

Narcissus Quagliata's 2002 piece *The Universe Within (left)* uses painting-with-light techniques to express the union of human and cosmos. Galia Amsel's 2001 work *Cycle 1 (below)* is a graceful example of "open-faced" kiln-casting, in which cold glass is placed into a mold and melted until the glass fills the mold. Both works were displayed in the Merwin Gallery exhibition in the Joyce Eichhorn Ames School of Art Building.



The University's
Merwin Gallery
exhibit of kiln-glass
reveals the luminous
beauty and startling
potential of an
emerging art form.

Shining Examples

Story by RACHEL HATCH

t Illinois Wesleyan's Merwin Gallery, the dark silhouette of a figure stands against a background of swirling blues, its head hung in a mood of quiet contemplation. Yet inside this figure bursts a radiant explosion of light and colors, as if a universe were being born within its human shape.

"Look at the vibrancy," says IWU Professor of Art Kevin Strandberg, with a tone of awed admiration. "Look at the colors, they will never fade. It's the organic brilliance — the light — that makes it so alluring."

Called *The Universe Within*, by Narcissus Quagliata, the piece is one of 70 glassworks that were displayed at the Merwin Gallery in the University's School of Art this winter for an exhibit entitled "Contemporary Kiln-Glass: A Survey of Work from the Bullseye Glass Co. Collection and the Bullseye Connection Gallery."

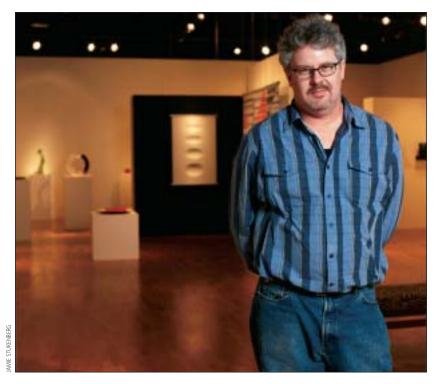
Unlike blown glassmaking, which has dominated the world of art glass for centuries, the pieces displayed in the exhibit represent examples of a technique known as glass-fusing. In its ancient practice, beginning in 2,000 B.C., chunks of colored glass were melted in a kiln and fused into luminous jewelry and pottery. It was a tradition that had been largely forgotten until the late 19th century, when artists revived the technique.

It gained more popularity when the Bullseye Glass Company in Portland, Ore., introduced the first line of tested, compatible glasses for kiln-forming over 20 years ago. Since then, computer-controlled kilns are beginning to pop up in art departments and studios around the country — including Illinois Wesleyan's School of Art, where Strandberg is in his second year of teaching glass-fusing to University students who are eager to learn about it.

While masters of the form can construct incredibly sophisticated pieces of kiln-formed glass, Strandberg says its growing popularity among his students relates to the fact that "even in its simplest forms, this stuff is so pretty." Unlike glassblowing, which usually takes a long time to master, beginning students can make attractive kiln-glass pieces almost immediately, says Strandberg.

Although glassblowing continues to be the more commonly taught of the two mediums, Strandberg says that kiln-forming is starting to catch the attention of both artists and teachers — and that the Merwin Gallery's Bullseye exhibit displayed some of the very best of what this emerging art form has to offer.

Strandberg's own passion for kiln-made glass is relatively new, and surprises even himself. A member of the faculty since 1979, Strandberg is best known for his





One of the exhibit's largest pieces was Jun Kaneko's *Towers #26*, part of a series in which the artist created intricate patterns by placing "stringers," or colored strings of glass, through the three panels, which each weigh 150 pounds.



work in non-glass mediums such as bronze, aluminum, and ceramics. He is especially interested in mixing mediums into surprising but coherent designs. With that in mind, he began to experiment with kiln-forming while working on a very personal piece of art in 2002.

After the Sept. 11, 2001, terrorist attacks that destroyed the World Trade Center, Strandberg began what he would later dub his "Homeland Security" series that expressed his emotions about the 9/11 tragedy, coupled with primal childhood fears. Although the sculptures he created for the series were mostly made of cast bronze and aluminum — twisted into the shapes of tornadoes and other ominous cloud formations — he wanted to include smaller, house-shaped structures that would be made of glass to express fragility and vulnerability. Casting glass in a large kiln at the IWU art studios, Strandberg spent a year experimenting with the form — with mixed results. "I had a 50-percent success rate," Strandberg says. "And that isn't bad," he adds with a laugh.

In his search for special kiln-forming glass for his project, Strandberg was referred to the Bullseye Glass Company in Portland. He learned that the company — which has an active relationship with glass artists through its gallery and resource center — was planning a conference to teach the kiln-forming process. Strandberg mentioned that fact to then Illinois Wesleyan President Minor Myers, who insisted that Strandberg travel to Portland at the University's

expense to learn all he could. Not long after that conversation, Myers was diagnosed with the lung cancer that would later take his life.

"When we received word of his diagnosis, all plans just went on hold," says Strandberg quietly. "After [Myers'] death, we were all too devastated to think about it." It was Miles Bair, director of the School of Art, who suggested Strandberg make the journey to Portland. "The idea was that I should be given the opportunity [President Myers] wanted for me," Strandberg says.

At the Bullseye conference, Strandberg not only discovered an exciting new form of art, but also inspiration for his teaching. "I went there to fine-tune my glass skills," he says. "I was just floored. I thought, 'This is a custom-fit for Wesleyan."

The University administration agreed, allowing Strandberg to develop a class on kiln-forming, first offered in 2003 with new kilns purchased by the School of Art and glass donated by the Bullseye Company. "We were absolutely thrilled," says Ted Sawyer, director of research and education at Bullseye Glass Company, who helped put IWU on Bullseye's donation program after working with Strandberg at the conference. Like many at Bullseye, Sawyer is an artist himself, with several examples of his kiln-glass work displayed in the Merwin exhibit.

While making kiln-glass can be extremely complex, the development of more sophisticated equipment and

specialized glass products have actually made kilnforming easier for first-time artists, says Sawyer. "No one can suddenly decide they want to blow glass tomorrow. It takes 10 years before you can make anything. With kiln-forming, you see the results of your creativity almost immediately."

"There's a great immediacy to kiln-forming," he adds. That feeling of immediacy is visible on the faces of Strandberg's students as they sit in Strandberg's class hunched over pieces of Bullseye glass. The sound of glasscutters zips across the room. "I have to admit, I'm addicted," says theatre major Kate Anderson '05 as she arranges colored glass shapes that will soon become a lampshade. "I have a stained-glass background, so this class was a great transition for me." Anderson took the original class in 2003, and enjoys continuing to work on projects in her free time. "Glass is just the coolest medium," she says. "I could do this for the rest of my life. I'm looking into getting my own kiln in the next few months."

That's not as implausible as it might sound. Of Illinois Wesleyan's three kilns, two are the size of large microwave ovens, and the other is about four feet long. "You don't need a giant furnace burning 24-7 for kilnforming," says Strandberg. "A lot of artists fuse glass like this into jewelry or plates for art fairs." IWU's computerized kilns bring temperatures up to 1,500 degrees Fahrenheit and cool them down slowly as needed.

The art of kiln-forming or "fusing" glass is based on a simple fact: if you apply heat to glass, it will soften. The artist arrange chunks of glass, called "cullets," and sheets of glass into a cold kiln and heats them until the pieces stick (or "fuse") together into a desired design. Kiln-fusing techniques include bending and shaping glass using the heat of a kiln. More advanced techniques include "combing," which involves using a tool to distort the shape of the glass while it is hot, and kiln-casting, which involves filling a mold with cold glass chunks and heating the mold in a kiln. Such methods differ from the more popular "hot shop" technique of

According to Sawyer, Illinois Wesleyan is unusual in choosing the kiln-forming path. Although many universities have glass programs, they are centered on glassblowing. "Glass programs on the university level are almost always hot shops," says Sawyer. "Let's face it, that kind of program is really sexy."

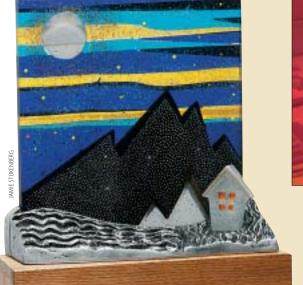
glassblowing, where the artist heats the glass and then shapes it on a rotating rod.

"It's like rock and roll," says Strandberg of hot shops, like the one at Illinois State University run by his friend, John Miller. "It's a bit too intense for me — a bit too frantic," he adds with a laugh. Strandberg says that creating kiln-formed art is much more meticulous; an artist has to have an





In a new kiln-forming class launched last spring, Strandberg (left) demonstrated how to piece together a cut-glass layout. September Fosdick '04 (above) created a name plate by combining bits of brightly colored glass. Once designs are finished, pieces are placed in a kiln (lower right) and heated until the glass softens and fuses. Strandberg used kiln-fusing for his piece All Summer I Dreamed of Mountains (lower left).





INC FEATHER

A kiln-glass glossary

Box-casting – a kiln-casting technique using an assembled mold to create a reverse-relief sculpture.

Casting – placing glass in a mold and firing it to create shapes.

Cullets - large chunks of glass.

Frits - ground, colored glass.

Fuse – heat bonding of different glasses at high temperature in a kiln.

Painting with light – the use of ground glass powder frits on sheet glass to create images.

Pâte de verre – literally "paste of glass" and used during the first reemergence of kiln-forming in 19th-century France, the technique fuses glass at lower temperatures to create a "sugar" texture.

Roll-up – created by Klaus Moje and a team of Australian artists, the roll-up combines two forms of glassworking, as cold glass is fused in a kiln, cooled, then reheated and worked on a glass collar in a hot shop or blowing studio.

Stringer – thin rod or thread of colored glass.

Slump – forming a piece of glass over a mold in a kiln using heat and gravity.



idea where each piece will fit before the glass touches the kiln. "Sometimes there are surprises — good or bad — but you have to have a game plan," unlike glassblowing, which tends to be more spontaneous.

"I'd say you need to be a little eccentric [to be a glassblower]," admits Miller, who has been running Illinois State's glass program for a little over two years. "Glassblowing is intense, fast-moving and exciting. There is nothing like it."

Though the two forms of glassworking have different personalities, they are not mutually exclusive. As pieces in the exhibit demonstrate, the kiln-forming technique can be complemented by glassblowing, sculpting, and even sketching with glass powder before fusing glass in a kiln.

It was Miller who suggested Strandberg contact Bullseye glass when he was first experimenting with the kiln-forming process. The two friends, who ride motorcycles together, held a demonstration in January of a technique developed by famed glass artist Klaus Moje called the "Australian Roll-up." A combination of kiln-forming and glassblowing, the roll-up allows for fused glass to be fired again, this time in a hot shop. The results can be astounding. The exhibit offers examples of the roll-up, including Moje's work and the graceful curves of Steve Klein's *Lybster 2 Marquette*, a rendition of the rolling Scottish hills that holds emotional power in its simplicity.

Strandberg had seen works by Moje, Klein, and several other artists in an exhibit by the Bullseye Company's Connection Gallery in Portland and wondered if it might be possible to bring the show to Illinois Wesleyan. Although the exhibit he saw had been disbanded, Bullseye Connection Gallery Director Lani McGregor agreed to develop a new exhibit for Strandberg — one that would encompass not just pieces of art, but a comprehensive look at the modern history of kiln-forming.

"It's amazing how ambitious the exhibition is," says Jennifer Lapham, director of the Merwin & Wakeley Galleries, of the 70 pieces from 45 different artists across the world. "It uses every resource we have available — all our pedestals, and temporary walls are out there." Bullseye shipped the exhibit in specially packaged crates that were too large for the gallery's inner doors. "Much of it had to be unpacked outside the gallery," says Lapham. Bullseye even sent over a special handler who assembled the pieces, a rarity in art exhibits.

"Bullseye is really behind the kiln-forming movement," said Strandberg. "They developed the glass used in modern kiln-forming and work with artists to develop new techniques for the glass."

The company invites about eight artists a year to the factory's resource center to work with the glass. "Bullseye brings in artists who have an idea of what they want to do with the material," says Sawyer. "We

connect with masters because we are interested in seeing if an idea can be done. We let them experiment."

Through this artist exchange program, new techniques have emerged. At Bullseye, artist Quagliata perfected the use of finely ground glass powder, allowing him to sketch onto the cold glass before it is fused. The technique, called "painting with light," gives the illusion that a paintbrush touched the glass. The exhibit boasted the Jeff Wallin's work *Synthesis*, with a detailed portrait of two men created entirely in the painting-with-light technique.

A haunting Bullseye collaboration was on display in the exhibit's *Study for Two Skulls*, by Mexican artist Rafael Cauduro. Sculpting two skulls out of plaster-silica, Cauduro kiln-cast glass all around the skulls and dug out the plaster, in a process called reverse-relief kiln-casting. The result is a striking image of the skulls in relief against a deep mire of dark glass.

"The exhibit represents a relationship between art and industry that few companies follow," says Lapham. "It allows the artists to work with the materials and push the technology. It's beneficial for both."

Sawyer believes that each new collaboration helps expand the art field. As an artist, "I stand on the shoulders of others who developed ideas before me," he says. "And I hope they will stand on my shoulders as I move ideas forward. We will leapfrog into the future."

The collaboration creates another benefit. As artists work at Bullseye, they often help offset the expense of studio time and materials by giving one of the pieces they create to the company. The result is a growing collection of kiln-formed work. Many of those pieces appeared in the Illinois Wesleyan exhibit. Others are on loan from artists, with selling prices that range from under \$100 to over \$25,000.

As Strandberg guides a visitor through the gallery, he marvels at the potential of the form as expressed in the pieces on display. Stopping in front of Ann Robinson's *Erbium pink vessel*, Strandberg comments simply, "It is luminous." He says he is always amazed by the way the light captures the art. "They look so gossamer — but they can weigh more than some bronze casting."

It's the luminosity of kiln-formed glass art that has drawn Strandberg to the medium. During the Bullseye exhibit, two of his works were shown in a display case at the Merwin Gallery entrance, along with examples of glass-blown art by Strandberg's ISU colleague, Miller. As in his "Homeland Security" sculptures, a small house is featured in Strandberg's piece *All Summer I Dreamed of Mountains* — only this time the house is placed against a serene backdrop of mountains and sky, without an ominous cloud in sight.

Strandberg reflects that the "lightness" of kiln-glass has, by its very nature, changed the tone of his art. His previous work in metal, he reflects, represents a connection to "working with things of the earth," while





In his 2002 Study for Two Skulls (above), sculptor Rafael Cauduro takes advantage of glass's unique capacity to express the internal and external.

Many of the techniques used to make pieces displayed at the Merwin Gallery exhibit (*left*) were developed through the Bullseye Company's artist exhange program.

glass draws his imagination more to "things of the sky."

For Strandberg, kiln-forming is also the manifestation of his lifelong pursuit to meld various art forms into one. In *All Summer I Dreamed of Mountains*, the layers of kiln-fused glass create the night sky, but Strandberg used metal to create the field where the house sits, and the work itself is constructed on a wooden base.

Kiln-formed glass is an art form that is here to stay at Illinois Wesleyan, Strandberg predicts. "In my dreams, I see a student art show, dedicated to all kinds of mediums," he says. "And there will be glasswork. Glass has an intrinsic light. It is just like magic."