

Ideation Grant Program 2023

General Information: The ideation grants are intended to fund scientists and engineers interested in translating their ideas and technologies into wider world impact, and potentially creating new ventures. These grants support the Resnick Sustainability Institute's mission to advance global sustainability by addressing challenges and opportunities associated with climate change and the stewardship of natural resources. The fundamental insights gained are directed towards implementation and scale-up for real-world impact. The Ideation Grant program encourages finding mentors and industrial partners to provide practical guidance and support next steps to real world impact. We support conceptualizing technology development from idea to kickstarting a business approach. The timeframe for completion of the grant is twelve months from receiving the grant. **Note:** special consideration is given to those projects enrolled in RSI Explorer or Impact programs.

Added benefit: these grants can pay for time spent away from research on more practical and applied work not covered by existing Caltech grants.

Eligibility: To see if you qualify for an Ideation Grant, please consider the following:

- Project aligns with RSI's general mission
- Grants range from \$5,000 \$20,000 upon negotiation
- Grants support applied research projects as well as companies in formation
- The requested award must fall under the Ideation-approved categories (See appendix A)
- Strong consideration: engagement with the campus's NSF I-Corps ZAP program
- Team make up: at least one member must be a Caltech student, post doc, faculty member or employee

Please complete the attached application form and budget proposal.

Applications will be considered on a rolling basis. We suggest that you submit your interest early.

To discuss whether this program is right for you please contact Stephanie Yanchinski, RSI Director of Entrepreneurial Programs, <u>stephanie.yanchinski@caltech.edu</u>.



Ideation Grant Program: Submission Form

| Name | |
|---|--|
| Title | |
| PI (If applicant is not a faculty member) | |
| Division | |
| Email address/Telephone | |
| Project Title/Company name | |
| | |

Summary of project (500 words maximum):

Please summarize the technology developed to date, the overall goals for moving it forward towards broader translation, and the next steps that the Ideation Grant will help you reach.

Where possible please include your thoughts about exploring potential markets, and outside partners for developing the commercial potential of your technology. Include such things as: attending educational programs e.g., the campus ZAP or other campus courses; bootcamps offered by incubators such as the Los Angeles Cleantech Incubator; UC Berkeley's Haas Applied Innovation Initiative C2M; and Activate; consulting advisors or mentors; attending industry or business conferences; and researching business information.

Describe grant dollar request and budget justification. Please list, as summaries, categories of expenditures, purpose, and the timeframe for completion.

Statement of Impact: Please describe the climate tech challenge that the proposal addresses, how the technology might impact that challenge, and your concept of how the potential outcomes might be translated to realize that impact. Where possible the application should identify relevant metrics. Some examples include Gt CO2 emission reduction; cubic feet of water purified); advancement of the technology's Technology Readiness Level (see Appendix B); patent or other IP under early consideration; preliminary interest from industry; and identifying sources for further funding. Please state if you have begun applying techno-economic analysis (TEA) to evaluating your technology. Does the proposal leverage unique internal or external resources, or time-sensitive opportunities such as federal grants?

Internal Approval: Candidates must provide a signed <u>Division Approval Form</u>, and complete the attached budget form. At the end of the project, grantees will be given the opportunity to present their project at a showcase event for selected VIP invitees.

Please submit your application ihcluding forms (with links); to Stephanie Yanchinski, RSI Director of Entrepreneurial Programs, <u>stephanie.yanchinski@caltech.edu</u>.



Appendixes

Appendix A: Permitted Categories of Expenditure

Ideation Grant - Categories

Applied Research and Technology Development

Space rentals: facilities user fees for technology development Small equipment, materials and supplies Techno-economic analysis support (TEA) Large equipent, shared use

Translational Discovery: Partners, Markets & Customers, Advisors

Space Rentals: Co-working space for business meetings Conferences (Air B&B, travel, per diem, conference fees, exhibition fees) Educational bootcamps (Air B&B, travel, per diem, bootcamp fees) Visits to potential partners (Air B&B, travel, per diem) Purchase of market surveys, entrepreneurial educational materials, business publications

RSI Office of Entrepreneurial Programs August, 2023

Appendix B: Department of Energy Technology Readiness Levels

| (TRL) Technology Readiness Levels | | |
|-----------------------------------|---|--|
| 1 | Exploratory research transition basic science into laboratory applications | |
| 2 | Technology concepts and/or application formulated | |
| 3 | Proof of concept validation | |
| 4 | Subsystem or component validation in laboratory environment to simulate service | |
| | conditions | |
| 5 | Early system validation demonstrated in laboratory or limited field application | |
| 6 | Early field demonstration and system refinements completed. | |
| 7 | Complete system demonstration in an operational environment. | |
| 8 | Early commercial deployment | |
| 9 | Wide-scale commercial deployment | |
| | | |