Summer Newsletter

UW Clean Energy Institute <uwcei@uw.edu>

Tue 7/14/2020 3:01 PM

To: Corin A Shelley-Reuss < corinsr@uw.edu>

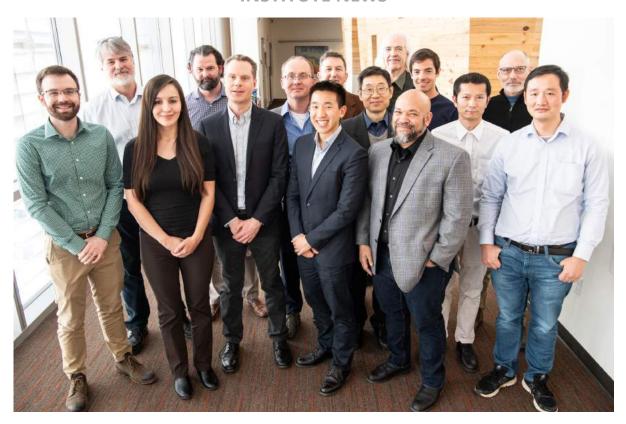
View the web version of this message





July 2020

INSTITUTE NEWS



Researchers join forces with industry to boost U.S. solar manufacturing

Working with leading domestic solar companies, the Washington Clean Energy Testbeds, NREL, UNC Chapel Hill, and the University of Toledo have formed the <u>U.S.</u> Manufacturing of Advanced Perovskites Consortium (US-MAP). This research and development coalition aims to accelerate the domestic commercialization of perovskite technologies. CEI Chief Scientist David Ginger, a member of US-MAP's executive board, spoke to the <u>Casper Star Tribune</u> earlier this year about advances in perovskite solar cells.



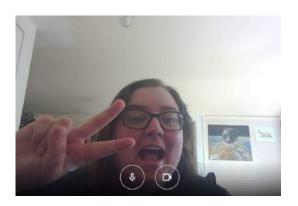
New website!

Our new website is here! We'd like to thank the CEI students, faculty, and partners that contributed feedback and ideas. We hope you like it! Questions or comments, email uwcei@uw.edu.



Student Achievement Awards

Yuanyuan Shi and Erica Eggleton received CEI's 2020 Student Achievement Awards. Shi, who graduated from UW in June with a Ph.D. in electrical & computer engineering, won the Scientific Achievement Award for her work in machine learning for energy systems. Eggleton, a chemical engineering doctoral student, won the Outreach & Service Award for outstanding volunteer work in schools and at UW.



At-home learning during COVID-19



That's debatable: Washington state can

Soon after COVID-19 closed schools, CEI developed <u>at-home learning resources</u> for K-12 parents, teachers, and students. In addition to lesson plans and science readings, we've offered virtual classroom visits from our clean energy ambassadors. Read more about this outreach work in *GeekWire*.

decarbonize in a decade

CEI Director Dan Schwartz participated in <u>KUOW's live debate</u> on whether Washington state can decarbonize in the next decadeachieving zero emissions from our energy use. His teammate on the "con" side was Julia Barnett, an activist entering the 8th grade. On the "pro" side was UW architecture professor Kate Simonen and Sarah Starman, a grassroots organizer.

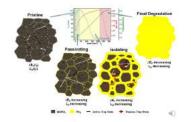


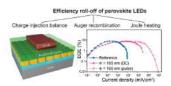
Environmental Innovation Challenge Winners

The CEI-sponsored "Clean Energy Prize" at this year's <u>Alaska Airlines Environmental Innovation Challenge</u> went to Moment, a team of engineering students from Simon Fraser University in British Columbia.

Moment is developing sustainable energy storage from used electric-vehicle batteries. The "Connie Bourassa-Shaw Spark Prize" was awarded to <u>ChocoLED</u>, a team helmed by CEI Graduate Fellow Yunping Huang. ChocoLED is developing a low-cost, ecofriendly solution to lighting and displays by using cocoa beans.

RESEARCH HIGHLIGHTS







Using machine learning to forecast the degradation of perovskites

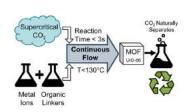
ACS Energy Letters

Suppressing Efficiency Roll-Off at High-**Current Densities** for Ultra-Bright **Green Perovskite Light-Emitting Diodes**

ACS Nano

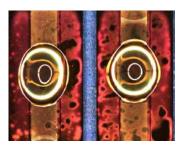
A proposal towards a scalable singlephoton source to create a quantum <u>simulator</u>

ACS Photonics



Scalable Continuous Flow Metal-Organic Framework (MOF) Synthesis **Using Supercritical CO2**

> ACS Sustainable Chemistry & Engineering



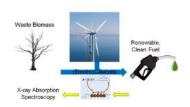
Active selfcleaning surface design for solar panels with water droplets

Applied Physics Letters



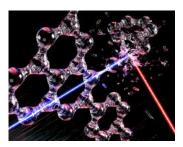
The challenges and contradictions of Peru's Proyecto Masivo de Energía Solar

Elsevier Science



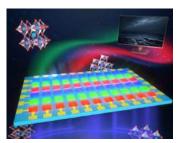
Understanding how solid catalysts powered by <u>electricity</u> convert organics in water to liquid **hydrocarbons**

Journal of Catalysis



Solar-to-fuel energy conversion: **Multi-pulse laser experiments** reveal a new way to control chemical reactions with <u>light</u>

The Journal of Physical Chemistry



Photolithographic Patterning of Perovskite Thin Films for Multicolor Display Applications

Nano Letters

JOB OPPORTUNITY

CEI's education director, Shaun Taylor, will retire this summer. CEI is looking for an Associate Director of Education & Workforce Development.

UW HOME

CLEAN ENERGY INSTITUTE



CONTACT US | PRIVACY | TERMS

© 2020 UW Clean Energy Institute | Seattle, WA

This email was sent to corinsr@uw.edu Unsubscribe or change your email preferences