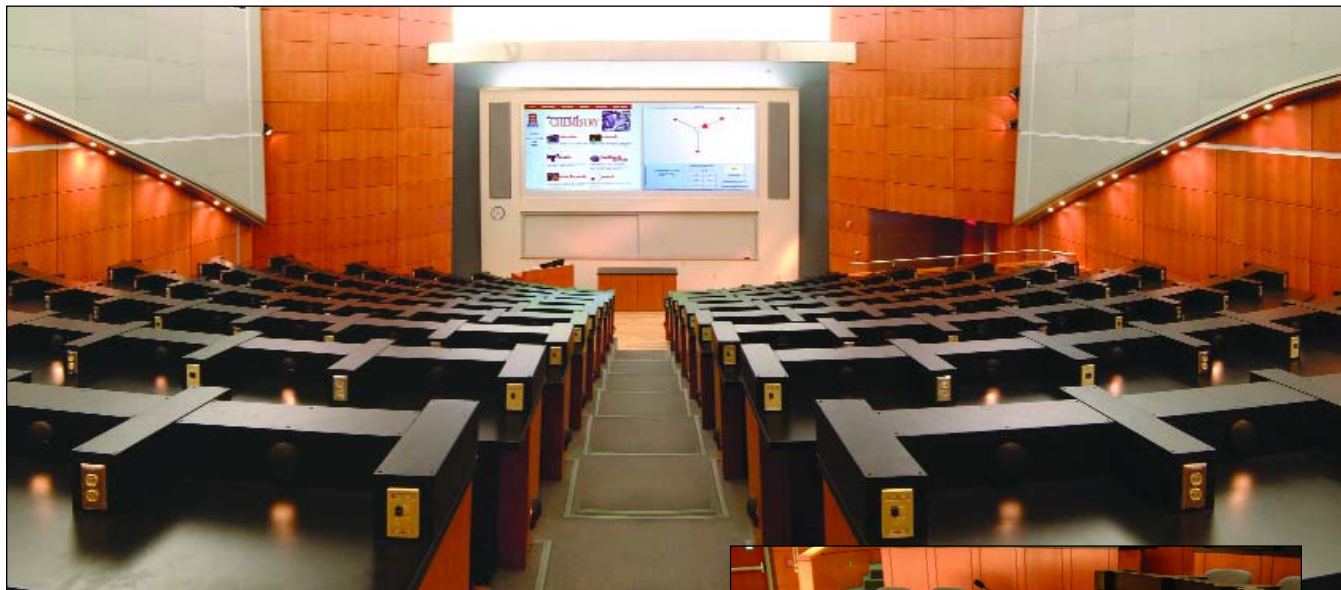


A/V puzzle comes together for UW Madison Chemistry



United Visual-designed system wins 2002 *Best Presentation Rooms* award

When you start a thousand piece jigsaw puzzle it doesn't look like much of anything, except a pile of cardboard. Yet before long, those misshapen pieces can come together into a really beautiful picture.

That's how architect Mike Eberle described the process of changing the barrel-shaped contours of a planned new addition to the University of Wisconsin Madison's chemistry building into the stunning space that is the finished room.

The seminar room, along with a seven-story tower addition built at the same time, had already won three major architectural awards. But then *Presentations Magazine* chose its a/v system as one of the top two auditorium systems built in 2001.

Above: Seminar Hall with side-by-side images on screen. Note custom cabinetry, gray centered aluminum panels on side walls and laptop connections at student tables. At right: podium with source equipment, doc camera, touch panel and confidence monitor



Widely recognized

Not only are the architecture and the presentation technology of the new building widely recognized: the National Research Council lists UW's chemistry department among the nation's top 10. The need for modernization of research facilities and increased safety were the primary reasons behind the chemistry department's expansion. Years of planning and fundraising preceded the groundbreaking and despite the generosity of donors, there was a tight budget.

One of the first parts of the puzzle that Eberle put together was the

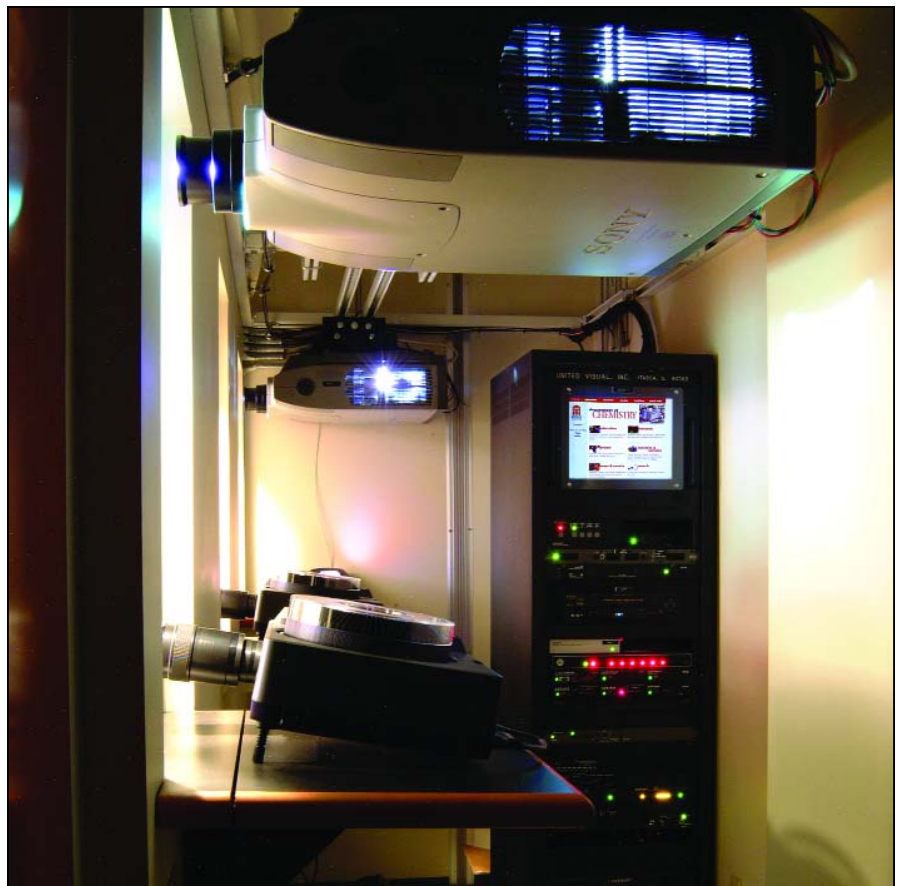
acoustics. "I wanted to use the shape and volume of the room to design a space so acoustically superior that it would need little or no amplification." He found a brand new material hitherto seen only in Japan, which gave him the qualities he wanted. "It's called centered aluminum," Eberle says. "It's ground into a fine sand and pressed in 1/8th inch corrugated panels. We used them at the side and back of the room to absorb excess sound." Once he had these panels together, reaching his goal of perfect acoustics would still take two major steps—tweaking the curve of the room's ceiling—and, of course, designing the perfect audio system.

This latter step became the job of a/v system designer Richard Laidman and systems integrator United Visual, who supplied and installed the a/v systems. Laidman designed two custom speaker sets, each with an ElectroVoice horn, EV midrange and two EAW woofers hidden behind 2' by 6' grills. An automatic mic mixer allows use of a very flexible assortment of wired and wireless microphones, and a digital signal processor provides extremely fine adjustment of the sound quality. A hearing assistance system offers extra amplification for those who need it.

The next part of the puzzle Eberle and Laidman addressed were the visuals. In a chemistry lecture hall it's extremely important to have clear sight lines for demonstrations, and instructors frequently show video or computer simulations before or after they perform experiments. Many professors rely, of course, on computer presentations—often including fine figures or schematics—and side-by-side comparisons can be quite useful.

Eberle and Laidman addressed these needs with a flourish. They put together a room with curved, tiered seating, custom 8' x 20' screen, self-lit whiteboard, stage lighting to add drama to a lecture or experiment and a unique trolley system that moves one of two large-venue SXGA projectors from a side to a centered position in the projection booth. That allows optimal placement of side-by-side and single computer or video images.

"Our people employ a lot of visual presentations," says department executive director Matt Sanders. "A number of people here are trying to develop the best way of teaching



Side-by-side Sony projectors in booth at the back of Seminar Hall. Note rail system on ceiling that allows one projector to move from side to center operating position.

their subject, so they're not afraid to try new things." To that end, Eberle and Laidman designed a large, custom-built podium with VCR, DVD, document camera and cassette player, 15-inch confidence monitor, and touch panel controls built in. The podium is large enough to accommodate two laptops and still leave room for lecture notes.

The final puzzle piece was communications, the Chemistry Department asking for individual network and AC hookups for up to 112 student computers. Students can not only take notes right on their laptops, but they can access email and the university's servers before and after class.

Despite the power and sophistication of these systems, Eberle says "there are not a lot of frills or bells and whistles. They needed state-of-the-art a/v, and they wanted to make the best use of the room within budget." United Visual's Dale Bottcher agrees. "Sometimes this much equipment in a small room can be overpowering. Yet everything here makes sense—the integration of the a/v in this room is awesome." All the pieces of this puzzle fit perfectly. It makes for a beautiful picture.



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