



José María Correa #23A  
Colonia Santa Cecilia  
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[www.caminosdeagua.org](http://www.caminosdeagua.org)

**Position:** Project Engineer - Groundwater Treatment System (GTS)  
**Net compensation:** 12,000-15,000 pesos MXN per month  
**Type:** Full time  
**Duration:** Minimum commitment 3 years  
**Reports to:** Technology Research and Development Coordinator  
**Location:** San Miguel de Allende, Gto.  
**Start date:** January 2024

**Apply by: November 30, 2023**

### **Caminos de Agua- Organizational Description**

The mission of Caminos de Agua (Caminos) is to improve the health and well-being of the community through adequate and affordable access to clean water. We develop, design, and implement water solutions for communities at risk in our watershed in Central Mexico, and leverage these solutions for others facing similar water challenges around the world. We work with local communities, grassroots organizations, leading research institutions around the world, governments, and other stakeholders to innovate and implement water solutions that facilitate adequate access to safe and healthy water supplies.

Our main programs include: the monitoring of water quality, development of water technologies, including [Aguadapt](#) and the [Groundwater Treatment System](#) (GTS), the community application of water and sanitation solutions (for example, rainwater harvesting systems and ecological dry toilets), educational materials, and collaboration and networking to drive systemic change.

We are a mix of Mexicans and immigrant residents, technologists and community organizers, investigators and educators, united by our commitment to public health and welfare. Caminos de Agua is a registered 501(c)(3) non-profit organization in the United States, as well as a Mexican Civil Association (A.C.).

### **Job Description - Project Engineer - Groundwater Treatment System (GTS)**

The Project Engineer - GTS will work with the Technology Research & Development Team. We are seeking an individual who can lead the technological development and implementation of our community arsenic and removal systems, GTS. This job requires an individual who is committed to the mission of Caminos de Agua and who shares the principles of the organization.

Reporting of hours and work will be directly communicated with the Research and Technological Development Coordinator. Close communication is expected with the Technology Director and the Community Implementation and Education team, including the GTS socio-technical promoter, who directly coordinates the community implementation of the systems.



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## Primary responsibilities

- Execute the technical process of the design and implementation of the GTS:
  - Perform the design and technical documentation of the systems;
  - Coordinate and perform water quality analyses (internal and external);
  - Communicate with technical advisors (national and international);
  - Coordinate logistics during the construction and implementation of the technology; including the purchase and delivery of materials and the inspection of the facility;
  - Monitor the performance of the system and ensure that it complies with relevant Mexican regulations
- Participate in social processes with the community implementation team:
  - Participate in decision-making that influences the operation and design of the system;
  - Design and support the implementation of technical training for the community groups that will operate the systems, taking care of the process of appropriating the technology;
  - Attend and support community meetings to support the community organizing process to ensure the successful implementation of GTS;
  - Support the technical assessment process to ensure the viability of future community systems;
  - Support in the development of tools for the dissemination and communication of technology to the community.
- Research and optimize processes used for design and implementation:
  - Conduct research and lead laboratory experiments to improve and optimize processes and use of technology, including bone charcoal regeneration;
  - Participate in the review of the organization's implementation strategy with field experience.
- Participate in and support the technical team with other activities as needed and appropriate (analysis of water samples, laboratory management, monitoring and evaluation, programming, etc.).

## Skills and required abilities

- Undergraduate degree (or higher) in the sciences or engineering (with experience in subjects related to water and/or systems of water purification)
- Knowledge and/or experience in the design of gravity water treatment systems
- Basic comprehension of chemistry
- Experience with experimental design and analysis of basic statistics
- Ability to create technical drawings (with CAD software)
- Aptitude with Microsoft Office, including expertise in Excel



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- Languages: Spanish or English
  - Mastery of one: native speaker or advanced level (TOEFL>100, CEFR or DELE C2, etc.)
  - Intermediate level in the other language: TOEFL>72, CEFR or DELE B2 or above, etc.
- Driver's license, driving automatic and standard cars
- Ability to carry out an abstract task and work independently
- Demonstrated skills to solve problems and challenges that arise
- Ability to structure, prioritize, and develop plans to work in relation to objectives
- Ability to work with a multidisciplinary and international team
- Respect diversity of gender, visions, and culture
- Dedication to technological development for social justice

#### **Skills and desired abilities**

- Previous work in the field with rural communities
- Ability to facilitate groups
- Basic comprehension of domestic electrical work
- Ability and willingness to perform manual labor (construction/plumbing/electricity)
- Programming experience
- Previous work in a laboratory
- Experience developing and/or working with absorbents for water treatment

**To apply:** Send a cover letter and CV to [alexandra@caminosdeagua.org](mailto:alexandra@caminosdeagua.org) and [matthieu@caminosdeagua.org](mailto:matthieu@caminosdeagua.org)

*Caminos de Agua is an equal opportunity employer that offers equality of opportunities and all qualified applicants will be considered for the position without discrimination on the basis of race, religion, sex, sexual orientation, gender identity, nationality, disability, veteran status, or any other characteristic protected by law in Mexico or the US.*