRF?

The [Water Quality Research Foundation \(WQRF\)](#), organized as a Section 501(c)(3) non-profit foundation under the Internal Revenue Code, was formed in 1952 to serve as a universally recognized, independent research and education sponsorship organization.

The mission of WQRF is advancing knowledge and the science of high quality, sustainable water. WQRF's vision is water quality improvement through relevant research.



## Our Research Program

WQRF-funded research provides third-party **validity** and **credibility** for the drinking water treatment industry.

Since inception, WQRF has sponsored numerous research studies which have examined a broad range of water chemistry, technology and environmental impact issues. These studies generated essential data on water quality and technology, positively impacted legislative change, and helped advance efficiencies of in-home water treatment technologies.

Additionally, in an effort to position the water treatment industry for the future, WQRF launched its Research Grant Program in 2017. The purpose of the Grant is to solicit and potentially fund unique and interesting ideas from the research community. This allows academic and independent researchers more flexibility for submission of study concepts which are topical to WQRF's mission, bylaws and research agenda.

Research concepts submitted in response to RFCPs are reviewed by WQRF's designated Research Task Force. The Task Force is comprised of WQRF staff and subject matter experts who volunteer their time to WQRF.

It is WQRF's preference that after review and acceptance of the final report, the researcher will seek to publish the study in a peer-reviewed publication.

# SCOPE

The proposed research concept **must** fit into at least one of the following themes:

1. Identifying treatment approaches for emerging contaminants in drinking water (PFAS, microplastics, lithium, microorganisms, etc.)
2. Removing multiple classes of contaminants simultaneously from drinking water

The scope of work **must** include:

1. Sampling for water quality parameters/contaminant(s) in untreated water at the point-of-use (e.g., household faucets, school water fountains, etc.)
2. Installation of [point-of-use and/or point-of-entry \(POU/POE\) water treatment devices](#) for end-users (i.e., outside of the laboratory environment for either private well or municipal water users)
  - a. Treatment devices must be [NSF/ANSI certified](#) to reduce at least one of the target contaminants
    - i. **The manufacturer, brand name and model number of the treatment devices must be anonymized** for the concept paper and any reporting to WQRF, only technical specifications of the devices tested can be included.
  - b. Installations must be conducted by [certified water treatment professionals](#)
3. Sampling for water quality parameters/contaminant(s) post-treatment to assess contaminant removal efficiencies shortly after installation and again several months after installation. The details of the sampling schedule are to be determined by researchers to propose in their concept papers.

**Additional topics of interest to WQRF that are not required to be in the scope include:**

- POU/POEs for Safe Drinking Water Act compliance in small systems
- New treatment approaches for legacy/regulated contaminants
- Economic analyses of sustained operation and maintenance of POU/POEs
- Environmental sustainability
- Social science research on the drivers of adoption and sustained use of POU/POEs

# RESTRICTIONS

**Concepts whose scope fall within any of these restrictions will not be funded.**

*You are encouraged to consult WQRF prior to developing a concept if you are unsure whether your study topic encompasses one of these restrictions.*

1. The concept must be scoped to prevent use of the study to promote or disparage a specific water treatment product model, company/organization or brand name. **It is WQRF's policy that brands, models, and manufacturers are confidential**, only the specifications of the products tested can be included in the report(s).
2. The **research will not be of a type ordinarily expected to be carried on by private enterprises in the ordinary course of research and development**, the testing and inspection of materials or products, particularized market or consumer research or the design and construction of water treatment equipment, products or parts.
3. While WQRF supports the many benefits of product validation evaluation and testing, **WQRF does not fund product development-related activities**, such as validation testing of new products or emerging technologies that are not yet widely available.
  - a. Projects that involve general validation or study broadly the benefits of certain categories of technologies relative to other categories of technologies have been funded only when they were scoped to benefit the entire industry and not to promote a specific product, benefit a specific manufacturer or develop intellectual property.
  - b. Consistent with this policy, WQRF bylaws require that any patents or trademarks owned by WQRF resulting from research they fund shall be made available to the public-at-large on a non-discriminatory basis.
4. **Researchers are prohibited from having a commercial interest in any products or technologies proposed** for inclusion in the research study.



# SELECTION PROCESS

Historically, between 7-12 research concepts have been submitted to the grant program. All concepts meeting the minimum requirements will be reviewed by WQRF's Research Advisory Committee, which is comprised of WQRF staff and subject matter experts. **A maximum of two (2) grants will be awarded this cycle.**

Researchers may be contacted during the selection process to: provide written responses to questions, engage with WQRF at a virtual meeting, and/or consider minor revisions to the proposed methods or deliverables.

The top two concepts selected by the Research Advisory Committee are presented to the WQRF Board of Directors (BOD) for review, due diligence, and a decision on acceptance. If accepted by WQRF's BOD, a full proposal shall be prepared with the intent of finalizing methodology prior to awarding funding. This acceptance is anticipated to occur in March 2025.

WQRF reserves the right to partially fund proposals by awarding portions or phases of proposed projects. If WQRF decides to partially fund a proposal, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the proposal, or portion thereof, was evaluated and selected for award, and therefore maintains the integrity of the competition and selection process.

In addition to reviewing for technical feasibility, submissions will also be evaluated by:

- The team's relevant **POU/POE knowledge and experience.**
- **Budget and timeline compared to scope** of work.
- If applicable - the **scope of work delegated to students compared to any planned training** and oversight.
- **Uniqueness** of the research concept.
  - Most Unique: Fulfills a need that is not currently fulfilled
  - Moderately Unique: Improves current solutions for a challenge
- **Potential impact of the research and outreach deliverables** to the POU/POE industry.
  - High Impact: Addresses a nationwide issue or affects multiple industry segments
  - Moderate Impact: Addresses a region-specific issue, or affects one industry segment
- The proposed **dissemination plan.**

# RESPONSIBILITIES

**In support of an accepted research project, WQRF ordinarily will:**

1. Provide the researcher with any background information needed, such as a list of industry and other interested parties and stakeholders.
2. **Take an active role in the technical review of progress/interim reports and acceptance of the final report.**
3. Track progress and provide any necessary coordination with, and supply technical input from, industry stakeholders.
4. **Provide public access to an executive summary and the full report.** Ordinarily, upon release or publication, the researcher will be permitted to make the report available as best determined.

**The researcher will enter into a research sponsorship agreement with WQRF, the terms of which broadly will include the following commitments from the researcher:**

1. Undertake, manage and perform all aspects of the contracted research and any necessary support activities.
2. Complete the work in a timely manner according to the project schedule.
3. **Engage with WQRF, its Research Task Force and its technical staff and provide responses to WQRF questions relating to progress and coordination, as well as comments on progress/interim reports.**
4. Agree that all intellectual property will be owned by WQRF or perpetually licensed to it without royalty or charge.
5. **Publish the study in a peer-reviewed publication.**

# INTELLECTUAL PROPERTY

Generally, WQRF will own the entire right, title, and interests, including all copyrights and other intellectual property rights, in and to all Project Intellectual Property developed by WQRF personnel. Project Intellectual Property that is jointly developed by the researcher and WQRF personnel will be jointly owned by the researcher and WQRF.

Generally, WQRF will reserve the intellectual property associated with the final report submitted to WQRF, including the copyright thereof, and all rights to distribute the final report. WQRF will make publicly available the research funded and knowledge gained through research, and the researcher ordinarily will be permitted to make available and publish sponsored research and use the knowledge gained to further its own research. However, no research results can be published by the researcher without prior review by WQRF.

**It is WQRF's preference that after review and acceptance of the final report, the researcher will seek to publish the study in a peer-reviewed publication.** Whenever referencing or publishing the study, or information and/or data derived from the study, researchers must cite as its source to the report delivered to WQRF. The study should be submitted for peer-review publication within 6 months from the date that WQRF accepted the final report. WQRF does not commit that the research will be withheld from the public during the 6-month period.

# APPENDIX A - FORMAT

Concepts *must not* be password protected to restrict editing. Upon receipt, WQRF will watermark the concept to identify it as confidential prior to its internal distribution. Concepts should include the following requirements, and if necessary, other sections may be added. Five (5) is the maximum number of pages allowed (references and curricula vitae are excluded from the page limit).

- **Abstract** – Summarize the research project plan, timeline and objectives.
- **Project Rationale** – Concisely state the:
  - Specific objectives
  - Importance to WQRF and the POU/POE water treatment industry
  - Current state-of-knowledge regarding the proposed project
  - Potential impact upon successful completion
- **Methodology** – Briefly describe the proposed experiment(s), including any equipment (but excluding manufacturer information and POU/POE brand or device names) and the methods which will be used. Address how you will collect and analyze data, normalize the findings, and present the results.
- **Deliverables** – Describe all the deliverables that you will be providing for this work. The **required deliverables** for this project are:
  - **Ongoing research progress reports** – Note that for each progress report, WQRF will organize a virtual meeting during which the researchers are asked to present the progress made and respond to questions from WQRF.
  - **Drafts of the final report and a 1–3-page executive summary** – The executive summary is a stand-alone document intended to summarize the purpose, methods, findings of the research, and future research opportunities identified. The information and data included in the executive summary must be readily understood without referring to the full report. The WQRF Task Force will provide technical review of the drafts of the final report and the executive summary.
  - **The final report and executive summary documents**

Additional deliverables might include raw data, articles in an industry magazine, infographics, a workshop, an interactive data tool, conference presentations, webinar presentations, etc.

- **Timeline** – Download the [template](#), edit it based on the requirements described below to fit your specific project timeline, and incorporate the table into the concept paper.
  - The total project timeline **shall not exceed 2 years** from the start date.



- Include an invoicing schedule along with your timeline that includes the upfront payment amounts due at the start of the project and an ongoing payment schedule. **All invoices must be linked to a deliverable or scientific milestone.**
  - Allocate up to 10% of the budget for the start of the project.
  - At least 15% of the project cost **must** be associated with the delivery of the final report and executive summary.
  
- **Dissemination plan** – Describe how the results will be communicated to the appropriate audience(s) and include an estimated timeframe for completing the dissemination plan (use the timeline template linked above).
  
- **Budget** – **Total budget shall not exceed \$100,000 of WQRF funds.** At a minimum, the budget should be segmented into the following categories (as applicable): Salaries, Fringe Benefits, Tuition Reimbursement, Equipment (including materials & supplies), Travel, Subcontract Fees, and Indirect Costs (F&A). **It is WQRF's policy that indirect costs shall not exceed 13% of total direct costs ([see Appendix B](#)).**
  
- **OPTIONAL SECTION: Future Opportunities** – Describe efforts that are beyond the scope of this project, but could be completed with potential future funding to address a known data gap, and/or further the impact of the current proposed research project.
  
- **Potential conflict circumstances statement and disclosure of any additional organizations who would potentially contribute to this project** – Include a statement reporting any direct or indirect facts or circumstances which could potentially create a conflict of interest. For example, if the results of proposed study could further the interests of a company with which the researcher or the research organization has a financial interest or relationship (including any contractual agreement or practice to provide testing, certification, consulting or other services (or is negotiating such an agreement), that is to be disclosed as a potential conflict circumstance. WQRF will have final authority in its sole discretion over whether a potential conflict circumstance represents a disqualifying Conflict of Interest. Please also disclose the name(s) of any organizations who you have contacted to potentially contribute to this project (in-kind or monetary contribution).
  
- **Credentials and qualifications** – In this section, please include the names, qualifications, previous POU/POE experience, and curricula vitae of primary and supporting investigators involved in this project.
  
- **Project management** – Address the following, where applicable:
  - Frequency that the project team will meet
  - Primary responsibilities of each team member/student
  - Responsible party for reviewing the work before submission to WQRF
  - Number of undergraduate, graduate, and/or doctoral student(s) needed
  - Student recruitment process and ideal timeline
  - Student training and oversight plan
  
- **References** – Cite any references used to develop the content for the concept.

# APPENDIX B - INDIRECT COSTS

## Indirect Costs Policy

Indirect costs shall not exceed 13% of total direct costs. The purpose of this policy is to keep costs associated with project outcomes (direct costs) the primary use of funding, as opposed to funding going towards expenses related to the general business of the funding recipient (indirect costs). Examples of indirect costs include rent, utilities, personnel of general administration (IT, HR, Legal), or other costs that would exist with or without the existence of the project WQRF is funding.