

# Tec researchers working on project to save power at home



Working in collaboration with researchers from the **University of California**, **Product Innovation** researchers from Tec de Monterrey's **Mexico City campus** have combined smart home devices in order to customize electricity consumption with the help of power-saving interfaces.

Dr. Pedro Ponce and students Juana Isabel Méndez Garduño, Omar Mata, and Adán Medina are carrying out **tests** to make the **project** a reality.

*“Several studies indicate that **how much power is consumed and how it is consumed** in the home chiefly depends on **human habits**,”* explained the Tec de Monterrey professor.

## **How does it work?**

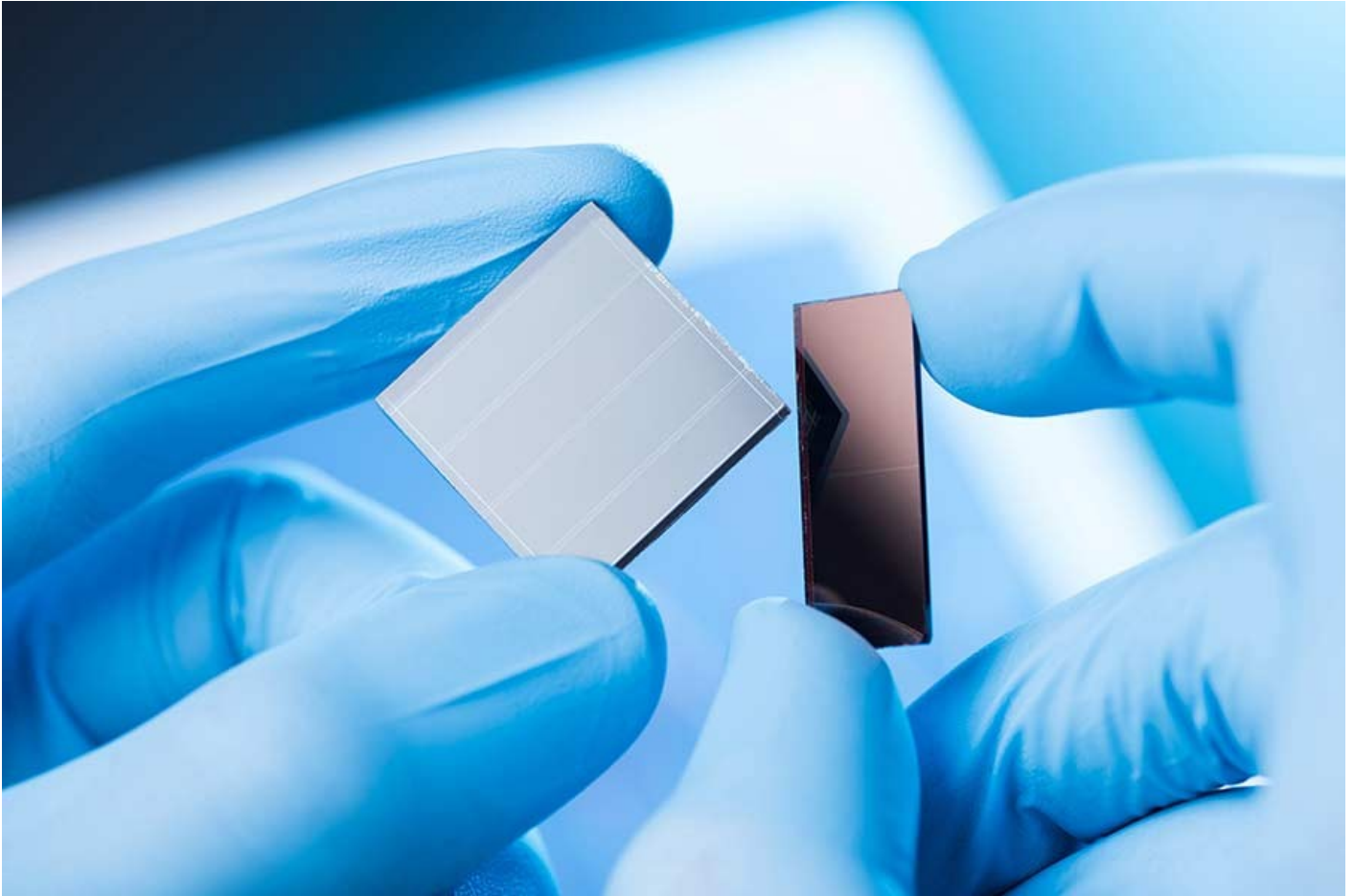
This **interface obtains information on power consumption** when users' behavior becomes excessively wasteful, while sending them an alert to modify their activities.

Through personalized games and rewards, users also obtain incentives every time **they improve their power-saving behavior**.

*“**Technological innovation** can undoubtedly create new opportunities for improving efficiency. The thermostats used in 85% of residential buildings are one example of this.*

*“These represent an opportunity to **optimize systems with a high demand** for power and electricity. When they are connected to our interface, they can reduce power consumption at maximum load by 10% to 35%,” said Ponce.*

The **amount of power consumed in the home** is normally distributed as follows: refrigerators, up to 30 percent; lighting, up to 20 percent; miscellaneous devices such as televisions, computers, chargers, blenders, microwaves, fans, and thermostats, up to 40 percent; and standby power, up to 10 percent.



width="900" loading="lazy">

This has led to the research needed to improve domestic consumption through **technological breakthroughs**.

Currently, **the project is in the testing phase** with users to monitor acceptance, adaptation, and operation in practice outside the laboratory.

The researchers hope to **take this technology** to the mass market in the coming years.

**YOU’LL SURELY WANT TO READ THIS TOO:**

<https://tec.mx/en/news/national/entrepreneurs/mexicans-create-food-supplement-brewing-waste>

