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### FEATURED STORY



## 3D PRINTING AFFORDABLE, sustainable and resilient housing in Alaska

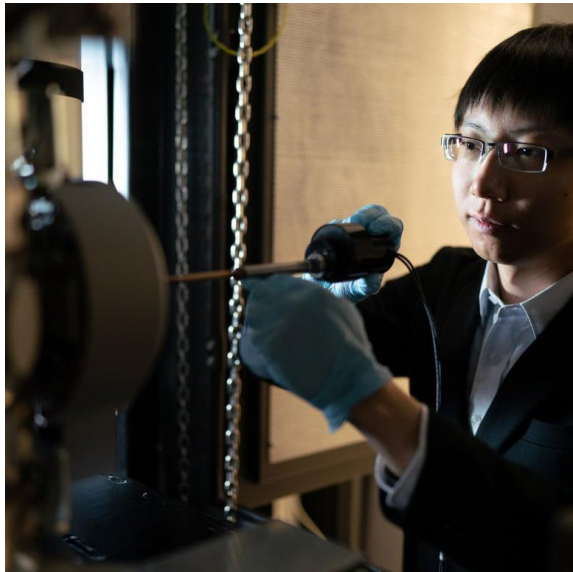


Alaska needs an estimated 27,500 new housing units over the next 10 years to alleviate overcrowding and unsanitary conditions. An interdisciplinary team of Penn State researchers is looking to alleviate some of that stress with a \$376,000 U.S. Department of Housing and Urban Development (HUD) grant.

[Read this featured story ⇒](#)

## OTHER NEWS

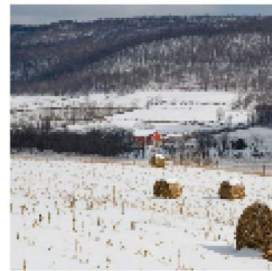
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### New structural insights could lead to mechanical enhancement in alloys

A new class of metallic materials with potential applications in airplane turbines, nuclear reactors and equipment for space exploration can withstand extreme temperatures and resist fractures, but scientists haven't understood why until now.

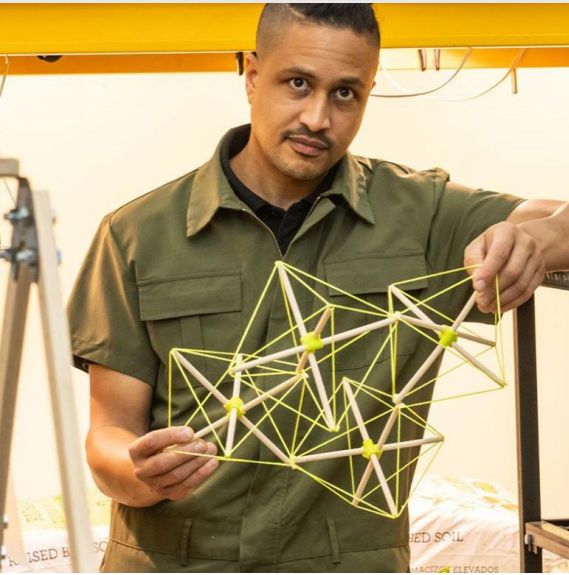
[Read more ⇒](#)



### Optical invention mirrors the image processing power of a human eye

Researchers invented a metasurface — an ultrathin, powerless optical element akin to a glass slide — to transform images into a format that artificial intelligence systems can easily process with minimal power and data bandwidth.

[Read more ⇒](#)



## Stuckeman architecture professor awarded United States Artists Fellowship

A Penn State architecture and engineering design professor whose work explores the reuse and recycling of materials to create low-carbon structures has been selected as a recipient of the national 2024 United States Artists (USA) Fellowship.

[Read more →](#)



## Dual-energy harvesting device could power future wireless medical implants

Penn State researchers show a new device that can harvest energy from magnetic field and ultrasound sources simultaneously, converting this energy to electricity that could power the next generation of implantable biomedical devices.

[Read more →](#)

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## Coffee and Characterization on UP Campus

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**Join us on Thursday, March 21**  
**1:00 - 2:30 PM ET**  
**Reber Building**  
**E-Knowledge Commons**  
**University Park, PA**

# Coffee & Characterization

**MCL**  
MATERIALS  
CHARACTERIZATION LAB



Coffee & pastries will be served.

**Pop-up Poster Session** with coffee, dessert, and casual conversations with the Materials Characterization Lab staff about new capabilities.

## Can't make the event?

Invite MCL to your next research group meeting:

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