

Research Assistant

Location: Dominican Republic

Project Vesta is a USA-based company and research organization with a mission to remove billions of tons of excess atmospheric carbon dioxide through Coastal Enhanced Weathering (CEW) of olivine. Enhanced weathering is a nature-based negative emission approach that accelerates the weathering rate of naturally occurring silicate minerals. When ground to the size of beach sand, olivine weathers thousands of times faster than would naturally occur in ultramafic rocks, leading to significant CO₂ sequestration from the atmosphere on human timescales. Project Vesta currently employs 10 full-time scientists and engineers including 8 Ph.D. level researchers in geochemistry, oceanography, and ecology. We are conducting laboratory, mesocosm, and pilot experiments at locations across the USA and internationally to determine if CEW can be a safe, effective, and affordable means of permanently sequestering excess atmospheric CO₂.

Job Description

For the Vesta Research Station (VRS) in the Dominican Republic, Project Vesta is searching for one or more **research assistants**. The position focuses on assisting the Project Vesta scientific staff with executing field work, setting up and running experimental mesocosm setups, conducting experiments, sample sorting and post-processing, gathering and curating data, reporting, literature review and generally assisting in the day-to-day science-related work.

During typical work days, the candidate collects, edits, processes, and coordinates research data in support of a specified research study or group of studies. The candidate arranges and conducts field studies as appropriate to the scientific work, and records research data in accordance with specified protocol and procedures. For collecting field data, the candidate travels to various sites within a specified geographical area, as appropriate to the objectives of the study, as well as replicating the field sampling in a mesocosm experimental setup at the research station.

Position requires: a) accompanied and independent travel to remote field sites; b) use of established research protocols, procedures, and techniques to collect and/or prepare field data, samples, specimens, materials, and/or media; c) following detailed protocol and procedures in the recording, processing, and routine analysis of field data; d) setting up and operation of relevant research equipment.

We see the ideal candidate as having a “no task too small” mentality, we are team working together on a focused mission. The **most important attributes** we are seeking in the ideal candidate is **being a motivated problem-solver, eager to learn new things, and works wonderfully as part of a team**. The candidate will work with and for the scientists, be in the field, problem solve, and challenge themselves.

Apart from being keen, the candidate should be mentally and physically able and mainly willing to assist in the large amount of work that needs to be done to move this Project forward. The work will regularly (several days per month) take place in the field, and with fieldwork comes (intermediate) physical effort. However, fieldwork days may start (very) early and continue until (very) late.

The responsibilities of this position include:

- Travels to field sites to collect and record data and/or samples as appropriate to the specific objectives of the study.
- As appropriate to the specified study, codes and verifies data in accordance with specified research protocol and coding procedures, and enters data into a computer database and/or spreadsheet application for subsequent analysis.
- Develops or assists in the development of sampling schedules; sets up and maintains experimental setups.
- Identifies and compiles lists of potential research subjects in accordance with study objectives and parameters, as appropriate to the individual position.
- Conducts and records field and/or mesocosm sampling, and/or laboratory analyses, in accordance with predetermined interview protocol, data collection procedures, and documentation standards.
- Reviews and edits data to ensure completeness and accuracy of information; follows up with scientific staff to resolve problems or clarify data collected.
- May set up, calibrate, and maintain laboratory and/or field research equipment, as specified by the requirements of the study.
- May lead or guide the work of student employees.
- Performs miscellaneous job-related duties as assigned.

The ideal candidate can easily fulfill the responsibilities of this position described above and has the following qualities and experience:

Personal

- A deep sense of dedication to combating the climate crisis.
- Ability and passion to learn quickly and solve challenges independently and creatively.
- A commitment to harmonious and productive collaboration.
- Professionalism under all circumstances.
- Meticulous attention to detail in planning and procedure.
- Enthusiasm for the Project Vesta mission and ethos.
- Dedication to fair and equitable treatment of all individuals on the team.
- Excitement and enthusiasm to assist in meeting the challenges of running a first-of-a-kind field pilot experiment, including developing relevant protocols and methods as required.

Minimum Qualifications

- BSc or MSc in a relevant field
- Fluency in English
- Independent thinking and working style
- Hands-on, problem-solving attitude
- Team player, or willingness (to learn) to become one
- Strong swimming proficiency
- Basic snorkeling proficiency
- Proficiency in MS Office, Google docs, and databases for data entry and reporting

- Skill in the use of computer spreadsheet and/or database applications in the compilation of research data
- Skills in one or more programming languages (R, Python, MatLab)
- Ability to maintain safety and quality control standards.
- Willing and able to work in tropical marine environments without problems (warm, humid, very sunny, salt water, sand, organic (animal/algae) material handling)
- Curious to learn about marine environmental research, ecology, geochemistry and/or climate change mitigation
- Proven / Strong interest in the biological and/or earth sciences, conservation and/or climate change
- Valid Driver's license
- Willing to live in the Dominican Republic full time

Desirable Qualifications

- Experience with the marine carbonate system
- Experience with marine pore water and/or sediment analysis
- Experience performing high-precision measurements of carbonate geochemistry
- Experience operating in-situ marine sensors
- Experience working in NGO, government, or industry settings.
- Fluency Spanish; a working proficiency of Spanish would be an enormous advantage
- Field work, laboratory and/or data collection skills
- Ability to understand and apply specified field and/or laboratory research procedures and protocols
- Ability to evaluate, verify, and edit research data
- Knowledge of planning and scheduling techniques.
- Internationally recognised diving certification, advanced or rescue level preferred (e.g. CMAS, PADI, NAUI, SSI, or equivalent)
- Valid driver's license
- Small boat (< 5 m / 15 ft) handling proficiency

Employment Terms

- Competitive salary and benefits

For more information or to apply, please email jobs@vesta.earth. Applications should consist of a single document or PDF file containing a (1) cover letter and (2) academic CV and/or professional resume, and (3) names and contact information of three references.

Equal Opportunity Employer: We celebrate diversity and demand equal opportunity employment. We are committed to building a team that represents a variety of backgrounds, perspectives, and skills- because

reversing climate change is going to require a diverse and unprecedented workforce. The more inclusive we are, the better our work will be.