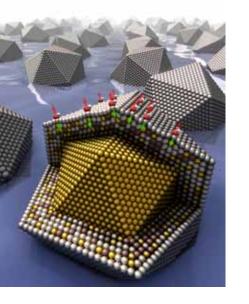


energy research







Energy Sciences Building will enable breakthrough energy research

The new Energy Sciences Building will enable Argonne to conduct use-inspired research that addresses fundamental science questions underlying the quest for:

- Highly reliable, safe, long-lived battery systems that are light, store many times more energy than current systems and can deliver energy more rapidly.
- Revolutionary, efficient, environmentally friendly chemical transformation processes for creating novel product feedstocks and fuels.
- ▶ Transformational systems for solar energy production.

Designed to Meet the Nation's Science Needs

The new building is a key step in developing the capability to carry out Argonne's strategic research mission and, at the same time replace outdated and inefficient buildings. The ESB will integrate with Buildings 222 and 223 to begin the formation of a university-style "Energy Quad." Another new building now in the planning stages, the Materials Design Laboratory, is expected to be operational in 2016. It will complete the Energy Quad.

The ESB will provide researchers with the best infrastructure to perform critical energy research. This building has been designed and is being constructed with vibration, temperature and electromagnetic requirements that will allow researchers to use extremely sensitive instruments.

Argonne Goes for the Green

Argonne's new building will earn its name — ubiquitous energy performance features will be included in its construction. The ESB is designed to be a Leadership in Energy and Environmental Design (LEED) Gold building. Key elements include:

- ▶ Energy performance approximately 38% better than American Society of Heating, Refrigerating and Air-Conditioning Engineers industry standards.
- Exhaust heat recovery systems.
- High-performance heating and ventilation systems controlled by a central building automation system.
- Use of local and recycled materials.
- Natural light through day-lighting design.
- ▶ High-efficiency lighting systems with occupancy controls.



A Cornerstone to

Argonne's Site Modernization

The Science Laboratories Infrastructure Program within the U.S. Department of Energy's Office of Science has invested \$95 million in the construction of the Energy Sciences Building, scheduled for completion in 2013. Designated as Building 241, the ESB will be located north of Building 223. The new building's 145,000 gross square feet of floor space will house approximately 200 research personnel dedicated to addressing the world's most critical energy challenges.



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