



## **JOB DESCRIPTION: CHEMISTRY FELLOW/CONSULTANT**

**Company:** EarthEnable

**Reports to:** R&D Project Manager

**Timeframe:** 3 to 6 months

**Compensation:** Modest

**Location:** Rwanda, Uganda, or remote

### **Who We Are**

At EarthEnable, we believe that our clients deserve our very best, that morning high-fives are the best way to start the day, and that the best ideas could come from any part of the company. We celebrate each other's wins, learn from our setbacks, and are deeply proud of the impact we make every day. We believe that a clean, dust-free floor means more than living in a healthy home. It means pride and dignity in the place our customers most treasure: their homes. Being a part of our team means more than building floors: it means building an organization and building a better future for rural families

### **What We Do**

EarthEnable is transforming the way people live, by making homes healthier for families across rural Rwanda and Uganda. 80% of Rwandans and Ugandans live in homes with dirt floors which are dusty, unsanitary, and fertile breeding grounds for parasites and germs. While replacing a dirt floor with concrete has significant health benefits (e.g. reducing diarrhea by 50% and parasitic infections by 80%), concrete is unaffordable for many who need it.

EarthEnable addresses this pressing and ubiquitous problem by selling high-quality, earthen floors that are 80% cheaper than concrete with 90% less embedded energy. Earthen floors are prevalent in modern homes in the United States and are composed of natural materials (gravel, clay, sand, and laterite). EarthEnable trains and hires local masons to install the floors which are sealed using a proprietary drying oil that makes them waterproof, strong, and polished.

### **About the Role**

The Chemistry Fellow/Consultant will lead research efforts to improve our existing flooring product to improve the health and livelihoods of rural communities. He or she will be primarily project-based working on 2-3 key improvements primarily to our varnish.

The responsibilities of this role will include, but certainly not be limited to:



### Develop Research Agenda

- Create work plan around 2-3 key outputs decided upon by the management team
- Allocate resources from the R&D budget towards this pipeline of research projects

### Execute Against R&D Agenda

- Create research protocols, and ensure rigorous execution and analysis
- Execute against key outputs for varnish improvement
- Track and push forward multiple research projects simultaneously
- Develop partnerships with external stakeholders (e.g., partnerships with universities and corporate bio-resin and flooring labs for research we cannot do-in-house) to outsource aspects of our R&D

### Communicate Across Internal Company

- Communicate findings and tradeoffs effectively to CEO and management team to make decisions about where to invest next (e.g. at specific forks in the road)
- Communicate research agenda to full company and get feedback when appropriate
- Communicate research findings to full company along with accompanying changes to the operation

### Transition Learnings to Implementation or Additional Research

- Transition unsuccessful experiments to a new research arm or document reasons for failure
- Transition successful experiments to implementation, partnering closely with Quality Assurance and Operations departments to ensure smooth implementation

### Qualifications

- 3+ years work experience in chemistry
- Master's degree in paint formulation chemistry, polymer chemistry, materials science, or another applied science (PhD preferred)
- Ability to be creative, strategic, analytical, and think outside the box to solve problems for our customer base
- Ability to work independently
- Excellent attention to detail, commitment to excellence, and outstanding work ethic



- Flexible and adaptable to changing environments; thrives in a bootstrapped culture
- Optimistic attitude, entrepreneurial spirit, curiosity to learn new things
- Ability to work on a variety of tasks at the same time, and keep track of a variety of workstreams
- Humble and patient team-player with a sense of humor

Apply online at <http://www.earthenable.org/applynow>. In your cover letter, please state what excites you most about this role, and what you think will be most challenging about it.