


Cal Poly 19-451 Submission MECS-TRIID

Trish Brock

Tue 6/4/2019 1:04 PM

To: mecs@lboro.ac.uk <mecs@lboro.ac.uk>

Cc: Trish Brock <pbrock@calpoly.edu>; Peter V. Schwartz <pschwartz@calpoly.edu>

 11 attachments (10 MB)

Cal Poly 19-451 Insurance.pdf; Cal Poly 19-451 Employee Handbook.docx; Cal Poly 19-451 Anti-Harrassment Policy.docx; Cal Poly 19-451 Affirmative Action Policy.pdf; Cal Poly 19-541 MECS-TRIID-Due-Diligence-Safeguarding-Questionnaire.pdf; Cal Poly 19-451 Whistleblower-Policy.pdf; Cal Poly 19-451 Standards of Conduct.docx; Cal Poly 19-451 MECS-TRIID-Thermal_Storage.pdf; Cal Poly 19-451 MECS-TRIID-Thermal Storage.docx; Cal Poly 19-451 MECS-TRIID-Due-Diligence-Safeguarding-Questionnaire.docx; Cal Poly 19-451 Mandated Reporter Full Policy EO-1083-rev-7-21-17.pdf;

To whom it may concern -

Please find attached Cal Poly's proposal for a project titled, "Thermal Storage with Phase Change Materials".

A word and PDF version of the proposal are attached, as well as a Word and PDF version of the Due Diligence questionnaire. Cal Poly's signature process results in signed PDF documents, which is why the PDF documents are attached. The Word and PDF versions are the same, except the PDF version contains the approving signature.

Please let me know if you have any difficulty opening the documents.

Cal Poly completed the Due Diligence and safeguarding document to the best of the institution's ability. As a non-UK, non-EU organization we apologize if we misunderstood any of the questions. If the proposal is selected for funding please let us know what other documents and information you may need to meet your diligence and safeguarding requirements.

It would be greatly appreciated if you could confirm that this submission was received and met the deadline.

Sincerely

Trish Brock

Senior Analyst

Research and Economic Development

Cal Poly

San Luis Obispo CA 93407-0035

Out of the Office Wednesday June 5th through Friday June 7th.

Direct 805-756-1450

pbrock@calpoly.edu

<http://grants.calpoly.edu/>

she/her/hers

Effective January 1, 2017 all proposal documents must be provided to GDO in signature-ready form, at least 5 working days before the submission deadline.



Modern Energy Cooking Services -
Technology Research Innovation
for International Development
(MECS-TRIID)
April 2019

Grant Application Form

Project Title

Thermal Storage with Phase Change Materials

Company/ Organisation name

Cal Poly Corporation

Competition applying for

Theme 1 Energy Storage

Choose an item. Choose an item.



Loughborough
University



Application code

Internal use only.

Notes

Please ensure you have read the MECS-TRIID Guidance Document, the MECS-TRIID Grant Specification document and the FAQs carefully before completing this form, they will provide valuable information for applicants.

All information relating to your application should be included in this Grant Application Form. Only information included in this form will be assessed. It is not permissible to submit additional documentation as part of your application and all graphs, charts, diagrams and figures must be contained within the text box areas on this form. The text in charts and diagrams is not included in the word count.

The deadline for applications is **23:59 hours BST on 4th June 2019** and applications submitted after this date will not be assessed. Your completed Grant Application Form should be emailed to mecs@lboro.ac.uk .

For further assistance, please also direct your query to the email address above.

The text will be made available in full on Loughborough University's website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard, please contact Loughborough University at mecs@lboro.ac.uk.



**Modern Energy Cooking Services-Technology Research Innovation for International Development
(MECS-TRIID) Application Form April 2019**

A. AWARENESS OF MECS-TRIID COMPETITION		
How did you learn about this MECS-TRIID competition? (Tick all that apply)		
A.1	Informed by MECS programme	<input checked="" type="checkbox"/>
	Informed by DFID	<input type="checkbox"/>
	Informed by Loughborough University	<input type="checkbox"/>

	Twitter	<input type="checkbox"/>
	LinkedIn	<input type="checkbox"/>
	Informed by KTN (Knowledge Transfer Network)	<input type="checkbox"/>

	Media/ Newsletters (please specify) Click here to enter text.	<input type="checkbox"/>
	Other social media channels (please specify) Click here to enter text.	<input type="checkbox"/>
Other (please specify) Email from Simon Batchelor	<input checked="" type="checkbox"/>	

B. LEAD COMPANY/ ORGANISATION INFORMATION		
B.1	Full company/ organisation name. <i>(If this application is successful, this is the name that will be used in publicity, unless an alternative name is clearly specified here)</i>	Cal Poly Corporation
B.2	Registered office address	Sponsored Programs Building 15 One Grand Avenue San Luis Obispo, CA 93407-0830 United States of America
B.3	Company/ organisation VAT registration number	Unknown/Not Applicable
B.4	Is your company/ organisation start-up, micro, SME, large, academia? (Select from list)	other
	<i>Other (please specify)</i>	Non-Profit Academic Auxiliary
B.5	Is your company/ organisation a voluntary, community or social enterprise organisation?	other
	<i>Other (please specify)</i>	Non-Profit Academic Auxiliary
B.6	Name of your immediate parent company (if applicable)	N/A



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B.7	Are you collaborating with another company? If you answer Yes, please provide details in section D.	Yes
B.8	Details of authority involved (e.g. local authority, energy suppliers etc.), if applicable (authority name, contact person, address and their involvement in the project)	N/A

C. LEAD COMPANY/ ORGANISATION CONTACT

C.1	Name	Pete Schwartz
C.2	Position	Professor
C.3	Address	Cal Poly Physics
C.4	Telephone number	1-805-756-1220
C.5	Mobile number	1-805-748-6341
C.6	E-mail address	pschwartz@calpoly.edu
C.7	Finance contact (for providing financial documents)	Amy Velasco, Director Grants Dev. & Sponsored Programs Offices
C.8	Finance contact's Telephone and email address	1-805-756-1123 Sponprog@calpoly.edu

D. PARTNER COMPANY/ ORGANISATION CONTACT

D.1	Name 1	Robert Van Buskirk, Kuyere
D.2	Position 1	CEO
D.3	Address 1	3217 College Ave. Berkeley, CA 94705
D.4	Telephone number 1	See mobile below
D.5	Mobile number 1	1-510-295-9266
D.6	E-mail address 1	rdvanbuskirk@gmail.com
<i>Please insert details for your second partner if applicable</i>		
D.7	Name 2	Peter Keller, Aid Africa
D.8	Position 2	Director
D.9	Address 2	3916 Pennsylvania Avenue La Crescenta, California 91214 U.S.A.
D.10	Telephone number 2	1-818-249-2398
D.11	Mobile number 2	1-818-389-6778
D.12	E-mail address 2	Peter@AidAfrica.net



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E. FUTURE OPPORTUNITIES	
E.1. Can Loughborough University contact you about other innovation research competitions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>E.2. If your application is successful, Loughborough University would also like to share your project details with partners who may be interested in working with you to progress the results of the project. Please tick if you are content for Loughborough University to share your project details with others listed below.</p> <p>The project is funded by the Department for International Development (DFID) and hence they will be able to access the contact details of all applicants.</p> <p>Loughborough University has contracted the day-to-day project management of MECS-TRIID to Simone Surveys Limited (SSL) and the Knowledge Transfer Network (KTN). Hence, these organisations will have access to the project and contact details of all applicants.</p> <p>Note: Details will only be shared if you give permission by ticking the boxes below.</p> <p>Innovate UK <input checked="" type="checkbox"/></p> <p>Energy Suppliers <input checked="" type="checkbox"/></p> <p>Energy Systems Catapult <input checked="" type="checkbox"/></p> <p>Other Government Departments <input checked="" type="checkbox"/></p> <p>Other <input checked="" type="checkbox"/></p>	

F. PREVIOUS APPLICATIONS	
F.1. Have you previously applied to other Loughborough, DFID or other cooking energy grant schemes?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<p>If you answered yes to F1, please tell us which competition round(s) you applied to by ticking the relevant box(es) below and specifying which specific competition e.g.</p> <p><u>Efficiency for Access, Low-Energy Inclusive Appliances</u> <input type="checkbox"/> Click here to enter text.</p> <p><u>Economic and Energy Growth</u> <input type="checkbox"/> Click here to enter text.</p> <p><u>Research for Community Access Partnership</u> <input type="checkbox"/> Click here to enter text.</p> <p>Other (<i>Please specify</i>) <input type="checkbox"/> Click here to enter text.</p>	
F.2. Have you previously received funding from other Loughborough University, DFID programmes or other energy grant schemes?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<p>If you answered yes to F2, please tell us which competition round(s) you were funded?</p> <p>Click here to enter text.</p>	



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G. PROJECT PROPOSAL

PROJECT TITLE

Thermal Storage with Phase Change Materials

PROJECT OUTLINE (one sentence; 20 words max)

Design, construct, and disseminate phase change thermal storage for cooking, made locally for \$20.00.

PUBLIC PROJECT SUMMARY

Please expand on your single sentence outline. This description will only be published if your project is funded. This text will not be assessed. Please ensure it is suitable for public disclosure as it may be shared with others.

Maximum words: 250

We developed Insulated Solar Electric Cooking (ISEC) whereby a solar panel is directly connected to an insulated, electrically-heated cookpot. Typically, we use a 100 W solar panel, capable of heating 5 kg of food to boiling in the course of the day and is ideal for “boil and simmer” cooking. However, some people want more power and/or want to cook in the evening after the sun has set. We are developing phase change thermal storage capability using Erythritol, with a melting point of 118°C that is capable of storing about ½ kWh over the course of the day. An early prototype can deposit much of this energy in a short period of time after external power has been disconnected, providing many times more power than 100 W. We disseminate ISEC with partners in Malawi and Uganda and will visit Ghana this August and intend to develop university and government collaborations. The simple phase change thermal storage unit could be used with applications other than ISEC, and is a simple design built from less than \$20 in materials. We have made working prototypes and seek grant funding to improve the design, share knowledge with African partners, collaboratively disseminate the technology, and study the technology adoption process. Our dissemination model is to support local enterprises in constructing and innovating ISEC products for local sale. The PI will request support to fund four research students in summer 2019 from The Bill Frost Student Research Grants and Cal Poly’s College of Science and Math.



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The following five sections form the main body of the Application and the assessment criteria relate to these. When answering these sections you may find it useful to refer to the Specification document and DFID's Priorities. For the assessment criteria and details of how applications will be evaluated please see the *MECS-TRIID Guidance Document*.

Evaluation process:

1. Initially, **only questions 1, 2 and 3** (The Challenge, Innovation and Local Partner/Knowledge Transfer in country supported by DFID) will be evaluated by at least two expert assessors. Only those applications receiving an aggregated score of **50% or greater for the three questions** (30 or more out of 60) will progress to a full evaluation.
2. During the full evaluation, **all six questions** will be reviewed by at least a further two expert assessors at Loughborough University and the KTN.

INITIAL ASSESSEMENT PROCESS		
Only those applications receiving an aggregated score of 50% or greater (30 or more out of the 60 maximum score) on questions 1, 2 and 3 will progress to a full assessment.		
Questions	Weighting factor	Maximum score
1. The Challenge What is the challenge being addressed by the proposed project?	1	10
2. Innovation How is your Application innovative?	4	40
3. Local Partner / Technology Knowledge What measures are being taken to ensure the knowledge is retained in the country being supported by DFID?	1	10
TOTAL	6	60



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FULL ASSESSMENT PROCESS		
Applications will be assessed on all six questions by at least three expert assessors from IMC Worldwide and partner organisations.		
Questions	Weighting factor	Maximum score
1. The Challenge What is the challenge being addressed by the proposed project?	1	10
2. Innovation How is your Application innovative?	4	40
3. Local Partner / Technology Knowledge Transfer What measures are being taken to ensure the knowledge is retained in the country being	1	10
4. Project Management and Team What is your project plan to deliver the project? What are the relevant skills and expertise of the team?	1	10
5. Impact and Maximise Outcome How will the outcome from this research have a beneficial impact on cooking energy market?	2	20
6. Project Finances/ Value for money How much will the project cost to deliver and how will this be spent to ensure value for money?	1	10
TOTAL	10	100

In addition to these criteria, applicants must demonstrate an ability to communicate their ideas effectively by writing clearly and succinctly throughout.



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Question 1: The Challenge

- What is the challenge being addressed by the proposed project?
 - Please specify:
 - The cooking energy challenge being addressed.
 - How this aligns with the ideas from the Specification document.
 - How this aligns with the DFID priorities.
 - strengthening global peace, security and governance
 - strengthening resilience and response to crisis
 - promoting global prosperity
 - tackling extreme poverty and helping the world's most vulnerable
 - delivering value for money
 - Why you consider this to be a challenge.
 - The wider economic, social, environmental or cultural benefits (expected/potential) of this project.
 - Do not describe your proposed solution at this stage. You may wish to discuss how your solution will assist in meeting the challenge.
- Maximum score available: 10
 - Maximum words: 500

We address the cooking energy challenge of storing a day's solar energy in a phase change medium (PCM) for high power cooking after sunset. We develop this phase change thermal storage (PCTS) in tandem with Insulated Solar Electric Cooking, which we recently introduced (Watkins 2016) and continue to develop (Gius 2019), although PCTS could be used with other fuels and with grid electricity to provide access to more reliable and higher power.

PCTS requires no batteries and has none of the challenges described in the grant specification document.

Toxicity/safety/disposal: Erythritol is an artificial sweetener and melts at 118°C. Although it will be hot, the device needs insulation, and thus presents less of a burn danger than the open flame that this technology could displace.

Damage caused by high C rates, and resistive losses in high-current wires: without electrical storage, these problems don't exist for us. Decreasing discharge time amounts to improving thermal conductivity between the cookpot and the PCM.

Cost: Erythritol can cost less than \$5/kg for food-grade purchases.

The specification document clearly outlines the problems presented by biomass, three-stone fire cooking. ISEC technologies address all of the health (respiratory), environment (deforestation and GHG emissions of CO₂ and soot), and economic problems associated with biomass cooking. Additionally, the specification document outlines efficiency losses in traditional cooking. We have shown that a moderately insulated ISEC converts PV (Photovoltaic) power into food heat with 74% efficiency, improvable with thicker insulation. Present 100 W ISEC installations can bring 5 kg of water, rice, beans, or stew to a boil in one day, cooking enough food for a large family.

Our most recent PCTS prototype, powered by a 100 W solar panel was able to provide ~ 400 W over a 10 minute period and ~ 200 W over a 30 minute period after being disconnected from the solar panel.



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While our approach answers each of the DFID priorities, we focus on the last two:

At \$20.00 per unit, our PCTS will be considerably lower cost than, and last considerably longer than electrical/battery storage, addressing the needs of the world's most vulnerable.

For the same reason, PCTS delivers great value for the money.

While not the focus of this proposal, the low cost of an ISEC facility as well as the cost of a PCTS unit could be covered by carbon credits and our partners have experience and interest in developing this as a funding mechanism.

Our ISEC technology provides additional societal benefits:

Access to electricity for the rural poor.

Creating local economy and ownership around production and dissemination.

(Gius 2019)

Hot Diodes!: Dirt Cheap Cooking and Electricity for the Global Poor? Gius, M. Walker, A. Li, N. Adams, R. Van Buskirk, P. Schwartz, *Solar Energy*, submitted May, 2019

(Watson 2016)

Insulated Solar Electric Cooking – Tomorrow's Healthy Affordable Stoves?, T. Watkins, P. Arroyo, R. Perry, R. Wang, O. Arriaga, M. Fleming, C. O'Day, I. Stone, J. Sekerak, D. Mast, N. Hayes, P. Keller, P. Schwartz, *Development Engineering 2* (2017) 47–52. Associated video:
<https://www.youtube.com/watch?v=XTQhdjVd0Fk>



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Question 2: Innovation

What is the focus of the innovation in your proposal? (e.g. is your solution applying existing technologies in new areas, developing new technologies for existing areas or is it a totally disruptive approach?)

Innovative Applications could include:

- Novel ideas, technology, processes, apps, devices, software, business case.
- Ideas, concepts or solutions from other sectors that could be applied to cooking energy.

If similar research has been commissioned or carried out previously please explain why your Application is still a novel approach.

Clearly describe the concept, technology or approach that you intend to use to meet the challenge described in question 1. Include relevant diagrams or figures. It would be helpful to demonstrate any evidence or previous work to support / validate your idea.

If applicable, describe what is currently considered state of the art and how your Application differs. How are you improving on the current state of the art?

Maximum score available: 30

Maximum words: 1000 plus diagrams/figures. Maximum 3 sides of A4.



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Using existing technologies in a novel way, ISEC (Insulated Solar Electric Cooking) is a fundamental disruption of the use of solar electricity (Watkins 2016), providing a radically inexpensive and simple way to extract heat and electricity from a solar panel at near optimum efficiency (Gius 2019). The innovation we seek funding for is to improve, refine, and disseminate Phase Change Thermal Storage (PCTS) with a Phase Change Material (PCM), allowing the user to cook after electrical power is disconnected, and to have access to greater power by discharging the stored heat over a shorter period of time. This PCTS capacity can be used with grid electricity and other energy sources as well as with solar electricity.

Background – what is ISEC?

Figure 1 from our recent submission (Gius 2019), illustrates the difference between a standard battery-based solar PV cooking system and a diode-based solar PV cooking system. Because all cooking energy is generated within the diode-heater, many of the controls for the diode-based electricity system are replaced by the heating element itself. On a per-unit-power-capacity basis, the diodes are very inexpensive, providing a much simpler and cheaper solar electricity system with fewer components. Additionally, the diode-based heater maintains a near constant voltage for all solar intensities, allowing the system to operate near the maximum power voltage (V_{mp}) at all times.

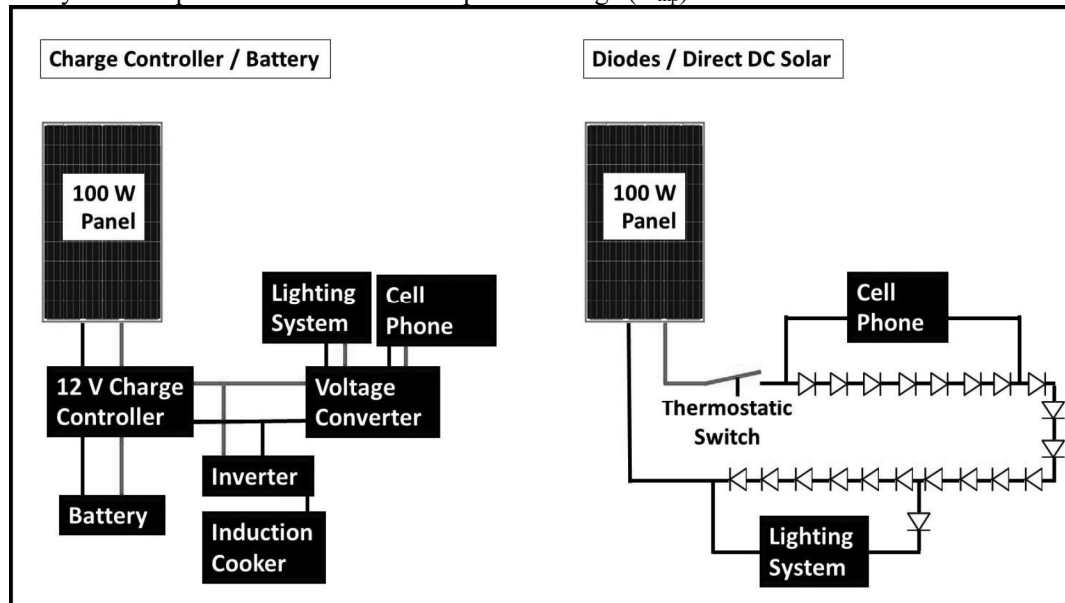


Figure 1 Conventional solar electric systems (left) cost well over \$150 with considerable maintenance costs but can provide some stored electricity on demand. A diode chain (right) cost well under \$10, but requires adaptation to make optimal use of solar electricity during the day.

Our research team and partners have made and are using an ISEC technology whereby diode chains are glued and thermally connected to the exterior of the cooking chamber (Figure 2). A thermostatic switch is included in the circuit to protect the cook pot and diodes from getting too hot. The pot is immersed in adequate insulation such as pink insulation, wool, or rice hulls.

As indicated in Figure 1, we can easily add charging and appliance power capability with no additional electrics by simply drawing current from the diode chain, which predictably quantifies the voltage drop across each diode. Such access has been shown to increase use of



Figure 2. A diode chain is made by twisting diodes together (left), securing the chain to the bottom perimeter of a pot (middle), and gluing with a high-temperature glue (right).



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a cooking facility (Wilson 2018).

We have developed our proof of concept for PCTS (Figure 3) at Cal Poly using erythritol (Figure 4), an artificial sweetener with a melting point of 118°C, heat of fusion of 334 kJ/kg, and a retail price of about \$5/kg.

The most recent prototype (Figure 5) was able to thermally store a day's energy from a 100 W solar panel and deposit 35% of it above 100°C to boil water after being disconnected from the power source. The thermal power to the water was about 400 W for the first 10 minutes, and averaged about 200 W over the first half hour. The rate of thermal transfer is limited by two things:

- The temperature difference between the PCM and the food is low, only about 20°C.
- In transferring heat to the load (inner pot surface holding the water), the liquid erythritol solidifies on the outer surface of the inner pot, insulating the inner pot from the hotter, liquid PCM.

There are two innovations to be explored in the next step:

- Research higher melting point PCM.
- Improving thermal conductivity inside of the PCM chamber. This could be done by adding, for instance, an aluminum mesh. Another round of laboratory development is required to improve thermal conductivity between the food and PCM, improve insulation to the outside world, streamline production, and reduce costs.

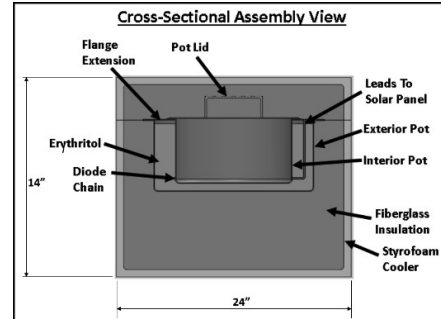


Figure 3. Phase Change Thermal Storage (PCTS) stores heat by melting erythritol inside of an insulated chamber.



Figure 4. Erythritol, our Phase Change Material (PCM) is a readily available artificial sweetener (left), and is show partially melted in a diode chain (right).

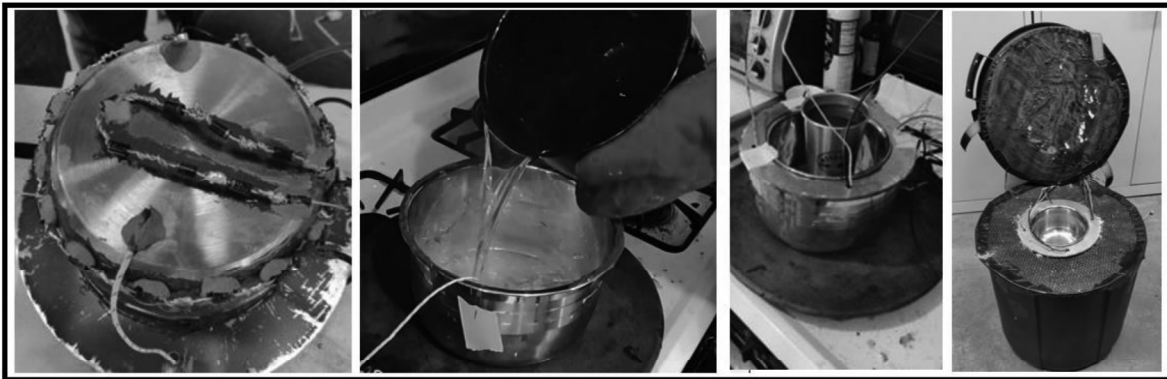


Figure 5. Construction of prototype, from left to right: Cementing diode chain to bottom of inner pot, pouring molten PCM erythritol into outer pot, finished PCTS unit after cementing the two pots together with PCM in between, final cooker with PCTS unit inside of insulated container.

What is needed is trail-and-error development as well as field testing onsite. At Cal Poly, we have ideal access to motivated students, and will pursue university funding support for these students during the summer. For field testing and collaborative development and adaptation, we have partner shops/laboratories in Malawi and Uganda. Additionally, we will work to develop university and government collaborations in August in Ghana when we provide workshops at Ashesi, University of Ghana, KNUST, the University of Energy Natural Resources, and the Ghana Energy Commission.

(Gius 2019)

Hot Diodes!: Dirt Cheap Cooking and Electricity for the Global Poor? Gius, M. Walker, A. Li, N. Adams, R. Van Buskirk, P. Schwartz, *Solar Energy*, submitted May, 2019



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(Watson 2016)

Insulated Solar Electric Cooking – Tomorrow’s Healthy Affordable Stoves?, T. Watkins, P. Arroyo, R. Perry, R. Wang, O. Arriaga, M. Fleming, C. O’Day, I. Stone, J. Sekerak, D. Mast, N. Hayes, P. Keller, P. Schwartz, *Development Engineering 2* (2017) 47–52. Associated video:
<https://www.youtube.com/watch?v=XTQhdjVd0Fk>

(Wilson 2018)

Effects of USB port access on advanced cookstove adoption D. L. Wilson, M. Monga, A. Saksena, A. Kumar, A. Gadgil, *Development Engineering*, 3 (2018) 209-217, ISSN 2352-7285,
<https://doi.org/10.1016/j.deveng.2018.08.001>



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Question 3: Local Partner/Technology Knowledge Transfer to country supported by DFID

Is the Lead/ Partner company based in a country supported by DFID Yes/ No (*Whilst this Grant is open to organisations across the world, preference will be given to those with local knowledge and plans for knowledge transfer to the country supported by DFID where this project could be implemented 10% more points are on offer to these applicants.*)

Which country is this project being designed for/implement in?

What measures are being taken to ensure the knowledge is retained in the country being supported by DFID?

What activities (for example trials, lab testing etc. if applicable) will happen in the country being supported by DFID? Name the companies/organisations you will be cooperating/collaborating with.

Maximum score available: 10

Maximum words: 400



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We have partners in Malawi and Uganda and hope to develop partnerships in Ghana, where we are and will continue to share knowledge and collaboratively develop and adapt the product with real time feedback from local communities and enterprises engaged in energy and cooking technologies.

Uganda: Our original publication introducing ISEC (Watkins 2016) resulted from collaboration with Aid Africa, led by co-author Peter Keller, a continuing collaborator. Four students spent a month in Uganda with Aid Africa learning about local culture and cooking needs. The team's first deployment was found unacceptable by the Aid Africa staff and was collaboratively redesigned to satisfy local needs. Aid Africa has undergone the certification process for the improved biomass cook stoves that they distribute and will be knowledgeable about seeking carbon credit funding for ISEC and PCTS.

Malawi: Recent ISEC improvements (Gius 2019) resulted from close collaboration with benefit corporation, Kuyere!, in Malawi, led by co-author Robert Van Buskirk, who jointly advises our technical development, testing, and dissemination. Kuyere! has a field laboratory in Malawi that communicates daily Cal Poly students developing ISEC. Additionally, Kuyere! supports local enterprises to manufacture and sell ISEC products to the rural poor, who could not otherwise afford them. They will implement 100 ISEC units this month.

Ghana: Nathan Heston (Cal Poly Physics) lived in Agbokpa on Lake Volta for four years, has strong university ties in Ghana, and is leading a university trip in August to establish collaborations and initiate university exchange programs. Additionally, Robert Van Buskirk, has 20 years' experience with African energy efficiency improvements and has university and government collaborators in Ghana. He is providing us with university and government contacts in Ghana. We are planning to develop collaborations and plan to meet with Ashesi, University of Ghana, KNUST, the University of Energy Natural Resources, and the Ghana Energy Commission. We plan to conduct workshops in building ISEC technology and build plans for continued knowledge exchange and collaborative innovation for the coming years. Lastly, we will spend a week in Agbokpa, learning about the village while we collaboratively explore opportunities for ISEC implementation. We may reallocate some of the requested funding to support these collaborations, which we understand will require MECS permission.

(Gius 2019)

Hot Diodes!: Dirt Cheap Cooking and Electricity for the Global Poor? Gius, M. Walker, A. Li, N. Adams, R. Van Buskirk, P. Schwartz, *Solar Energy*, submitted May, 2019

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Question 4: Project Management and Team

What is your project plan to deliver the project? What are the relevant skills and expertise of the team?

Your answer should include:

- Aims and objectives.
- Skills and expertise of who will deliver the project.
- Clear deliverables.
- Timescales, with milestones (including deliverables).
- An assessment and analysis of the risks to the project and risk mitigation measures especially with regarding Safeguarding and Whistleblowing measures for staff and the general public if interacting with them.
- Gantt Chart.

Maximum score available: 10

Maximum words: 500 plus Gantt Chart (*Please note that the wording used on Gantt chart and other charts are not included in the word count*).



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Aims and Goals: Collaboratively develop and refine PCTS, to be inexpensively produced by small African enterprises in our partner countries; Malawi, Ghana, and Uganda.

Team:

Pete Schwartz, (P.I., Cal Poly Physics)

- Studied cooking for the global poor since 2007: improved biomass stoves, solar concentrators, solar electric cooking.
- US Peace Corps, Fiji, teacher 1986-1989.
- 2007, introduced and teaches two service-learning classes dedicated to collaboratively improving lives in an impoverished partner community through collaborative group projects.
- 2010 – 2012, collaboratively designed and directed Guateca, 8-week field school in Guatemalan mountain village. Engaged about 40 Guatemalan and 37 Cal Poly students.

Cal Poly, provides full access to all needed laboratory and shop resources.

Peter Keller (partner, Aid Africa Director):

- Aid Africa since 2005, executive director since 2010
- hosted over 100 visitors.
- Builds and disseminates efficient stoves, provides grafted trees, drills wells, provides public education.

Robert Van Buskirk (partner, CEO of Kuyere!):

- Mathematical scientist
- Designs equations toward utilization of clean energy technologies in the US and Africa.
- 16 years with Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory.
- Eritrea: founded the email system (1990), cofounded clean energy research programs for Ministry of Energy as a Fulbright Scholar (Assistant Professor) at University of Asmara, and as Research Scientist at Renewable Energy Research and Training Center.
- Kuyere, designs and builds clean energy products and business models for African entrepreneurs to deliver the most cost-effective clean energy solutions for rural poor.

Nate Heston (collaborator, Cal Poly Physics):

- Four years in Agbokpa, Ghana, Peace Corps teacher, and developing an off grid farm.
- Strong ties to Ghanaian village and Universities.
- Supervised two trips to Thailand with Engineers Without Borders.
- develops off-grid ice production.

Deliverables

Phase Change Thermal Storage Capacity for insulated cooking to be deployed with solar electricity, grid electricity, or other cooking fuels. Provide electrical power access for appliances, USB ports, battery charging. Easily produced and disseminated by local collaborating enterprises for less than \$50, less than \$25.00 in parts.

Dissemination will be done through our African partners, subsidizing 100 ISEC with PCTS, and study adoption process.

Knowledge Sharing is guaranteed via network in Uganda, Malawi and Ghana; and continued publications and conference presentations.



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Timescales and Milestones:

August, 2019: Establish university, government and village partnerships in Ghana.

September, 2019: Establish dissemination strategy with partners.

September – December, 2019: Technological Development, dissemination, adoption study with partners.

January, 2020: Author report describing findings and next steps.



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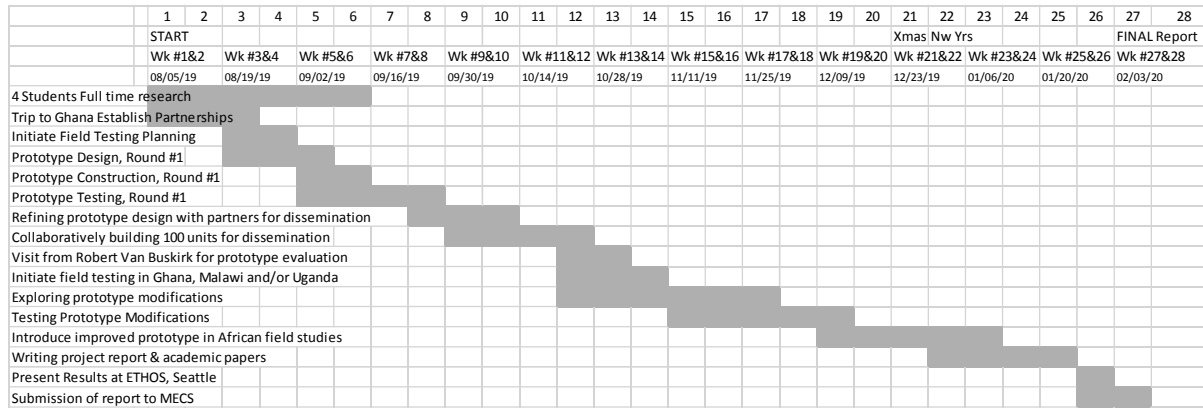
Risk Analysis

Technology Failure: We already successfully tested PCTS. We wish only to improve thermal conductivity between PCM and food, and increase efficiency (heat delivered to food / energy imparted to PCM).

Collaborations: If no successful collaborations materialize in Ghana, we have two strong partnerships with Kuyere! (Malawi), and Aid Africa (Uganda).

Poor Adoption: ISEC is a broad technology and we have partners in a variety of cultures. If PCTS is not desirable in target communities, between different communities and different ISEC embodiments we will innovate solutions to improve adoption.

Gantt Chart





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Question 5: Impact and Maximise Outcome

How will the outcome from this research have a beneficial impact on cooking energy market in countries supported by DFID? Outline the future potential for further development.

- Align the project to one or more of the DFID priorities: *strengthening global peace, security and governance, strengthening resilience and response to crisis, promoting global prosperity, tackling extreme poverty and helping the world's most vulnerable, and delivering value for money.*
- If this project is part of wider programme, discuss both how the outputs/outcomes from this project support the wider programme and how the wider programme will deliver impact.
- What difference is the MECS-TRIID funding going to make to your innovation idea?
- List the deliverables you expect to produce as part of this project to maximise the benefits from the results. A final report is expected as a minimum (please note if a report is confidential, a public version is also required).
- Should you obtain this funding, what are the next steps for developing this project? Please consider options such as prototype product testing, software, demonstrations, presentations, publishing journals and other dissemination activities. Please also include these deliverables in the timescale and milestones in question 3 above.
- How much funding/investment do you require for next steps of this project?
- If successful, how would you seek further funding to develop the outputs of this project?
- If this project was to be scaled up, which country(ies) supported by DFID would you target?

Maximum score available: 20

Maximum words: 800



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Storing energy in a thermal battery is considerably less expensive than using an electric/chemical battery in terms of capital costs and/or operations and maintenance. While batteries are more dispatchable and hold the power longer, they present many safety, health and environment challenges and are also prohibitively expensive for the rural poor. Thus, the development of ISEC technologies with charging capability, and in particular, this PCTS capacity, nicely addresses DFID's final two goals: tackling extreme poverty and helping the world's most vulnerable, and delivering value for money.

This project is one step in the past decade's work of technology and network development dedicated to improving the lives of the global poor through improved cooking technologies and access to inexpensive electricity. The advances resulting from this grant will stand upon past technology and collaboration development, and will support continued technology and collaboration development. The next steps include:

- Continued studies of the adoption process in new environments.
- Sharing with educational institutions including universities and high school science programs.
- Continued technological development to accommodate increased power levels with the continued decrease in solar panel costs.
- Exploration of funding mechanisms including individual government funding and the carbon market.

Our project will continue regardless of funding from MECS-TRIID. At Cal Poly, we have small but consistent university funding, hardware and material expenses are minimal, and motivated students will consistently present themselves to do research for short periods of time. The funding we seek with this grant will accelerate the process by funding students who would otherwise get jobs during the school year. Additionally, it will make possible collaborative development by providing funds to support research and subsidize dissemination and adoption studies in partner countries. While we are perfectly capable of effectively utilizing the funds at Cal Poly on development and travel, we will in August likely establish a parallel research programs in Ghana, Uganda, and/or Malawi. Grant funding will help support research programs with these partners and support their dissemination studies.

We may reallocate some of the requested funding to support these collaborations, which we understand will require MECS permission.

Deliverables: The main deliverable of this project will be the important step that is outlined above. We anticipate that this next project development will bring ISEC into main stream dissemination.

Next Steps: Possible next steps are briefly outlined above. However, by the very nature of our work, the next step cannot be better defined until we are well through the project proposed in this project. Ideally, this will bring ISEC greater acceptance for people who want to cook in the evening with greater power access. Ultimately, we hope that this innovation brings ISEC to a point where many non-profits, governments, and independent enterprises would begin efforts to further develop and disseminate similar technologies. Our response would then be to pick one compelling direction to support with the most interested of our partners.

If all goes well, in the coming years we might request funding to support continued collaborative technology development and dissemination in partnering countries. For example, \$200,000 per year could support a joint program between Cal Poly and a Ghanaian University to develop technology, subsidize local enterprises to conduct field tests, and study the adoption process.



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Question 6: Project Finances

What will the project cost to deliver and how will this be spent to ensure value for money?

Costings				
Use this table to detail your costings for the project. List each person involved, along with their daily rate and number of days worked. Also include other costs, such as equipment, material and contracting.				
Name of employee	*Daily rate (£)	Company (esp. if collaborating)	Number of days per employee	Total budget (£) (highlight field(s) and press F9 to calculate/ update grey cells)
Pete Schwartz	0 to project	Cal Poly	As needed	0
Nate Heston	0 to project	Cal Poly	As needed	0
TBD Graduate Students	173.28	Cal Poly	126.25	21881
				0
	Consultancy costs (£)			0
	Material costs (£)			3950
	Equipment cost (£)			0
	Laboratory/testing cost (£)			0
	Other expenses (£) (please specify) Travel to US Conference for dissemination (790) Travel to international partner for Schwartz (1,580)			2370
(A)	(B) Total cost (£) (highlight field and press F9 to calculate/ update grey cells)			28201
(C)	(D) Total funding sought from MECS-TRIID (£)			28201
	If the total project cost (A) is greater than the funding being sought (B) please explain how you plan to fund the difference.			

*** To include Full Economic Cost (FEC)/ overhead charges.**

Grants will be paid upon final report approval. Successful applicants will have the choice to claim 25% of the funding against as an early payment to help with costs. Please indicate your preferred payment option. Tick one box only.

I wish to receive payment of 25% of the funding at an approved progress report followed by the remaining 75% upon final report and Statement of Grant Usage approval by Loughborough University.

I wish to receive 100% at the end of the project and upon final report and Statement of Grant



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Usage approval by Loughborough University.

Please explain the costs in the table above and describe how you plan to spend the Grant funding. Your answer should:

- Demonstrate value for money e.g. competitive day rates (vs benchmark), equipment, services used etc.
- Justify the costs, showing how they relate to the project plan, and how they reflect fair market value.
- Include sufficient relevant detail in the cost breakdown for the assessor to understand what the money will be spent on.
- Clearly explain the staff costs, using reasonable, fair market value rates.
- Explain any other costs, such as materials.
- List and justify any sub-contracting costs.
- Any submissions where the travel and associated expenses exceed one third of the total grant application will be considered as out of scope. If you there is a legitimate reason for the costs to be higher, please contact Loughborough University by 14th May 2019 to get approval.

If you expect to pay VAT during the delivery of the research, (e.g. for consultancy/ sub-contracting charges, material costs and other expenses), and you are unable to recover VAT from HMRC or other national revenue authority, you must ensure that the cost of this VAT payment is included in question 5 of your Grant Application Form and the justification for claiming VAT is noted in the box below.

Maximum score available: 10

Maximum words: 500

SALARIES AND WAGES: The salary and wage rates are based on the California Polytechnic State University (CPSU) and Cal Poly Corporation (CPC), jointly Cal Poly, established salary and wage rates paid during the 2018-2019 Fiscal year (July 1 – June 30). The rates shown are for budgetary purposes; the rates in effect at the time the work is performed will be charged to the project.

FRINGE BENEFITS & EMPLOYER PAYROLL TAXES: CPC graduate student fringe benefits include SUI and Worker's Compensation which would result in the pooled rate of 4.5%. CPC graduate students convert to intermittent employees if the graduate student is not fully enrolled when the work is performed, resulting in the addition of FICA to fringe benefits and the current intermittent fringe benefit rate of 10%. Cal Poly elects to budget graduate student fringe benefits at the 10% intermittent rate, assuming that the graduate students will not be fully enrolled. It is not feasible to assess enrollment status at the time of proposal submission. The rates in effect at the time the work is performed will be charged to the sponsor.

DOMESTIC TRAVEL: Funds will support Conference travel for up to two students to the Seattle ETHOS Conference in January to disseminate results.

FOREIGN TRAVEL: Partial support is requested for the PI to travel to an international partner site.

OTHER DIRECT COSTS:

SUPPLIES AND MATERIALS: (Items \$5K and under): Funds will be used to support the purchase of supplies needed to develop the phase change thermal storage prototypes and engage in field tests.



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INDIRECT COSTS: Indirect costs at Cal Poly's federally negotiated rate are included in the daily rates for graduate students. Cal Poly's federally negotiated indirect rate is 38.5% of modified total direct costs, effective July 1, 2018. Modified total direct costs exclude equipment, capital expenditures, charges for patient care, tuition remission, rental costs of off-site facilities, scholarships, and fellowships, participant support costs, and the portion of each subaward in excess of \$25,000.



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H. Final Check List before application submission	
H.1. Please tick box that you have answered all questions in sections A-G <input checked="" type="checkbox"/>	
H.2. Please tick box that you have read the following MECS-TRIID documents before completing the application: <ul style="list-style-type: none"> • Guidance Document <input checked="" type="checkbox"/> • Specification Document <input checked="" type="checkbox"/> • FAQs <input checked="" type="checkbox"/> 	
H.3. Please tick box that you have reviewed the terms on the template for the Grant Disbursement Agreement (Funding Agreement or Terms and Conditions) and you accept them X*	
H.4. Please tick box that you will be attaching the Due Diligence form with this application X	
<i>Having examined the Guidance Document, Grant Specification, FAQs and Grant Disbursement Agreement with Funding Agreement template, I hereby submit our application on the full understanding that any resulting Grant Offer shall be subject to the provisions of the Funding Agreement and I accept these terms and conditions.</i>	
Name:	Amy Velasco
Company:	Cal Poly Corporation
Position:	Director, Grants Development & Sponsored Programs Offices
Signature:	DocuSigned by: <i>Amy Velasco</i>
Date:	1F812B80C88146F... 2019-06-04

* If you wish to query or want further clarifications on any terms and conditions, please email Loughborough University **by 14th May 2019** with a subject heading **MECS Grant Disbursement Agreement** to mecs@lboro.ac.uk .



Due Diligence & Safeguarding Questionnaire

Please note the following points before completing the questionnaire;

- Please complete this questionnaire honestly. Answering 'no' to a question does not automatically disqualify your organization from working with the programme. In each section you are invited to explain the answer you give. This explanation is important and will be given careful consideration during the assessment process.
- Providing false information on this questionnaire can result in the termination of any contract issued.
- There are **3 main sections to complete; background information, due diligence and Safeguarding**. All sections and sub-sections must be completed. If a question is not applicable to your organisation mark it N/A.
- All details provided in the questionnaire will be kept securely and managed in line with Loughborough University's Data Protection Policy. Details of the policy can be found at <https://www.lboro.ac.uk/admin/ar/policy/dpact/ludpp/>
- Please sign the declaration at the end of the form. Forms returned without a signature will not be processed.
- Please include any supporting documents requested, making clear in the file name the name of the organisation/respondent and the question number it refers to.
- Please complete the questionnaire electronically. To check a box, place the cursor over the required box and double click the left mouse button. A pop-up window will open, under default value, select 'checked'. Click ok to close the pop-up window.

Section A: Background information

Question	Response
1. Full name of organisation	Cal Poly Corporation
2. Address of Registered Office (including postcode)	California Polytechnic State University Building 15 One Grand Avenue San Luis Obispo CA 93407-0707
3 Is your organisation a legally registered entity?	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If yes - Please provide a copy of the registration document</i> <i>If no – Please explain why</i></p> <p>Cal Poly Corporation is registered with the United States of America and the State of California as a non-profit organization. Cal Poly Corporation is unsure if it is registered with any particular international organization. If a registration is specified Cal Poly Corporation will identify if the Cal Poly Corporation is registered with that entity.</p>
4 Company Registration Number	U.S.A. Dun & Bradstreet number (DUNS) 02-9326246 U.S.A Tax ID # 95-1648180
5 Description of organisation (e.g. what the organisation does)	<p>The California Polytechnic State University (“University”) established a separate non-profit auxiliary(501 (c) (3), the Cal Poly Corporation, to serve the mission of the University. The Cal Poly Corporation is the Grantee organization accepting sponsored programs on behalf of the University.</p> <p>The Cal Poly Corporation is a non-profit public benefit corporation and is not organized for the private gain of any person. The charitable purposes for which the Cal Poly Corporation is organized and operated exclusively are to perform the functions of, and to carry out the mission and educational programs that benefit the California Polytechnic State University (Cal Poly), San Luis Obispo.</p> <p>As the university’s service auxiliary, Cal Poly Corporation serves to complement Cal Poly’s instructional program and assist the university in achieving its educational mission. Cal Poly Corporation assists the university with vital commercial services, research support, and administrative services and funding resources. Cal Poly Corporation is proud to serve the university with integrity, commitment, empowerment, creativity, collaboration, equity, trust, respect and communication – centered on a results-oriented approach. Cal Poly Corporation is dedicated to invest all funds generated by our activities back into Cal Poly, providing financial and facility resources to benefit the campus community.</p> <p>Throughout this form references will be made to both the Cal Poly Corporation and the California Polytechnic State University,</p>

Question	Response
	<p>as both organizations will provide administrative and policy support in pursuit of the project proposed herein. The two organizations work collaboratively, the Cal Poly Corporation manages the Sponsored Project funds, management, reporting, and some employees. The California Polytechnic State University performs much of the project work, as the faculty involved on the project are employed and governed by the University. This relationship has worked well for 75 years, and is the same model used by many of the other California State University campuses. Please contact us if you have additional questions or concerns.</p>
6 Head of organisation (name and title)	Ms. Lorlie Leetham, Executive Director
7 Name and contact details of main contact person for this Award	<p>Authorized Official: Amy Velasco Director Grants Development & Sponsored Programs Offices Cal Poly Corporation One Grand Avenue San Luis Obispo, CA 93407-0830 Email: grants@calpoly.edu Tel: 1-805-756-2982</p> <p>Administrative Pre-Award Contact: Andrew Brown Grants Analyst, Grants Development California Polytechnic State University One Grand Avenue San Luis Obispo, CA 93407-0035 Email: ajbrown@calpoly.edu Tel: 1-805-756-</p>
8 If the organisation is a subsidiary of another body, will that parent firm guarantee the awardee's contract performance as its subsidiary?	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p> <p><i>If Yes – Please provide details of the parent firm including company registration number.</i></p>
9 Length of time in operation	More than 75 years, created in 1941
10 Status of organisation	<p>A Public Limited company <input type="checkbox"/></p> <p>A Limited Company <input type="checkbox"/></p> <p>A Company Limited by Guarantee <input type="checkbox"/></p> <p>A Partnership <input type="checkbox"/></p> <p>A Sole Trader <input type="checkbox"/></p> <p>A Charity <input checked="" type="checkbox"/></p> <p>A Franchise <input type="checkbox"/></p> <p>A Small/Medium Sized Enterprise or SME <input type="checkbox"/></p> <p>Other (e.g.: a Special Purpose Vehicle, Joint Venture Company etc.) Please specify</p>
11 To the best of your knowledge, does any director or senior officer of your organisation have any personal or financial connection with	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Question	Response
any member of Loughborough University staff?	<i>If yes, please provide details of the individuals concerned and the nature of their relationship.</i>

Section B: Due Diligence

1: Governance structure

Question	Response
1.1 Does your organisation have a written constitution, overall strategy, mission statement and/or vision statement?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>
1.2. Does your organisation have an organogram which clearly defines responsibilities and reporting relationships?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>
1.3. Please explain any processes in place to manage environmental sustainability and waste management	Cal Poly Corporation manages Campus Dining which has a comprehensive environmental and waste management commitment. https://www.calpolydining.com/sustainability/ The California Polytechnic State University also has a comprehensive plan and personnel to manage environmental sustainability and waste management. https://afd.calpoly.edu/sustainability/
1.4. Please explain any processes in place to manage health and safety	Cal Poly Corporation has in place an Injury and Illness Prevention Program which includes safety training and violence prevention programs. These documents are accessible via the web at https://www.calpolycorporation.org/resources/policies-forms-howto/safety-at-the-corporation/ The California Polytechnic State University also provides support for Sponsored Projects, such as the one proposed here, related to Environmental Health & Safety, International Travel support, and other similar services.

Section 2: Economic and financial standing

Where possible, the University will carry out an independent financial check on all Awardees using an appropriate software package.

Question	Response
2.1. Does your organisation have the willingness to invest its resources towards implementation of the planned activities?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>

Question	Response
2.2. Does your organisation have a designated bank account that will accept euros, pound sterling and/or US dollars?	Euro <input type="checkbox"/> US dollar <input checked="" type="checkbox"/> Pound sterling <input type="checkbox"/> <i>If no – Please explain why</i>
2.3. Are the accounts audited (internal/external) at least once per year?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>
2.4. Please explain your organisations accounting system and how it allows for proper recording of financial transactions e.g. general ledger accounts, cash book/s, fixed assets register, accruals, pre-payments etc	<p>The organization and financial management system follows GAAP, Generally Accepted Accounting Principles, in accordance with the U.S.A. 2 CFR 200. Furthermore, the organization follows GASB, Governmental Accounting Standards Board, standards and guidance.</p> <p>The organization’s main accounting and financial management system is OneSolution, a Sungard Product.</p> <p>The organization’s financial management system(s), adequately identifies source of funds and application of funds for federally-sponsored activities (<i>Account Set-up Checklist, DOI Drawdown Procedures, and Signature Authorization process</i>). The management system provides identification for the proper treatment of funds as does other relevant policies and procedures.</p> <p>The organization monitors allowable costs to ensure they are charged to the grant (<i>Direct Cost and Allowable Cost Guide, and Transaction Review Guide</i>) within a specified period, in accordance with 2 CFR 200.</p> <p>The organization’s financial management system identifies and compares budget and expense line variances (<i>ACTE Report</i>) for each project award.</p> <p>The Sponsored Programs guide is available at the following web address: https://www.calpolycorporation.org/resources/policies-forms-howto/sponsored-programs-guide/</p>
2.5. Are supporting documents (invoices, receipts) obtained for all costs incurred?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i> Yes, except for some meal costs which fall within the meals policy as not requiring documentation.
2.6. Please indicate which of the following you would be willing to provide to evidence your organisation having the required financial strength by ticking the appropriate box.	A copy of your audited accounts for the most recent two years <input checked="" type="checkbox"/> A statement of your turnover, profit & loss account and cash flow for the most recent year of trading <input type="checkbox"/>

Question	Response
	<p>A statement of your cash flow forecast for the current year and a bank letter outlining the current cash and credit position <input type="checkbox"/></p> <p>Alternative means of demonstrating financial status if trading for less than a year <input type="checkbox"/></p>
<p>2.7. Please explain how you ensure reliability and integrity in your financial controls, systems and processes. Include details of any manuals you have and staff training done.</p>	<p>There is not a “single” accounting manual. Accounting policies and procedures within the organization in some cases are decentralized to the respective units. The organization feels adequate policies and procedures are in place for the proper management and oversight of federal assistance awards.</p> <p>There is a Sponsored Programs guide describing activities, roles, and responsibilities related to Sponsored programs such as the one proposed here.</p> <p>https://www.calpolycorporation.org/resources/policies-forms-howto/sponsored-programs-guide/</p> <p>The organization’s financial management system(s), adequately identifies source of funds and application of funds for Sponsored activities (<i>Account Set-up Checklist, DOI Drawdown Procedures, and Signature Authorization process</i>). The management system provides identification for the proper treatment of funds as does other relevant policies and procedures.</p> <p>The organization’s property management systems provide effective controls (<i>Direct Cost and Allowable Cost Guide and Fixed Asset Guide</i>) over asset management.</p> <p>The organization maintains written policies and procedures regarding Cost Allowability (<i>Direct Cost and Allowable Cost Guide</i>).</p> <p>The organization monitors allowable costs to ensure they are charged to the grant (<i>Direct Cost and Allowable Cost Guide, and Transaction Review Guide</i>) within a specified period.</p> <p>The organization’s financial management system identifies and compares budget and expense line variances (<i>ACTE Report</i>) for each project award.</p> <p>The organization has controls (<i>Direct Cost and Allowable Cost Guide, and Transaction Review Guide</i>) to review costs to ensure they are charged to the grant compliant with budgetary controls to preclude incurring costs above allowed cost lines and/or in accordance with the awards terms and conditions.</p> <p>The organization does not have an automated “accounting system” that reviews the budget and program plans. However, this is managed manually by the Sponsored Programs Analyst at the time of expense review, and regularly on a monthly cycle after month-end close or when an alternate schedule governs otherwise.</p>

Question	Response
	<p>The organization's accounting records are supported by source records (e.g purchasing and travel reimbursement back-up) (<i>Retention Policy and Transaction Review Guide</i>).</p> <p>The organization's employees hours and leave are recorded by actual hours and accrued leave appropriate to the fund source with leave taken against the liability accrued (<i>website: http://www.calpolycorporation.org/docs/#payroll and Leave Accrual procedures</i>).</p> <p>The Project Director (or designee) has signature authority and must approve all transaction requests including personnel and payroll forms. The signature of the Project Director's supervisor is required, as directed by CPC policy, when payments or reimbursements to the Project Director are being requested.</p> <p>Demonstration of "approval" (e.g. original signature, electronic signature, email approval) should be in accordance with relevant CPC policy and procedures.</p>
<p>2.8. It is a requirement of this contract that the awardee holds the insurance indicated.</p> <p>Please confirm whether you already have or can commit to obtain, prior to the commencement of the contract, the insurance cover indicated.</p>	<p>Compulsory for organisations with one employee or more: Employer's Liability Insurance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Preferred: Public Liability Insurance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Preferred: Professional Indemnity Insurance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>Please provide a copy of your insurance certificates</i></p> <p>A copy of the insurance certificates is provided as an attachment via email. If Cal Poly is selected for award then the necessary sponsor organization/s can be named as certificate holder/s.</p> <p><i>If you do not hold any of these insurances (or an equivalent) please explain why</i></p>
<p>2.9. Have you, either as a supplier, an awardee or as an organisation in the supply chain, been involved in the provision of any contract in the last 3 years for goods and services, where the contract has been terminated or payment has been withheld because your performance was not satisfactory?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>If yes - please explain</i></p>
<p>2.10. Have you as a supplier or an awardee withdrawn from a contract prematurely during the last three years?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>If yes - please explain</i></p>

Question	Response
2.11. Have you as a supplier or an awardee had to pay financial penalties or had payment deducted from monies arising from failure to perform in accordance with contractual obligations during the last three years?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <i>If yes - please explain</i>

Section 3: Professional and technical capacity

Question	Response
<p>3.1 Please provide details of up to 3 current or completed contracts that are similar in nature to the work you will be doing under the MECS programme</p> <p>Loughborough University, as the lead of MECS may speak to the client listed to confirm the accuracy of the information provided. The University reserves the right to contact any or all these organisations for a reference.</p> <p><i>If you cannot provide these details, please explain why</i></p>	<p><u>Contract 1</u> Customer organisation: International Development Research Centre Contact name, tel. no., & e-mail: Sophie Lessard, +1 613 236 6163, slessard@idrc.ca Contract start date: October 1, 2018 Contract completion date: December 31, 2021 Contract value: 319,000 CAD Brief description of contract (max 150 words): The overall objective of this project is to support engineering training and research systems in Sub-Saharan Africa to contribute to socio-economic development.</p> <p><u>Contract 2</u> Customer organisation: US Agency for International Development through The Washington University Contact name, tel. no., & e-mail: Molly Gaschler, 314-747-5294, gaschlerm@wustl.edu Contract start date: May 1, 2014 Contract completion date: September 30, 2016 Contract value: \$50,004 USD Brief description of contract (max 150 words): This research on the benefits of treating moderate malnutrition during pregnancy will be conducted in Malawi and include home visits for diet assessment and adherence to treatment arms and submission of ethics and Malawian Health Ministry approvals and communication.</p> <p><u>Contract 3</u> Customer organisation: Australian Research Council via Murdoch University Contact name, tel. no., & e-mail: Jane Crier, 61-8-9360-2970, j.crier@murdoch.edu.au Contract start date: March 8, 2016 Contract completion date: March 7, 2020 Contract value: \$14,577 Brief description of contract (max 150 words): Cal Poly is participating as part of a team of historians on a multidisciplinary transoceanic investigation of pearling in the Indian Ocean World.</p>
<p>3.2 How many staff does your organisation intend to deploy in order to carry out the services for this award? Please include any staff from sub-contractors or other consortia members.</p>	<p>2 faculty, approximately 4 undergraduate students, and approximately 2 graduate students.</p> <p>In addition, up to 5 administrative staff will be directly involved in preparing and administering any award resulting from this application.</p>
<p>3.3 Please provide the names of up to 3 people who will be responsible for managing the delivery of services under this award.</p>	<p><u>Person 1</u> Name and Title: Amy Velasco, Director Grants Development & Sponsored Programs Offices</p>

Question	Response
	<p>Position in organisation: Director Grants Development & Sponsored Programs Offices Length of service with the organisation: 6 years as Director of Grants Development, 2 years as Director of Grants Development & Sponsored Programs</p> <p><u>Person 2</u> Name and Title: Peter Schwartz, Professor Position in organisation: Professor within the Physics Department Length of service with the organisation: 19 years</p> <p><u>Person 3</u> Name and Title: Stephany Martin Position in organisation: Contract & Grant Analyst III Length of service with the organisation: 11 years</p>
<p>3.4 Please provide details of the educational and professional qualifications of the individuals listed in question 3.3.</p>	<p><u>Person 1</u> Professional Qualifications: Master's Degree and 10+ years of Research Administration experience Country: United State of America Date/s: Cal Poly does not generally provide dates for educational attainment & professional positions unless they are publically published by the individual, as the consideration of such information might be considered age discrimination.</p> <p>Professional qualifications: 10+ years of Research Administration and Management experience Institution: California Polytechnic State University & Cal Poly Corporation Country: United States of America Date/s: Cal Poly does not generally provide dates for educational attainment & professional positions unless they are publically published by the individual, as the consideration of such information might be considered age discrimination.</p> <p><u>Person 2</u> Highest educational qualification obtained: PhD Institution: Princeton Country: United States of America Date/s: Ph.D., Princeton University, 1998 M.S., Princeton University, 1993 B.S., Massachusetts Institute of Technology, 1986</p> <p>Professional qualifications: Cal Poly full Professor since 2017 Institution: California Polytechnic State University Country: United States of America Date/s: Cal Poly faculty member beginning 2000</p> <p><u>Person 3</u> Highest educational qualification obtained: AA</p>

Question	Response
	<p>Institution: Cuesta College Country: United States of America Date/s: Cal Poly does not generally provide dates for educational attainment & professional positions unless they are publically published by the individual, as the consideration of such information might be considered age discrimination..</p> <p>Professional qualifications: Institution: Cal Poly Corporation Country: United States of America Date/s: Cal Poly does not generally provide dates for educational attainment & professional positions unless they are publically published by the individual, as the consideration of such information might be considered age discrimination.</p>
<p>3.5 Please explain what quality assurance, monitoring and control processes you have in place to ensure the work will be delivered to the standard required</p>	<p>The monies awarded must be spent by the CPC in accordance with the proposal and award terms and as initiated by the Project Director. Although the CPC signs the agreement and the CPC is legally and financially responsible to the sponsor, the Project Director is responsible for overall project administration, including, but not limited to: submission of the technical reports, and proper fiscal, compliance and programmatic management of the project. The Sponsored Programs office will provide administrative and financial services to assist in these responsibilities and has established procedures to help meet sponsor, university and CPC administrative requirements.</p>

Section 4: Equality

Question	Response
<p>4.1 Is it your policy as an employer to comply with your statutory obligations to staff and applicants for employment under national equality legislation?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Cal Poly Corporation follows both State of California and United States of America equal employment policies and practices.</p>
<p>4.2 Does your organisation have a formal equality policy?</p>	<p><i>If yes, please attach a copy of your equality policy and answer question 5.3 below</i></p> <p><i>If no - please explain why</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>4.3 Does the policy address the following?</p> <p>(a) Recruitment, selection, training, promotion, discipline and dismissal</p> <p>(b) Discrimination, harassment, and victimisation (and it is made clear that these are disciplinary offences within the organisation)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

<p>(c) Modern slavery (defined as slavery, servitude, forced or compulsory labour and human trafficking)</p> <p>(d) Identification of the senior position with responsibility for the policy and its effective implementation</p> <p>(e) How the policy is communicated to staff</p> <p>(f) It covers both employees and service users</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no to any item - please explain why</i></p> <p>Slavery and human trafficking are already against the law, we do not include all laws in every policy.</p>
<p>4.4 Is the policy effectively implemented in your organisation's recruitment practices?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>4.5 Does your organisation monitor the profile of its staff according to protected characteristics?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no – please explain why</i></p> <p><i>Please provide a copy of your recruitment policy</i></p>
<p>4.6 Does your organisation provide equality training for managers and any staff responsible for recruitment and selection?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no - please explain why</i></p>

Section 5: Procurement and asset management

Question	Response
<p>5.1 Does your organisation have a procurement manual that includes clear policies and procedures?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no – please explain why</i></p>
<p>5.2 Does your organisation solicit competitive bids for all major procurements? Please explain how the bids are documented</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no - please explain why</i></p> <p>All Major purchases exceeding a value of \$25,000 require a bid, except as described in the Sole source section below.</p> <p><u>Purchases Exceeding Value of \$25,000.</u></p> <p>An authorized signer on an account is required to submit a request for a purchase order and attach a minimum of three formal bids, based on the same written specifications, and which provide competitive price, responsiveness to specifications, and</p>

	<p>reputation of vendors. These purchases must be pre-approved by a designated CPC signatory.</p> <p><u>Sole Source Written Justification.</u> Sole source purchases on a non-competitive basis will require written justification and approval of the Lead Financial Administrator or his/her designee. The written justification should include:</p> <ol style="list-style-type: none"> 1. Unique performance factors of the products specified, 2. Why these factors are required, and 3. What other products have been evaluated and rejected, and why.
5.3 Does your organisation have threshold amounts for obtaining multiple bids or quotes?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no - please explain why</i></p> <p>See 5.2 above.</p>
5.4 Is an assets register maintained and how often is it updated? When was the last physical inventory of assets performed?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no - please explain why</i></p> <p>The organization conducts property inventory an on annual basis (Fixed Asset Guide) which is at least every 2 years. The last inventory for equipment was due April 2019.</p>
5.5 Please explain how you safeguard project assets	<p>The organization has written property management policies and procedures (Procurement Policy and Fixed Asset Guide). The organization has an inventory control system (Fixed Asset Guide). The organization maintains records of property disposed (Fixed Asset Guide) in accordance the organization's policies and procedures and sponsor requirements.</p>

Section 6: Compliance with relevant legislation, regulation, rules, policies and procedures

Question	Response
6.1 Do you confirm compliance with all national legislation, regulation, rules, policies and procedures?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If no - please explain why</i></p> <p>Cal Poly Corporation is in compliance with all State of California and United States of America national/state legislation, regulations, rules, policies, and procedures.</p>
6.2 Please explain the measures, processes and systems you have in place to ensure you comply and remain updated with all national legislation, regulation, rules, policies and procedures	<p>The University and Cal Poly Corporation both identify and disseminate information about major changes in national legislation, regulation, policies, and procedures. Individual units such as Human Resources, Grants Development, Sponsored Programs, Risk Management, and Informational Technology Services also have staff whose responsibilities include identifying and disseminating information about changes both within the respective units and to other University and Corporation constituents. Most staff are also expected to attend regular</p>

	internal and external trainings related to national (and state) legislation, regulation, rules, policies, and procedures.
6.3 Does your organisation have a policy on anti-corruption and anti-bribery?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If no - please explain why</i>
Do all staff get trained on it?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If no - please explain why</i>
Is the policy enforced?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If no - please explain why</i>
6.4 Is your organisation linked to any political activity?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, please explain the nature of this activity</i>

Section 7: Data management

Question	Response
7.1 Does your organisation have a policy on good data management?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If no - please explain why</i>
Are all staff trained on this policy?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If no - please explain why</i>

<p>7.2 Please explain the processes and systems used to handle, process and keep data held by your organisation secure.</p> <p>Please explain specifically how you maintain the confidentiality and integrity of personal and/or sensitive data.</p>	<p>The Cal Poly Corporation follows California State University policies on protecting data.</p> <p>The Cal Poly Corporation data protection website is available at the following URL:</p> <p>https://www.calpolycorporation.org/resources/policies-forms-howto/protecting-sensitive-data/</p> <p>University departments undergo regular review to examine the types of sensitive data used and stored by the department to ensure sensitive data is only collected, used, and stored for a business purpose. The reviews also examine how data is stored to ensure data is stored in a safe and protected manner.</p> <p>Cal Poly also uses Spirion software to scan employee computers for confidential data.</p> <p>Cal Poly's Responsible Use Policy for Information Technology is available here:</p> <p>https://security.calpoly.edu/content/policies/rup/index</p> <p>Cal Poly Information Security standards are available here:</p> <p>https://security.calpoly.edu/content/policies/standard_list</p>
<p>7.3 Does your organisation provide, transfer or sell data to third parties for any reason?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, please provide further explanation</i></p> <p>Data is sometimes provided to research partners to support collaboration on projects. Cal Poly is also required to publish certain data sets on public websites based on contract terms related to awards and contracts made with the Federal Government and other partners.</p>

Section C: Safeguarding

Principles of Safeguarding

The safeguarding principles that underpin our due diligence process are as follows;

- Everyone has the responsibility for safeguarding
- Do no harm
- Organisations have a safeguarding duty of care to any people we work with, staff and volunteers, including where downstream partners are part of delivery. This includes people who are not directly involved in the programme but who may be vulnerable to abuse as a result of the activities of the programme.
- Act with integrity, be transparent and accountable
- All activity is done in the best interests of any person involved

- A child is defined as someone under the age of 18 regardless of the age or majority/consent in country.
- All people shall be treated equally, irrespective of race, gender, religion/or not, sexual orientation or disability

Section 1: Safeguarding processes and procedures

Question	Response
<p>1.1 Do you have a safeguarding policy in place?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If yes: does it include a statement of your commitment to safeguarding, including a zero-tolerance statement on bullying, harassment and sexual exploitation and abuse?</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>Please provide a copy of the policy and answer questions 1.2 & 1.3</i></p> <p><i>If no; Are safeguarding issues addressed in a different organisational document e.g. an HR manual?</i></p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p><i>If yes: does it include a statement of your commitment to safeguarding, including a zero-tolerance statement on bullying, harassment and sexual exploitation and abuse?</i></p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p><i>If yes, please provide a copy of the relevant document and answer questions 1.5 & 1.6</i></p> <p>If no - <u>please explain in detail</u> how you ensure;</p> <p>a) a comprehensive, safe environment for all people the organisation engages with and</p> <p>b) a zero-tolerance approach on bullying, harassment, sexual exploitation and abuse</p>
<p>1.2 Please provide details of your organisation’s safeguarding procedures.</p> <p>This should include details of:</p> <ul style="list-style-type: none"> - how you keep records of safeguarding issues - What your investigation and disciplinary procedures are when allegations, complaints or a disclosure are made - the referral mechanism to be followed when reporting safeguarding cases to the relevant authorities 	<p>All complaints of harassment are received and investigated by the Director of Human Resources for the Cal Poly Corporation. All complaints are taken seriously. The person being harassed or making the complaint is interviewed along with all witnesses and the person being accused. If an act of physical abuse, stalking or serious offenses are reported University Police would be contacted immediately. In all harassment cases the person being accused is placed on investigatory suspension until the end of the investigation when a final determination is made in regards to the outcome of the case and their employment. All investigations are documented and save electronically and in paper form in a locked desk in the Human Resources Directors Office. In needed</p>

Question	Response
	in these types of investigations HR will discuss with an attorney to help decide the final outcome of the case.
1.3 Are staff provided training on your safeguarding policy?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i> <i>If yes – please explain the type of training done (e.g. in person, online, one-off, ongoing etc).</i>
1.4 Do you have a designated safeguarding officer or focal point?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1.5 Are you going to be working with children or vulnerable adults through your activities under this award/contract? If yes - do you have a child protection policy and /or a vulnerable adult's policy?	Children (below 18 years of age) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Vulnerable adults Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Child protection policy Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Vulnerable adult policy Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <i>If no – Please explain why</i> Cal Poly typically does not work specifically with vulnerable adults, and any work with vulnerable adults would likely be reviewed either by Institutional Review Board for Human Subjects if data would be collected about humans or the work would be identified during the contract process with project partners and protections would be identified within the contract review and negotiation process.
1.6 If you are going to be working with vulnerable people in order to deliver this award/contract have all the staff involved been cleared/vetted through a nationally recognised process? (e.g. a police check).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>Please explain the process followed</i> Staff will be vetted following the process described in question 3.2 if the proposal is awarded.

Section 2: Whistle blowing (also called complaint or concerns procedure)

Question	Response
2.1 Do you have a whistleblowing policy in place?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If yes – please provide a copy</i> <i>If no – please explain;</i> - how you ensure that whistle blowers are protected within your organisation and - what the processes are for dealing with concerns raise by staff and what the timelines are
2.2 Are staff provided training on your whistleblowing policy?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>

	<p><i>If yes – please explain the type of training done (e.g. in person, online, one-off, ongoing etc).</i></p> <p>This is a federal law. Information in regards to this is posted throughout the facility on federal posters that are mandated by law. Also provided in handbook given to employees.</p>
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Section 3: Recruitment and selection

Question	Response
3.1 Does your recruitment process consider the level of safeguarding risk in a job role?	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If no – Please explain why</i></p>
3.2 Does your recruitment policy include a criminal background check on candidates?	<p>Yes – all candidates <input type="checkbox"/></p> <p>Yes – some candidates depending on role <input checked="" type="checkbox"/> <i>(please provide further details)</i></p> <p>No – no candidates <input type="checkbox"/> - <i>please explain why</i></p> <p>Cal Poly Corporation follows the California State University (CSU) policy on background checks for new employees or employees entering into new positions or roles.</p> <p>The CSU Policy document states:</p> <p>Protection of the campus community and its assets can be best achieved when risk and issues of compliance are well managed. To accomplish these goals, the Background Check Policy was created to provide policy directives and guidance in the administration of background check programs. This policy requires background checks to be conducted on all final candidates for hire once CSU makes a conditional offer of employment. For the purposes of this policy, current CSU employees are required to undergo background checks if under voluntary consideration for a position in which a background check is required by law or for a sensitive position (with limited exceptions). Sensitive positions are those designated by the CSU as requiring heightened scrutiny of individuals based on the potential for harm, concerns for safety and security, or risk of financial loss to the CSU community. Student workers and volunteers are required to have background checks if they perform duties that would require a background check by law or if they access Level 1 data. Independent contractors, consultants, and auxiliaries that operate under the CSU name or on CSU property are responsible for ensuring that their employees have had background checks if they perform duties that the CSU considers to be sensitive or that would require a background check by law.</p> <p>The CSU recognizes the need to balance its responsibility for conducting background checks with the need to protect</p>

Question	Response
	individual privacy. Federal law, state law, and University policy recognize the individual's right to privacy and restrict the use of information obtained through background checks. The campuses are responsible for maintaining the confidentiality of the background check results and for ensuring they are properly retained and destroyed as appropriate. Background check information cannot be used to discriminate against any individual on the basis of race, religion, ancestry, color, sex, sexual orientation, gender identity, age, physical disability, mental disability, veteran status, marital status, pregnancy, medical condition, genetic information, and/or national origin.
3.3 If the role to be recruited is for a person who will work directly with vulnerable groups does the interview include specific questions on people's attitudes and values in relation to the protection of children and/or vulnerable adults?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <i>If no – Please explain why</i> Questions related to work with vulnerable groups are not required within interviews, although they may be voluntarily included in some recruitments. California Polytechnic State University recruitments, such as those to hire faculty, require a question of the applicant's references related to any past indications of an applicant potentially being violent in the workplace.
3.4 Do you make use of probationary periods of employment to ensure suitability once in post?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>

Section 4: Risk management

Question	Response
4.1 Do you have a risk management policy or framework capturing risk appetite and risk categories that includes safeguarding risks?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>
4.2 Does each activity/project/programme have a risk register that feeds into an overall organisational risk framework?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <i>If no – Please explain why</i> Each unit/division is responsible for managing risks related to their activities within the risk management framework. Specific risks, once identified, are managed by specific areas or units, such as Environmental Health and Safety. Executive Management is made aware of extraordinary/unusual risks as needed, but due to the variety and number of activities, there is no integrated system for tracking all risks across all departments and activities for the Cal Poly Corporation and the California Polytechnic State University.
4.3 Is there regular senior oversight of your risk register?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <i>If no – Please explain why</i>

Question	Response
	<p>The pre-award Grant Analysts in Grants Development review all proposal for risk factors, including those related to the project itself, risk to the sponsor, and risk for the University and Corporation. Risks identified at the proposal stage are then also reviewed by the Academic Department Chair/s and Dean/s (or designee/s) as part of the submission process. The Department Chair/s and Dean/s (or designee/s) also review for programmatic risk. The risk factors are reviewed again upon award by the Grants Development Analyst (pre-award office) and the Grants and Contracts Analyst in Sponsored Programs (post-award office). The Director of Grants Development and Sponsored Projects Offices reviews all documents and potential risks again prior to signing a contract and/or accepting funds. The Grants and Contracts Analyst provides oversight of expenditures and compliance risks during the project period. At any time, Analysts may involve the Director, who will in turn involve upper level leadership such as the Dean of Research or VP for Research & Economic Development (University) or Executive Director of Cal Poly Corporation as needed.</p>
<p>4.4 Do you share your risk management policy or framework with your downstream partners, especially for issues around safeguarding?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>If no – Please explain why</i></p> <p>Mitigation of Risk is incorporated into all subcontracts, teaming agreements, and Memoranda of understanding as required by the prime award and the work being done by the partner.</p>

Section 5: Code of conduct

Question	Response
<p>5.1 Does your organisation have a clear code of conduct for staff (paid or voluntary) that sets out clear expectations of behaviours, inside and outside the workplace?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If yes, please attach a copy</i></p> <p><i>If no – Please explain why</i></p>
<p>5.2 Does the code of conduct include what will happen in the event of a breach of the code?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If no – Please explain why</i></p>
<p>5.3 Does the code of conduct prioritise the wellbeing of and care of all people, including all the people you work/interact with?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If no – Please explain why</i></p>
<p>5.4 Are all staff (paid or voluntary) provided with training on the code of conduct as part of their induction to their role?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If no – Please explain why</i></p>
<p>5.5 Are your policies and practices for the management of downstream partners/sub-</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>If no – Please explain why</i></p>

Question	Response
contractors and affiliates aligned to the code of conduct?	

Section 6: Governance and accountability

Question	Response
6.1 Does your organisation regularly review the management of safeguarding issues?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i>
6.2 Does your organisation have a designated person responsible for safeguarding who is responsible and accountable for safeguarding standards and reporting across the organisation?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <i>If no – Please explain why</i> United States of America laws and policies do not require a single point of contact for safeguarding standards, as different offices such as Sponsored Programs, HR, and Information Technology Services all play an inter-related role in maintaining safeguards. Each office and unit is responsible both for the areas for which it has primary responsibility and for effectively communicating and working with other units to ensure transparency about requirements and to ensure requirements are met.
6.3 If, through your activities under this award/contract, you are working with or delivering services directly to people, is their feedback on your approach/process/service actively sought?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <i>If yes - please describe how feedback is sought and actioned</i> <i>If no – Please explain why</i> Services are not being directly provided to people. The technical team will be acquiring feedback from local people on the usability of the product/s under development.
6.4 Are there opportunities for the people your organisation is working with to participate in the governance structures of your organisation? (e.g. can a representative sit on a committee that reports to the board of directors)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If no – Please explain why</i> Yes, there are opportunities for community persons to participate in the governance of the Cal Poly Corporation and the Institutional Review Board. The institution completes a wide variety and large number of projects and activities, and therefore any given project/activity is not likely to be directly represented in the governance structure.

Please provide the name and contact details of the individual who can answer queries about this questionnaire.

Name: Trish Brock

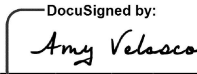
Position in organisation: Senior Analyst, Grants Development Office

Contact details: phone, 1-805-756-1450, email, pbrock@calpoly.edu

After completion of the questionnaire, please sign the declaration below (delete as appropriate)

I declare that the information given is accurate to the best of my knowledge.

I understand that false information could result in the termination of any existing or future contract.

Signed:  _____
1F812B80C88146F...

Name: Amy Velasco _____

Position: Director, Grants Development & Sponsored _____
Programs Offices

For and on behalf of: Cal Poly Corporation _____

Date: 2019-06-04 _____