FLEXLAB®

The world's most advanced integrated building and grid technologies testbed

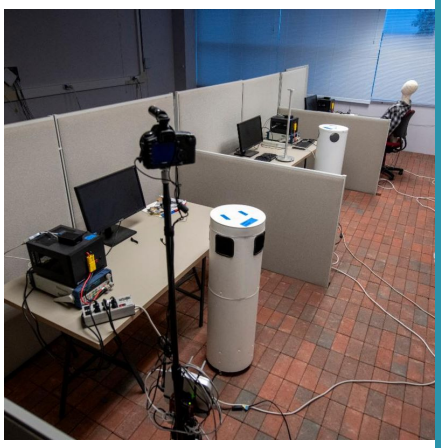
FLEXLAB® Celebrates 10 Years of Impactful R&D and Counting

Can you believe it's been a decade? **FLEXLAB®** is proud to celebrate 10 years of research achievements supporting a future of decarbonized buildings. In this newsletter we focus on demand flexibility and how it can play a crucial role in supporting clean energy at scale, mitigating climate change and creating a greener future. FLEXLAB research advances innovations to help us all get there. The articles below highlight a few FLEXLAB projects that exemplify these research efforts, showing the value to building owners, and demonstrating how flexible devices can communicate quickly to respond to grid needs.

Learn More!

Latest FLEXLAB News & Updates

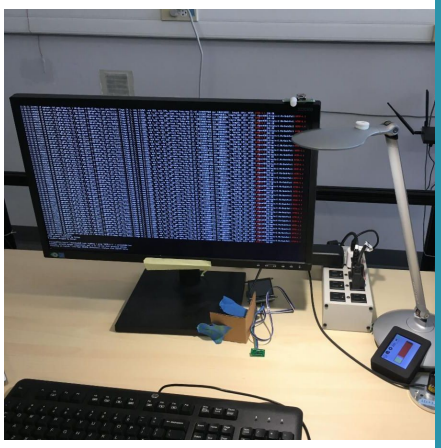
Case Study: Demand Flexibility Benchmarking



Building demand flexibility (DF) can help to decarbonize the buildings sector and power supply, improve grid reliability, and meet environmental and economic goals for buildings. FLEXLAB tests were able to identify key factors influencing building DF and reveal how HVAC system type and thermal mass may influence building DF. As building owners begin to learn about demand flexibility, this project demonstrates the key metrics they can use to determine how flexible their building can be.

Learn more

Case Study: AutoDR Interconnection and Interoperability



AutoDR (automated demand response) provides the communications and automation to enable responsive customer electricity demand, enabling the electricity grid to react more flexibly to evolving supply and demand conditions such as variable renewable generation. As the grid becomes cleaner with variable renewable energy sources (e.g., wind and solar), managing supply and demand becomes more important to maintain a reliable supply of energy. FLEXLAB tests showed AutoDR satisfies the rapid-response needs of a modern grid system with responses to the grid signal in less than one minute.

Learn more

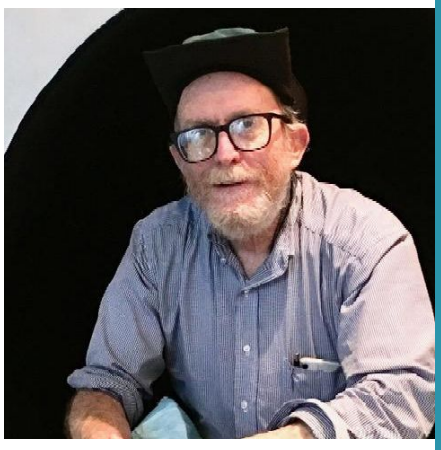
Tours

Over the past 10 years, FLEXLAB has hosted more than 750 tours for a variety of stakeholders and community groups including sponsors, industry partners, and academic institutions/programs. Tour participants explore the test beds and get an overview of the research conducted, including examples of technologies that decarbonize buildings and improve occupant comfort and health. Since the program's inception in 2022, FLEXLAB has also hosted tours for **Science en Acción (SeA)** each spring. Armando Casillas, a researcher from Berkeley Lab's Building Technologies and Urban Systems Division, developed a Spanish FLEXLAB tour for the program and has hosted a tour group each year.

On the topic of tours, Berkeley Lab's K-12 STEM Education Program Director, Faith Dukes, had this to say: "FLEXLAB allows students to see applications in STEM research that are relevant to their everyday life. We're thankful for the work that Berkeley Lab administrator Shaylah Rigmaiden has done to accommodate all of our tours. In addition, the research staff has worked hard to make information accessible by delivering information in Spanish and English. The FLEXLAB tour has been one of the highlights of the program."

Request a Group Tour

In Memoriam: Steve Greenberg



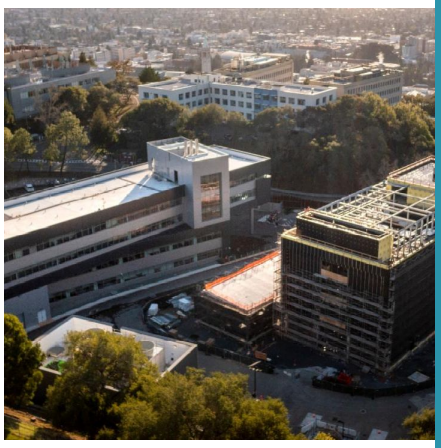
It's been less than a year since we've **celebrated Steve Greenberg's retirement** and now with heavy hearts, we celebrate his life and the legacy he left behind after 65 years of life. Steve was a longtime research engineer and energy efficiency specialist in the **Building Technologies and Urban Systems Division** at Berkeley Lab. With his well-integrated technical skills, keen insight, and commitment to continual improvement, Steve was an invaluable contributor to a wide range of significant endeavors in the 30+ years he worked at Berkeley Lab. Steve lived a life of adventure, humor, and purpose —

while helping others to do the same. At his celebration of life ceremony, Steve's friends, family, and colleagues talked about his long-lasting devotion to energy efficiency. As one speaker stated, “he got his calling early.” We miss him dearly and are eternally grateful for the knowledge and joy that he imparted to all of us that knew him.

Photo credit: Paula Ashley

Learn More

Technology Commercialization Fund’s (TCF) Open Voucher Call



As a Connector in the American-Made network, FLEXLAB recently participated in the **TCF Open Voucher Call**, created by the U.S. Department of Energy’s Office (DOE's) of Technology Transitions and American-Made program. This program aims to provide innovators with opportunities to receive technical assistance from researchers at eight DOE national laboratories, including Berkeley Lab. This $2.1 million opportunity makes $100,000 vouchers available to innovators to be used within a one-year period to advance energy, sustainability, and other lab-supported initiatives. This program is funded by the **Base Annual Appropriations Technology Commercialization Fund**, which serves to improve America’s energy competitiveness and security by accelerating commercialization and shepherding critical energy technologies from the national labs to the market, where the private sector will continue to innovate.

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(In case you missed it...)

FLEXAB Animation | **FLEXLAB Self-guided Virtual Tour** | **FLEXLAB Video** | **FLEXLAB Case Studies**

To learn how FLEXLAB® can work for you

Contact **Cindy Regnier**

Visit **flexlab.lbl.gov**

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