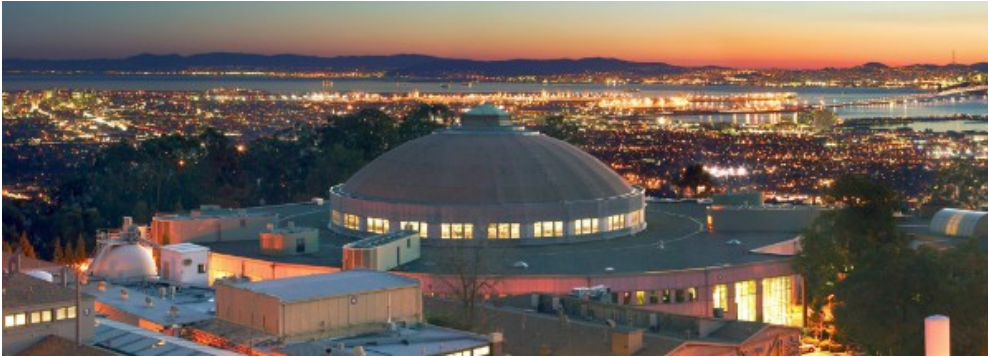


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Vol XXIV. January 2021

Happy New Year!

All of 2021 is ahead of us, and with it, both scholarship programs CIEE runs have opened applications! Further on, we discuss a podcast that features Dr. von Meier's work on California's electric grid.

Upcoming Events

None for now—Check back next month for updates!

In the News

[A Field Guide to the Election and Climate Change](#)

[Another Reason to Cut Down on Plastics](#)



Cal Energy Corps Applications Now Open!

Applications for our Cal Energy Corps 2021 Summer Cohort are officially open!

The Cal Energy Corps is an undergraduate summer internship program engaging top UC Berkeley undergraduate students in the design, development and delivery of sustainable energy and climate solutions. All placements are challenging, full-time assignments with leading organizations in the private and public sector, enabling students to gain professional experience working on the technical solutions of social issues in a cohesive learning environment.

All current undergraduate students at UC Berkeley are eligible to apply for the Cal Energy Corps program. Students from all disciplines and majors are encouraged to apply. Some internship hosts may have specific major preferences, as indicated in their respective position descriptions.

Selected students are expected to commit to working full-time for a minimum of 8 weeks over the summer and will be paid a competitive hourly salary for the duration of the internship. Students will have the opportunity to address energy and climate issues by conducting hands-on research in areas such as renewable energy, carbon policy, buildings efficiency, and sustainable design.

Applications will require the following:

- [Application form](#)
- Statement of purpose (max. 800 words)
- Academic transcript (unofficial is okay)
- Resume (1-2 pages)
- [Letter of Recommendation](#) from a UC Berkeley faculty member or approved supervisor

Applications and letters of recommendation are both due on **March 7th, 2021**.

Additional hosts and opportunities will be added during the open application period, so please be sure to subscribe to our [mailing list](#) or social media channels ([Facebook](#) | [Twitter](#) | [Instagram](#) | [LinkedIn](#)) to stay up to date on news.

Apply Now!



**Art Rosenfeld Award for Energy Efficiency Applications
Now Open!**

For our Berkeley graduate students, we are pleased to announce that the Art

Rosenfeld Award for Energy Efficiency is also now taking applications!

The Art Rosenfeld Award for Energy Efficiency aims to promote innovative research in technologies and policies that will enable a more resource-efficient society. To this end, the Rosenfeld Fund provides funding to a graduate student committed to research on energy efficiency. This includes technical, social science and policy research that can lead to reductions in the use of energy. The successful applicant will be selected for their academic merit, passion, and commitment to pursuing both educational and career paths with a focus on energy efficiency. Heavy weight will be given to the potential of the plan of action to make a contribution in this area. A \$10,000 award will be awarded to one graduate student in a Ph.D., Masters, J.D. or professional program. Applications are due by March 14. Notification of award will be by April 16.

To apply to this fellowship, submit the following materials to info@uc-ciee.org by March 14th, 2021:

- Your resume or CV of up to two pages;
- 2) Personal Statement (750-1000 words) describing your background and how you selected a career related to the field of energy efficiency;
- 3) Plan of Action (750-1000 words) describing your academic plans and how the Rosenfeld Award will support, broaden and/or accelerate them.

The selection committee is especially interested in the potential for specific activities in your plan to make a useful contribution to energy efficiency technologies, strategies (including strategies that address behavior), and policies. The Rosenfeld Fund is an endowment managed by the California Institute for Energy and Environment (CIEE) and the UC Berkeley Graduate Assembly (GA) to support graduate and professional students who pursue career paths and educational opportunities in local and global sustainability.

Apply Now!

CIEE Instagram Now Live!

Good news: CIEE is now on Instagram, as well as Twitter, Facebook, and LinkedIn! If you'd like, you can follow us by clicking the button below.

Follow our Instagram!

Upcoming Events

None for now—Check back next month for updates!

Monthly Spotlight



A PG&E contractor works on utility poles along Highway 128 near Geyserville, California on October 31, 2019. (PHILIP PACHECO/AFP via Getty Images)

CIEE's Sascha von Meier on KQED's Bay Curious Podcast: "Why Doesn't PG&E Just Bury the Powerlines to Prevent Wildfires?"

We're always happy to see our gifted researchers at CIEE sharing their work out with the world, and with the state of California's electric grid in the forefront of many residents' minds, that work is more and more critical.

In KQED's Bay Curious, a podcast looking to answer people's biggest questions about the Bay Area, host Olivia Allen-Price tackled a question sure to be on many Californians'

minds: why doesn't PG&E simply bury all of their power lines in order to prevent wildfires?

It's an attractive solution to keep electrical equipment safe and isolated from any fuel sources in case of a shortage or failure, but it's not as simple to implement as it sounds. Cost is an obvious problem. If PG&E was to bury every power line currently on the grid, it would cost about \$3 million dollars per circuit mile—and PG&E has over 100,000 miles of transmission lines on the grid.

CIEE'S Sascha von Meier also observes that, with electrical equipment buried underground, diagnosing an electrical failure becomes that much harder to do.

“When power lines are underground, if and when something does go wrong, it's a lot harder to find where the problem is and go fix it. So that then takes longer and costs more to do.”

While some new additions to the grid, including those being developed as part of the effort to rebuild the town of Paradise that was razed in the 2018 Camp Fire, are being built underground, burying the whole electrical grid doesn't seem to be a viable solution to PG&E and California's wildfire woes.

So, what is?

Dr. von Meier, and the rest of us at CIEE, think that a smarter electrical grid is a solution to many of the problems California faces. One key innovation in electric grid management is the application of synchrophasors, sensors placed along an electrical line that monitor and report the line's status in real-time, and in high-resolution detail. For instance, synchrophasor measurements can recognize when a power line has been severed, allowing operators to cut electricity to that line in a split second, before the wire even touches the ground -- a feature that's already being utilized by San Diego Gas and Electric. And a smarter grid, Dr. von Meier says, would allow utilities to operate the system in fundamentally different ways. It would make it easier, for example, to integrate rooftop solar generation into the mix, to better coordinate electric vehicle charging, and to orchestrate microgrids that can generate and store power independently during a power shutoff— a core feature of one of CIEE's other major research projects, the Oakland EcoBlock.

If you'd like to listen to the whole podcast, you can do so on KQED's [website](#).



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