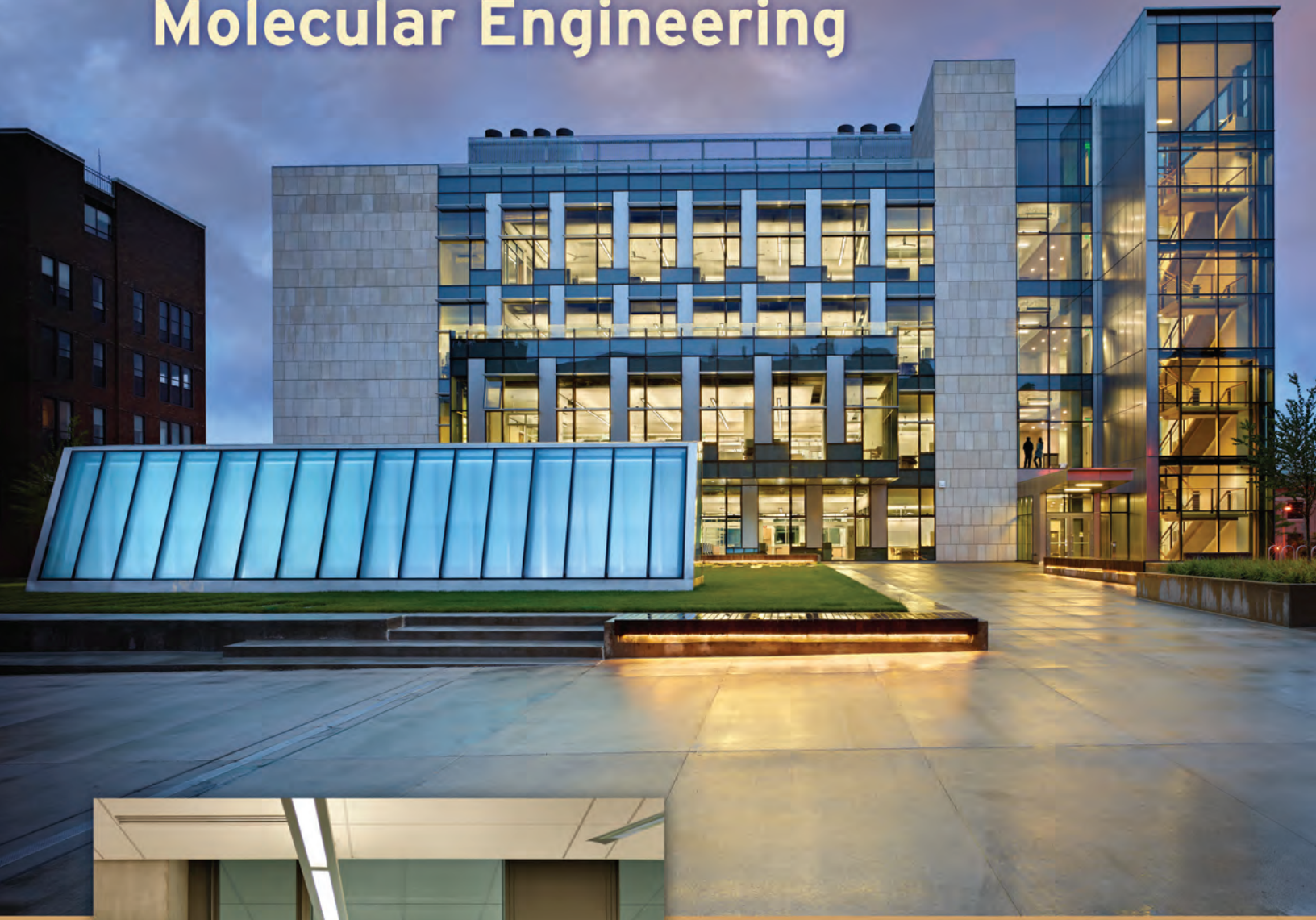


Learn More About
Molecular Engineering



Watch “The Rise of Molecular Engineering” on UWTV (channel 27) or online at www.uwv.org. In this half-hour documentary you’ll meet the scientists, explore the building and delve deeper into this emerging field.

Join us on September 18 to celebrate the launch of the Molecular Engineering & Sciences Institute and the opening of the new building. The day-long symposium draws together leaders from industry and academia to discuss the potential of this developing field.

Visit www.moles.washington.edu/symposium/ for details.

Attend the Engineering Lecture Series and go in-depth on the potential energy and health applications of molecular engineering and science. Visit www.engr.uw.edu/alumcomm/lectures.html for series details.

FROM THE GROUND UP

The new molecular engineering and sciences (MoES) building, a 90,300-square-foot space near the center of campus, physically embodies the program's larger aims of cross-pollination between disciplines. "The new building has largely open research space and people space that will specifically encourage collaborative research," says MoES Institute director Pat Stayton. From the overall layout to the choice of paint—really—everything is designed to bring people together in new and useful configurations.

The four floors of the \$77 million building are each divided into a laboratory half, facing Stevens Way, and an office half, facing the center of campus. A glass partition divides the two—a necessary safety feature transformed into a visual reminder of common purpose.

The office area is largely a collection of desks separated by low partitions. And instead of being divided up into individual labs, each floor's lab space will be shared by three to five principal investigators, accommodating several dozen students, postdocs, and lab technicians. These 'collaboratories,' as Stayton has dubbed them, are easy to reconfigure as different researchers move in and out, and as their needs change.

The building's common areas are also set up to encourage informal interaction. On each floor, instead of a walled-off break room, there's an open area for lunch, coffee, and casual meetings. The glass-walled main staircase is adjacent to these break areas, so that people can see who is hanging out as they move between floors.

"The new building has largely open research space and people space that will specifically encourage collaborative research." -Pat Stayton, MoES Institute Director

Even the smallest details seem calculated to support the spontaneous exchange of ideas. Upper cabinets in the break areas are faced with dry-erase board. Chalkboard paint on a wall in the basement begs to be scrawled with geeky graffiti.

Appropriate for a space that houses research to address big societal challenges, the MoES building walks the talk with carefully and cleverly designed green features. For example, the office side of the building is naturally ventilated, with ceiling fans, operable windows, and solar chimneys that draw warm air up and out by passive convection.

The walls are embedded with a vegetable oil-based phase-changing gel, which absorbs energy to cool the building as it melts. This cutting-edge material is the product of research not so different from what will be taking place in the building.

"We've tried to use all these incremental steps to make the space comfortable," says Steve Tatge, project manager in the UW Capital Projects Office, getting into the spirit of MoES: "Engineering to solve a problem!"

The structure is chic and gleaming, yet researchers seem equally excited about what's going on underground. The basement of the building will house a large collection of state-of-the-art instruments, sited to minimize vibration and electromagnetic interference. One advantage of this Molecular Analysis Facility is convenience: "You can test a lot of ideas that way, if you have all the equipment right downstairs," says professor of bioengineering Suzie Pun.

Another advantage is more of that cross-pollination. "Graduate students and postdocs from far different groups are all bumping into each other," says College of Engineering dean Matt O'Donnell. And when researchers from elsewhere on campus come to use these resources, and see this new way of doing research at UW? "It propagates the faith."

