

UC Riverside

PRODUCT

Clarity Matrix G3
LCD Video Wall System

LOCATION

Riverside, California

INDUSTRY

Education

APPLICATION

Data Visualization
Interactive Learning
Collaboration

PARTNERS

T1V
Integrated Media Technologies

Large Clarity Matrix Video Wall Supports Visualization and Collaboration at UC Riverside

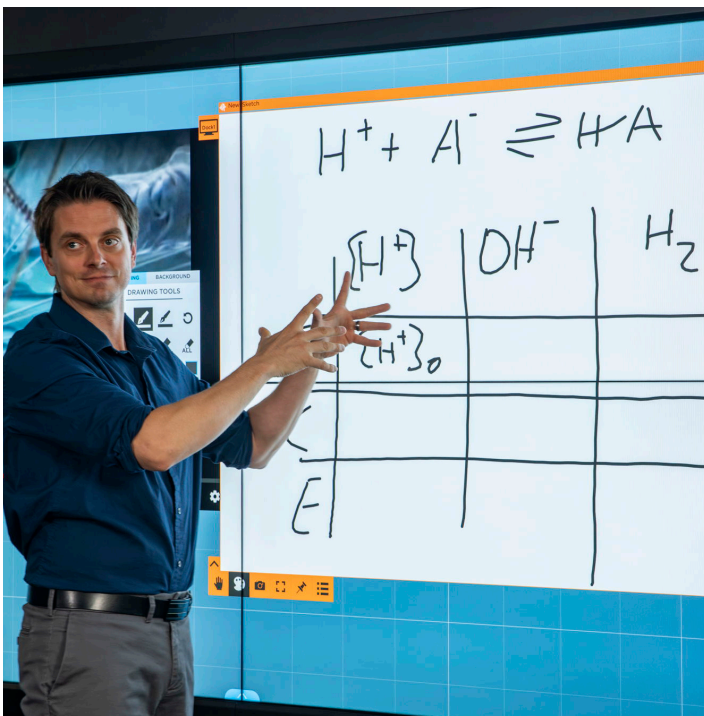
In Southern California, the University of California, Riverside (UC Riverside) is a major research institution and ranked among the top 15 best public universities in the nation. On UC Riverside's 1,200-acre campus, the Exploration Center for Innovative Teaching and Learning (XCITE) provides a hub for faculty interaction, student engagement and campus collaboration. The XCITE program empowers UC Riverside's educators to engage with cutting-edge tools and techniques to enhance learning in traditional and non-traditional classrooms.

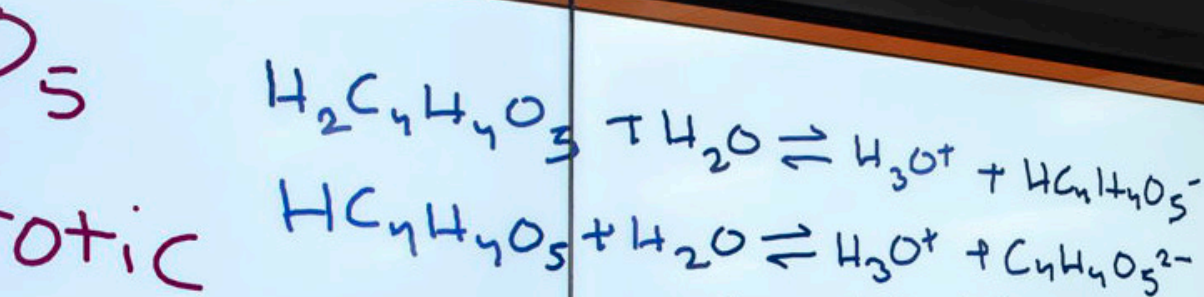
As part of this mission, XCITE has partnered with UC Riverside Professor of Physics Dr. Bahram Mobasher and the university's Information Technology Solutions research computing team to create the Classroom of the Future Exploration Center. The centerpiece of the new space—made possible by a grant from NASA—is a 24-foot-wide, 5-foot-high (6x2) Clarity[®] Matrix[®] G3 LCD Video Wall System. Installed by Integrated Media Technologies, the video wall features ThinkHub interactive technology from visual collaboration software company T1V. Integrated Media Technologies, Inc. (IMT), AV systems integrator worked closely with UCR to fully understand and vet their applications, requirements, and budget. Once the decision had been made to move forward with the Planar and T1V solution, IMT coordinated and supported the complete implementation of the project

Venturing into Data Visualization

With a total resolution of up to 11,520 x 2,160 pixels, the Clarity Matrix installation is known on campus as the High Visualization Wall and is used to support work involving big data, high-end computing and visualization. “We wanted to build something that generations of students would benefit from,” said Dr. Mobasher. “And we realized that data visualization was the next step. We can display and study images that span from galaxies to the human brain. This is what gets students interested in science and engineering.”

According to XCITE Director Richard Edwards, the 24-foot-wide video wall allows them to display data that doesn't fit into a square box and provides a platform that both instructors and students can use to help understand very complex topics. “We think the High Visualization Wall is a model of what classrooms will look like in the year 2030.”





$$D = 3.98107 \times 10^{-4}$$

$$= 7.76247 \times 10^{-6}$$

	H ₂ A	H ⁺	HA ⁻
I	0.20	0	
C	-x		
E	0.20-x		

	HA ⁻	H ⁺	A ²⁻
I			
C			
E			

following for 0.20M
 $\text{H}_2\text{C}_4\text{H}_4\text{O}_3$
 Solution

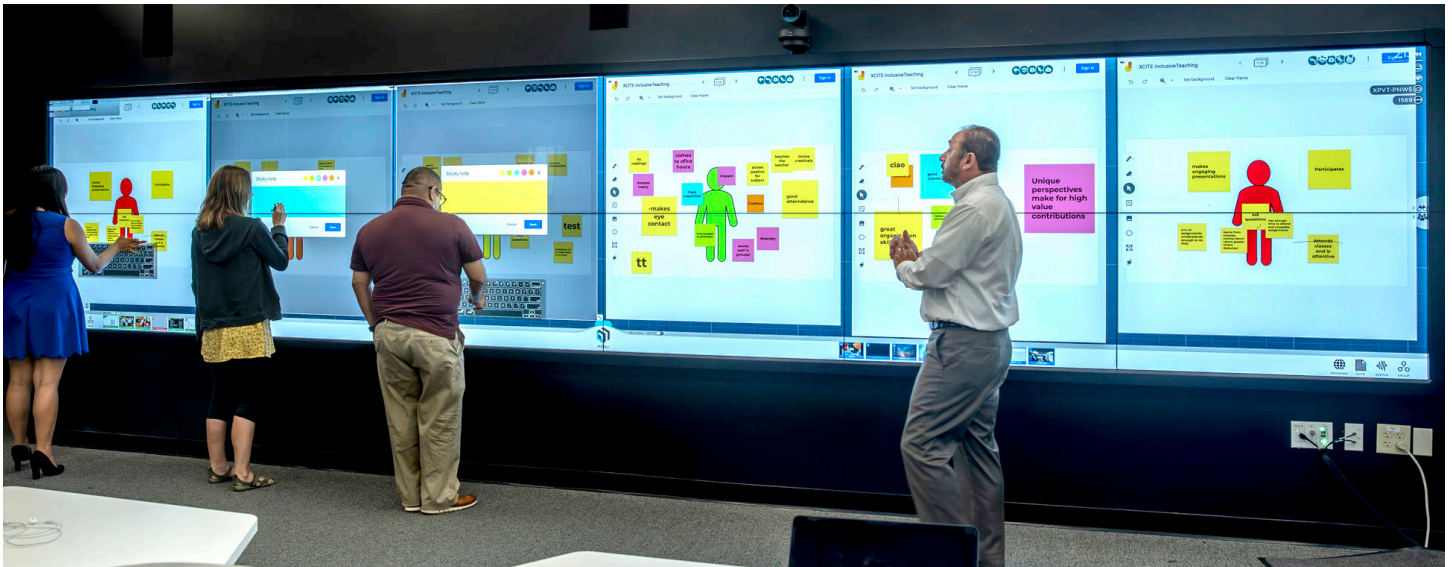
pH = 2.05
 $[\text{HC}_4\text{H}_4\text{O}_3^-] = C$
 $[\text{C}_4\text{H}_4\text{O}_3^{2-}] = ?$

Molar Solubility
 in solution
 $K_{sp} = 2 \times 10^{-17}$

$2\text{Ag}^+ + \text{CrO}_4^{2-}$

“We wanted to build something that generations of students would benefit from.”

— Dr. Bahram Mobasher,
 Professor of Physics, UC Riverside



“We think the High Visualization Wall is a model of what classrooms will look like in the year 2030.”

— Richard Edwards,
Director, XCITE

Inspiring Collaboration

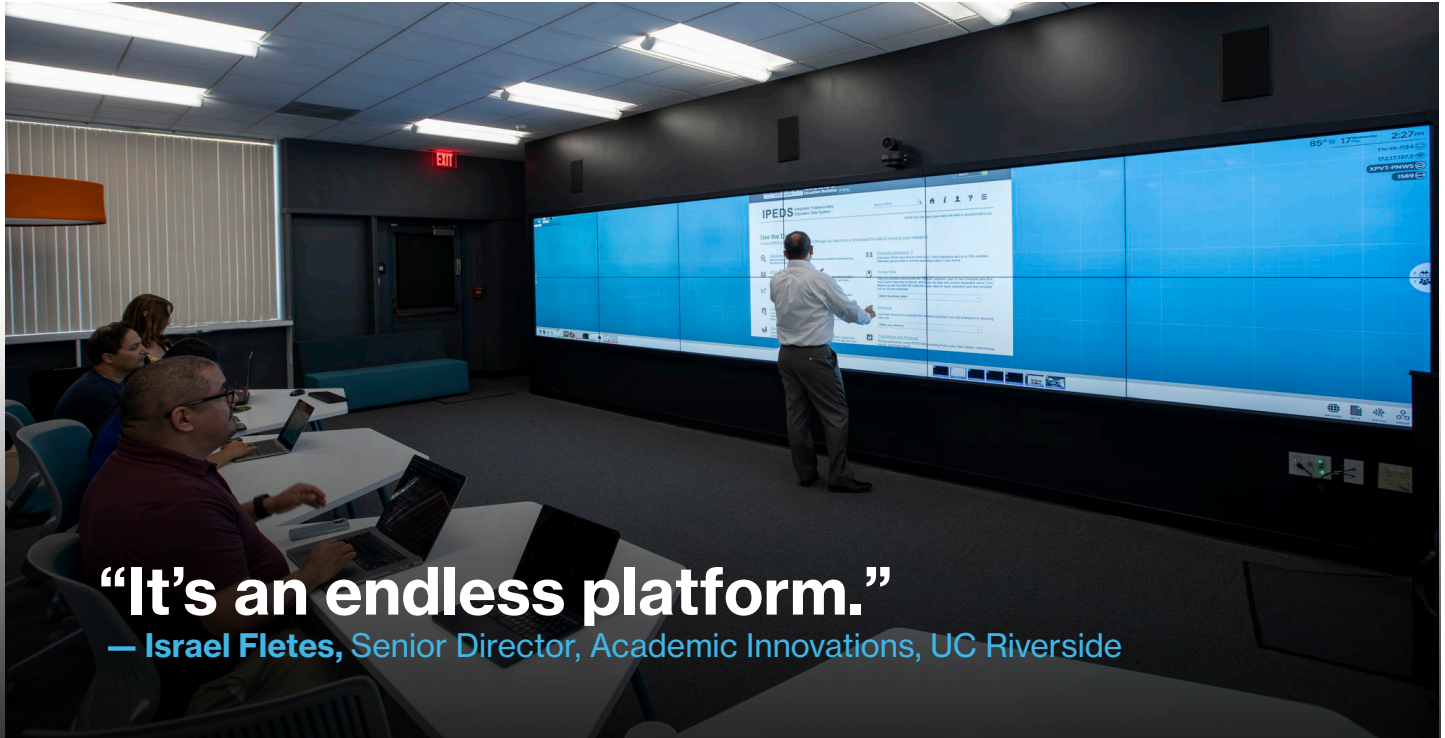
The Clarity Matrix video wall with ThinkHub visual collaboration software allows up to 25 touch inputs at once. The display can be configured into three work zones or full screen. “We can have multiple people annotating on the video wall at the same time,” said Israel Fletes, senior director, Academic Innovations at UC Riverside. “They can work together as a group, learn from each other and collaborate. It’s an endless platform.”

Josh Hartman, assistant professor of teaching, Chemistry Department at UC Riverside, said his main role at the university is chemistry education, which includes finding new ways to engage and help students overcome the barriers to learning. With the flexibility of the video wall and the collaborative software, they can “seamlessly integrate applications and different instructional styles to further the students’ understanding and interest in subject matter,” Hartman said. “We can meet students with the methods that work best for them.”



About the Clarity Matrix G3 Video Wall System

Clarity® Matrix® G3 LCD Video Wall System combines superior visual performance and 24x7 reliability with the industry's thinnest profile and narrowest tiled bezel width. It features off-board power and the Planar® WallDirector™ Video Controller, and has advanced video processing embedded directly into the video wall. The interactive model offers up to 32-point simultaneous touch.



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— Israel Fletes, Senior Director, Academic Innovations, UC Riverside