

GLASS ART

For the Creative Professional Working
in Hot, Warm, and Cold Glass

July/August 2017



\$7.00 U.S. \$8.00 Canada
Volume 32 Number 4



www.GlassArtMagazine.com

Ideas...

Amplified



Blue Ribbon Livin'

2013

14 ft. x 10 ft.

Kiln-formed glass, aluminum and copper
Washington State Arts Commission
in partnership with Valley School District



The Artist

Michael Dupille is one of the early pioneers in the kiln formed art glass movement that began in the 1980s. He creates large scale pieces as murals or individual elements using fused crushed glass. He calls his style "Soft Surrealism" due to its representational imagery that incorporates imaginative twists to embellish the narrative. Find out more about Michael and his work at: www.skutt.com/Dupille



The Kiln

"I love my GM1414! I have used them for years in my workshops, and other studio environments. They are well built, dependable workhorses with some great features. I do a variety of kiln forming techniques as well as production work and the size, depth and versatility of this model allow me to realize nearly all of what I set out to accomplish."



SKUTT

**We help you make
great things!**



GLASS ART

July/August 2017

Volume 32, Number 4

- 4 Letter from the Editor**
Guiding Art Glass into Tomorrow
by Shawn Waggoner
- Art Glass Studio Profile**
HaeuserHeil Studio
- 6 Munich Style Meets David Fode's**
Contemporary Aesthetic
by Shawn Waggoner
- 14 AGG News**
2017 American Glass Guild Awards
by Tony Glander
- Architectural Glass**
Sarah Hall
- 16 Energizing Architectural Glass**
with Photovoltaic Cells
by Shawn Waggoner
- 21 Readers' Forum**
- 22 SAMA News**
Mosaic Arts International 2017
- Working Greener**
Rick Silas
Upcycling Tempered Glass as Art
by Colleen Bryan
- CGS News**
Celebrations
- 32 Commemorating 20 Years of Service**
to Contemporary Glass
by Pam Reekie
- Marketing**
Forty Years of Marketing Madness
by John Emery, Sr.
- Glass Talk**
Getting into Galleries
by Paul Messink
- Skills and Techniques**
Getting Control of Your Slump
by Bob Leatherbarrow
- Winning Glass**
The 2017 Glass Craft & Bead Expo
Gallery of Excellence
- Independent Artist**
Audrey Wilson's Multimedia Glass
Chasing Truth in the How of Things
by Colleen Bryan
- 52 What's New**
- Hot Glass Studio Profile**
Robert Mickelsen
A Second Act in Functional Glass
by Shawn Waggoner
- GAS News**
60 The 2018 Glass Art Society Conference
Il Percorso di Vetro—The Glass Path
- 62 Advertisers' Index**



Above: Elementia by Robert Mickelsen and Eusheen Goines.

On the cover: Sun, Moon, and Dancing Mice by David Fode.

Like us on



Facebook. Also pin us on



Pinterest. Check our blog on



Tumblr.

Glass Art

Volume 32, Number 4

Publisher ~ Maureen James

Editor ~ Shawn Waggoner

Copy Editor ~ Darlene Welch

Accounting ~ Rhonda Sewell

Circulation Manager ~ Kathy Gentry

Advertising ~ Maureen James

Graphic Artists ~ Dave Burnett

Mark Waterbury

Contributing Artists and Writers

Colleen Bryan, John Emery, Sr.

Tony Glander, Bob Leatherbarrow

Paul Messink, Pam Reekie

Shawn Waggoner, Darlene Welch

Glass Art™

ISSN 1068-2147 is published bimonthly
by Glass Patterns Quarterly, Inc.

POSTMASTER: Send address
changes to Glass Art,

8300 Hidden Valley Road,

P.O. Box 69, Westport, KY 40077

Telephone: 502-222-5631

Facsimile: 502-222-4527

Website: www.GlassArtMagazine.com

E-mail: info@GlassArtMagazine.com

Subscriptions: United States, Canada,
and Mexico (U.S. Funds): one year \$30;
two years \$48; three years \$60. Foreign
(U.S. Funds): one year \$56, one year
airmail \$70. Single copy price (U.S.) \$7.

All subscriptions must be paid in
U.S. dollars with an international
money order or with a check
drawn on a U.S. bank.

Periodicals Postage Paid
at Westport, KY 40077

and additional mailing offices.

©2017 Glass Patterns Quarterly, Inc.

All items submitted to *Glass Art* become
the sole property of *Glass Art* and cannot
be reproduced without the written con-
sent of the publisher. Advertisers and/or
agencies assume all liabilities for printed
advertisements in *Glass Art*. Opinions
expressed in *Glass Art* may not necessar-
ily reflect the opinion of the magazine, its
management, or its advertisers.

Letter from the Editor

Guiding Art Glass into Tomorrow

Glass Quest 2017 took place May 26–28 in downtown West Palm Beach, Florida. Sponsored by WardellProducts.com and McMow Art Glass, the event offered a full week-end of entertainment and engagement presented by brilliant teachers and glass visionaries including featured presenters Maureen James, Tony Glander, Leslie Perlis, Peter McGrain, Dawndae HK Hamilton, Lisa Vogt, Phil Materio, Randy Wardell, Jenny Mesirow, and Mike Glotfelty.

Saturday's keynote speaker Maureen James, publisher of *Glass Art*, *The Flow*, and *Glass Patterns Quarterly* magazines, presented her unique understanding of today's issues, exciting future possibilities, and ways in which artists can publish their work. Held in a building adjacent to Habatat Galleries, a Glass Quest reception at the gallery provided a memorable part of the weekend. "There was wonderful networking among several area studios, and I heard firsthand that they were so glad they attended. Taylor Materio really did an amazing job of organizing the event."

One of the highlights was a roundtable discussion with some of the featured presenters moderated by Shannon Materio. They addressed glass as an art form, a craft, a business, and a culture. Attendees also enjoyed a Q&A portion of the discussion and were able to ask both technical and business related questions. Look for more details on this event in a future issue.

Glass Art is thrilled to be part of keeping this beloved medium alive and well. The cover of the July/August 2017 issue features the artwork of David Fode, who has adapted ancient techniques of the Munich school in his painting of modern subjects on glass. Fode's contemporary content helps legitimize the stained glass craft by appealing to today's art viewing and art buying audience.

A further adaptation of the stained glass craft can be seen in the work of Sarah Hall, who has refined a unique and high-tech approach to architectural glass. Through the use of photovoltaic cells that convert solar energy into electricity, Hall's windows can store sunlight by day in order to backlight the glass at night. The cells can also produce clean electricity that feeds directly into their respective buildings' energy systems.

Adapting to his changing market, flameworker Robert Mickelsen gracefully transitioned from sculptural to functional glass, promoting his artwork to an entirely new fan base. This move has resulted in the most successful years of his career.

To assist our readers in responding to changing times via growth and exploration of new opportunities, *Glass Art* presents its 2017 schedule of comprehensive *Glass Expert Webinars*™. Go to www.glassartmagazine.com to see the complete list of exciting online workshops for growing your glass skills without ever leaving home. We invite readers to subscribe on iTunes or Stitcher to our free and popular podcast *Talking Out Your Glass*™. Listen to interviews with the world's most renowned glass artists for inspiration and information needed to adapt to today's evolving art market.

Guiding you through changing tides, in print and online,



Shawn Waggoner
Editor

Autumn Trail by Paul Messink.

Photo by the artist.



Advertising Deadlines

September/October 2017

Ad Closing	June 20, 2017
Ad Materials	July 30, 2017
Issue Mails	August 25, 2017

November/December 2017

Ad Closing	August 20, 2017
Ad Materials	September 30, 2017
Issue Mails	October 27, 2017

**More than
175,000 sold!**

The Taurus 3 Ring Saw should be your ring saw.

**Craftsmen from around the world have made
the Taurus 3 their first choice.**

- We originated the ring saw and have 27 years of ring saw technology behind us.
- Seven different interchangeable blades are available, for easy and precise cutting through virtually any material. These long-lasting blades are produced by a unique 15-step manufacturing process.
- Built-in work light reveals every detail of what you're creating.
- Accessory kit available for making circles, 45 degree bevels, straight and special cuts.
- Unparalleled USA-based customer service.
- Full three-year warranty on saws, parts and workmanship.

TAURUS
RING SAW **3**



*Saw snaps out of
base for use as a
hand-held unit!*



GEMINI SAW COMPANY, INC. • 310-891-0288 • www.geminisaw.com

HaeuserHeil Studio

Munich Style Meets David Fode's Contemporary Aesthetic

by Shawn Waggoner

Photography by David Fode

Like something out of a dark fairy tale, David Fode's personal work in stained glass entices the viewer with its frighteningly beautiful aesthetic. His alluring autonomous panels painted in the Munich style provide a canvas for Fode's highly detailed and elaborate renderings, resulting in an irresistible synthesis of the exquisite and the macabre.

Since 2004, Fode has been designing and fabricating independent works in glass from his Waukesha, Wisconsin, HaeuserHeil studio as a means of promoting the Munich style for applications in private and smaller public venues. Portraying modern subjects through ancient techniques makes for an interesting and endlessly appealing dichotomy. Fode's contemporary content helps legitimize the stained glass craft by appealing to today's art viewing and art buying audience.

Formally trained in illustration at the American Academy of Art in Chicago, Illinois, Fode has worked in stained glass studios for nearly 20 years, replicating the Munich style for new and preservation projects across the United States. Currently the senior artist at Gaytee-Palmer Stained Glass in Minneapolis, Minnesota, Fode endeavors to keep the art of stained glass alive through both his private and studio commissions.

"One of my favorite aspects of working with stained glass is that a finished piece can look dramatically different over the course of a single day. An overcast sky has the potential to change the mood and presence of the entire work. There are not many art forms where the environment of the work can have as much influence on the finished piece as there is with stained glass. I greatly enjoy navigating the interplay between light and glass as well as the challenge of manipulating the painted surface to achieve the desired effects."

The Munich Style

In May 2017, Fode gave a presentation on the Munich style at the American Glass Guild (AGG) Conference held in Rochester, New York. Using examples of painted faces from historic windows, Fode discussed the differences between the work of two 20th-century Mayer painters. He also identified the series of steps he uses to re-create the style and discussed process refinements, including the use of specific types of tools and lavender oil as a medium for certain firings.



David Fode, Untitled, 19" x 19", 2009.

Stained glass was one of the traditions resurrected during the Gothic Revival. In 1827 Bavaria's King Ludwig I founded the Munich Institute of Glass Painting. The renaissance in Munich continued, and in 1862 Joseph Gabriel Mayer added stained glass production to his Institute for Christian Art Works. The firm's work became so popular in the United States that by 1888 it opened an office in New York City. By the turn of the century, the company employed over 300 craftsmen and artisans. Mayer's son-in-law, Franz Xavier Zettler, originally worked in the window portion of the business before striking out on his own in 1870.

Both Mayer and Zettler studios perfected what became known as the Munich style, characterized by religious scenes painted and fired on larger sheets of glass. Blending of colors was not attainable by the old medieval style of using separate leaded pieces of colored glass for any change of color in a scene. In Munich school windows, lead lines were camouflaged by the design, resulting in a more organic, realistic look.

"When I first began working with stained glass, the Munich style windows were the most challenging. The advanced skill required to reproduce this look piqued my attention, and viewers always ask, 'How did they do that?' Appreciating finely rendered realistic artwork as opposed to abstract or contemporary work, I was naturally drawn to the realistic painterly approach of the Munich style."

From Tumbleweeds to Masterpieces

Growing up around Milwaukee and Chicago, Fode was interested in comic strips. His favorite was *Tumbleweeds*, a finely drawn strip about the Old West. This interest evolved into the artist's love of black-and-white drawing and eventually a degree in illustration.

(Right) David Fode, Amy, 24" x 35", 2017.





The Hollander Specialty Glass Group continues to be the largest wholesale only distributor with multiple locations and service centers across the nation.

Fode discovered stained glass through researching his hero Harry Clarke, who was prolific in illustration but also worked in stained glass. "The possibilities of stained glass seemed endless, because light can illuminate and bring to life illustrations in that context. However, the drawing must be refined before the translation from paper to glass can occur. My goal was to hone my skills in both arenas."

From 1998 to 2004, Fode was co-owner of The Glass Chamber in Waukesha with his close friend Bruce Medema. At the time, both artists were working for Conrad Schmitt Studios, Berlin, Wisconsin, restoring Mayer and Zettler windows. Fode and Medema opened their own studio to explore the Munich style in autonomous panels. Avoiding gallery commissions and exhibition deadlines, they sold most of this work online via eBay and Custom Made.

"I definitely made my share of bad windows, I can't lie. But they were all necessary as far as learning the limits of paint and the good and bad effects you can produce. Amazingly, a lot of those panels sold, but not as many ended up in my portfolio."

HaeuserHeil Studios

In 2004 when Medema relocated, Fode founded HaeuserHeil Studios. There he designs and fabricates personal works in glass infused with the vibrant, lavish style of sumptuous illustration seen in the work of his hero Clarke.

*David Fode, Best Friends,
26" x 13-1/2", 2014.*



We've launched our new shopping cart at Hollander Glass Texas, Inc.

Come in and shop the aisles in our spacious 130,000 sq.ft. warehouse and fully air-conditioned store or you can now enjoy the convenience of shopping on-line. Visit our website at www.HollanderGlass.com to learn more.

Houston

Hollander Glass
Texas Inc.
713-460-0045

Atlanta

Bevel King Doors
678-904-1136

Phoenix

Hollander Southwest
602-278-9833

**Midwest
Service Center**

Hollander Central
630-350-2063

**East Coast
Service Center**

Hollander Glass
East Inc.
732-346-1211

Canadian

Service Center
416-628-5508



David Fode, *Traditional Break*,
12" x 14", 2014.

Fode's *The Queen* was created for *American Glass Now: 2016*, a juried contemporary stained glass exhibition of 18 artists' work organized by the American Glass Guild at the Logan Center for the Arts at the University of Chicago. AGG's fifth annual survey show then moved to the Washington National Cathedral, Washington, D.C., where it was on view from July 17 through September 28, 2016.

The Queen was chosen by a jury that included the former curator of the Smith Museum in Chicago Rolf Achilles, curator of the Neustadt Museum of Tiffany Glass Lindsay Parrott, and artist and American Craft Council Fellow Judith Schaechter. With the charm of an illustration from an antique book, *The Queen* reflects the classic look and feel that define Fode's aesthetic. Flanked by whimsical creatures including a pelican, a giant fish, and a goat man, in this stained glass fairy tale *The Queen* reigns over all in her kingdom.

Once Fode has his initial rendering in hand, a cartoon is created in pen and charcoal, then shaded the same way he will shade the glass with paint. Beginning with a trace paint, Fode coats the entire piece with the same texture. "I remove almost all the paint with the first layer, because I'm just going for texture. A lot of painters will do a flat layer and pull away paint in such a way that you can see a lot of brushstrokes. My main objective is to eliminate all evidence of brushstrokes, making the viewer wonder how that was done. Most pieces of glass in a window require three firings—for faces up to six. It's all a matter of layering and making certain the shadows are not too powerful, but also not too weak. Making the window work as a whole is always a challenge."

Over 40 years of experience in retail,
wholesale and education divisions

Delphi offers the highest quality tools and supplies.
100% Satisfaction Guaranteed



STAINED GLASS

GLASS FUSING

FLAMEWORKING

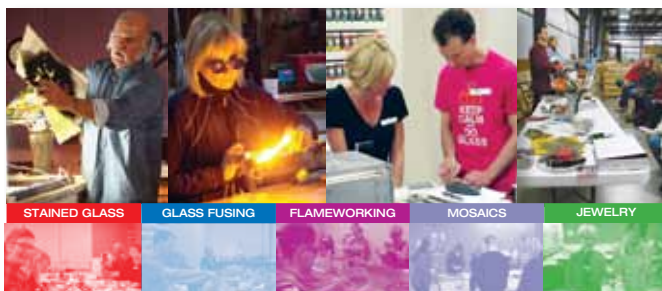
MOSAICS

JEWELRY

Delphi has the largest
art glass showroom in America



Delphi is your source for Creative Arts



STAINED GLASS

GLASS FUSING

FLAMEWORKING

MOSAICS

JEWELRY



Visit us online: www.DelphiGlass.com



David Fode, Saint Tekakwitha, 47" x 18", 2015.

Traditional Break, a small window depicting St. Peter and Jesus in the water, was created for an AGG auction. Fode merges traditional and contemporary styles in a unique way. Instead of Jesus saving Peter from drowning, in this portrayal Christ rescues Peter from being consumed by a contemporary window. Breaking through the window's border, it appears as if the water is flowing out of the main scene, down and out of the panel into a border that doesn't conform to the interior scene.

"I really enjoy being a member of the AGG, because everyone there is willing to share information. Panels such as *Traditional Break* get conversations going. AGG seems to prefer more experimental or unusual approaches in glass, and that's fun for the artists, too."

Fode begins every job with his disciplined approach, except when he's replicating an image that already exists, seen in his homage to Arthur Rackham's *Undine*. "Replicating an existing illustration in glass answers all of the questions about shadow and detail, because I'm sticking to the original verbatim. It's actually easier to do that, because it's either right or wrong. Classic children's book illustrations from the 1920s and '30s, whether you're talking about Rackham, Kay Nielsen, or Edmund Dulac, could all be fantastic windows. The line work translates so well to lead lines."

Working primarily with lead came, Fode only uses copper foil in combination with plating. His recent stained glass portrait of the late singer and pop/R&B icon, Amy Winehouse, includes plating in the subject's face and flesh. A fan of Winehouse's music, Fode captured the tragic figure's essence surrounded by a border of highly detailed orchids that represent being taken too soon. Winehouse appears as a saint in front of a rose window of flowers encircled by the music from one of Winehouse's most poignant songs, *Love is a Losing Game*. The panel was under construction for more than eight months.

Fode enjoys presenting contemporary subject matter such as *Star Wars* characters in a traditional medium such as stained glass. "This sparks the imagination of a lot of clients, because they think stained glass only comes in the form of suncatchers or traditional transoms. I want the viewer to realize that any subject can be translated into this ancient art form."

To Be Continued . . .

As senior artist for Gaytee-Palmer Stained Glass, which specializes in large-scale public projects of restorative and new stained glass, Fode makes initial contact with board members and committees. He also develops projects from conception to design and is responsible for all renderings, full-size cartoon work, glass selection, and all painted and fired applications.

Fode's work at Gaytee-Palmer Stained Glass ranges from churches, historical buildings, repair, and restoration for businesses to the custom design of new window projects for private residents and designers. In 2016, the artist designed fourteen 4-by-4-foot windows for Trinity High School in Bismarck, North Dakota. With natural light on only one side of the building, the remaining windows were artificially lit to mimic natural light. LED panels set on dimmer switches and timers controlled the light, replicating daylight as closely as possible. Fode recently worked on a church commission that featured an Allis-Chalmers tractor in front of a cornfield, continuing on his journey of bringing nontraditional subjects to life in stained glass.

Transitioning with ease from studio work to personal commissions, Fode currently paints fifteen 3-by-12-foot windows for a Gaytee-Palmer client in Shawnee, Kansas. Meanwhile, at Haeuser-Heil the artist creates a window featuring the *10 Commandments* movie poster. The client wants the window to look exactly like the poster, so the entire panel has been painted in enamels and will be installed in a light box.

"Many times I can choose different colored glass and maybe use a silver stain and one enamel on a piece at the most. The rest would all be done with matts. When the entire window is done in enamels, there is a lot more layering, and it's not as forgiving. You have to make sure you've created samples of the paint before you fire it in. Enamels look very different when they are applied compared to when they are fired."



David Fode, *The Queen*, 11" x 18", 2016.



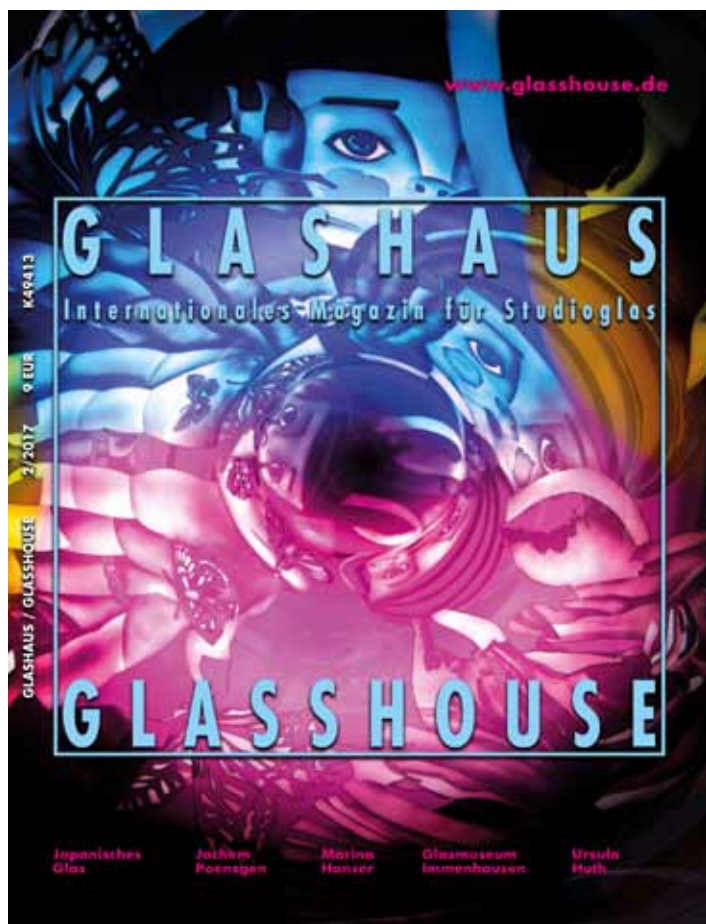
Wet-Belt Sanders
Not Just for Grinding!
Perfect Starter Units
for Hobbyists or
Professionals

Redlands, CA
(909) 793-6636
www.covington-engineering.com

Fode would someday like to have an exhibition of his personal work, although gathering stained glass from around the globe might prove impossible. In lieu of a retrospective exhibition, he hopes to have the time to make a series of panels for display, perhaps a fairy tale told in glass that could also be translated into a book.

It is Fode's belief that stained glass is not only surviving but thriving, as seen in the resurgence of interest in traditional glass painting. "There are a lot of very talented people out there creating amazing work. The only way to achieve this kind of work is for an artist to do it by hand. The idea that stained glass is going to go away or that it can be replaced with something else is impossible. When I explain to my online clients what I will be doing for them and show them photographs of the work, they are amazed and delighted. Original works of art will always be in demand." **GA**

David Fode was a recent guest on Glass Art magazine's new podcast Talking Out Your Glass. Visit the link under "What's New" at www.glassartmagazine.com to subscribe to this free podcast today.



*David Fode,
Red Riding Hood,
32-1/2" x 20", 2014.*

David G. Fode
406 Everett Drive
Waukesha, Wisconsin 53188
(262) 366-8261
haeuserheil@sbcglobal.net

© Copyright 2017 by Glass Art. All rights reserved.

Nortel

Manufacturing Limited

**Glassworking
Burners, Torches and
Glass Wet Cut Saws**

**MINI MILON
BENCH BURNER**



**UNITORCH
HAND TORCH**



**RED MAX
BENCH BURNER**

Surface Mix or Premix Topfire



Bench Burners

Major • Midrange Plus
Minor • Mega Minor • Midrange
Red Max • Rocket

Hand Torches

Multimix • Unitorch
Twinfuel • Ranger

☎ 416-438-3325

nortelmfg.com

photography: dougaldwinphoto.com

Weeklong, weekend and extended weekend workshops for beginners through advanced students.



Touchstone
CENTER FOR CRAFTS

2017 Instructors: Richard Parrish • Carmen Lozar • Michael Mangiafico • Andrew Tischler •
Elizabeth Braun • Meredith Edmondson • Kit Paulson • Susan Thornton •
Dorie Guthrie • Diana Dugina • Karen Leonardo • Joy Knepp • Chad Parker

1049 Wharton Furnace Rd. | Farmington, PA 15437 | 800.721.0177 | touchstonecrafts.org

The natural setting for your creative nature



Armour Products Glass Etching Family



www.ArmourProducts.com
email: Sales@ArmourProducts.com
973.427.8787

2017 American Glass Guild Awards

by Tony Glander

The American Glass Guild (AGG) met during May 2017 in Rochester, New York, for its 12th annual conference. The AGG has a strong mission built around education, but the organization also feels it is important to recognize the people who keep this incredible industry on its feet and moving forward. The AGG presented two awards this year to some very special leaders in the stained glass community.

The AGG Joseph Barnes Award

Established by the American Glass Guild in 2008, the AGG Joseph Barnes Award was and is a service award presented to individuals who serve the glass community with a kindness toward others and an enthusiasm for the glass industry. The award was established to honor Joseph Barnes himself for his many years of service to the field of stained glass. Barnes received this inaugural award from the American Glass Guild, honoring his love of helping others in the stained glass industry. His career has spanned over 60 years, of which almost 40 have been with Bendheim.

“Joe’s love of people and deeply rooted work ethic have made him a great asset to Bendheim and the stained glass industry,” said Robert Jayson, president of Bendheim. “He is known to be the first man in to work, one of the last to leave, and is one of the few who can always be relied upon to do the job, no matter what the task.” Customers could always count on a smile and friendly service when it came to Barnes.

This year’s recipient of The 2017 AGG Joseph Barnes Award was Dennis Dailey of DHD Metals, Conyers, Georgia. “Dennis has extensive knowledge of the industry such that he is able to explain its history and give guidance to us about the nature of the lead used in older windows” said Rick Prigg.

Dailey and his wife Janice acquired DHD Metals from White Metals Corp. in 1990. “Our plan was to use Janice’s customer service and my engineering skills to provide the trade with high-quality



Dennis Dailey, AGG Joseph Barnes Award recipient.

products and good service” said Dailey, and they have acquired just that reputation. He has worked with many restoration artists to reproduce the unusual dies necessary to restore the work of innovators such as John La Farge and Louis Comfort Tiffany, always with a smile and positive attitude. Dailey is a humble man who would never presume to deserve to be honored with such an award, but he was adamant that he could not accept it without including Janice, his wife of 35 years.



Rick Prigg, Selenium Path panel for American Glass Now 2017 made with lead from DHD Metals.

The AGG Nicholas Parrendo Lifetime Achievement Award

To acknowledge distinguished accomplishments and service over the whole of a career by those in stained glass, the AGG Lifetime Achievement Award was established in 2013. Recipients are known to inspire others with their vision, achievement, standards, and leadership. In 2017 the board of the AGG voted to rename the award The AGG Nicholas Parrendo Lifetime Achievement Award in honor of Nick Parrendo, whose lifetime of service to the stained glass industry was exemplary. Parrendo was an incredible artist, designer, painter, and businessman, but he also lived his ideals and treated others with warmth and respect. Following in his footsteps, Mary Clerkin Higgins received the award for her vast contributions and her dedication to improving stained glass works and the community.

Higgins moved to New York City to attend Fordham University at Lincoln Center. Immediately after graduating in 1976, she began an apprenticeship at the renowned Greenland Studio in Manhattan, where she learned the craft and conservation of stained glass. Interested in both the creation of new work and the conservation of masterworks from the past, she studied glass painting and chemistry to augment her many years of work at the bench.

After ten years at Greenland, Higgins opened her own studio in Brooklyn in 1986. She continues to work on a full range of projects, which this past year included two panels from the North Rose of Notre Dame Cathedral in Paris, France, and a new window for a chapel in North Carolina.

The artist's new work has been selected for the *New Glass Review 36* by The Corning Museum of Glass and received a 2014 AGNX award from the jurors of *American Glass Now*. Her contemporary stained glass designs have been created for secular and religious settings from apartments on Central Park West in New York City to the Chapel at the Cloister at Sea Island, Georgia. She also worked closely with artist Rowan LeCompte on a number of projects and participated in the film *Let There Be Light* about LeCompte's last window created for the National Cathedral in Washington, D.C.

Higgins has presented at numerous conferences in the states and abroad as well as giving workshops on stained glass conservation. In addition, her conservation work on stained glass from the 12th to the 21st centuries may be seen in public and private collections across North America.

One of the five founders of the American Glass Guild, Higgins was its president for two terms, program chair for three conferences, and editor of the five published conference proceedings. She is also founder and has served as organizer for five years of the juried show *American Glass Now*. Higgins takes great satisfaction in knowing that the AGG has made a positive difference in the field of stained glass and that she has been a part of that project from its inception.

Looking Forward to AGG 2018

The AGG is proud to acknowledge the exceptional careers of these outstanding and dedicated glass artists. It believes that the examples of service and leadership offered by these exceptional individuals will prove to be an inspiration to others.

As the American Glass Guild looks forward to next year's conference in Cleveland, Ohio, its members are encouraged to nominate someone they admire for the 2018 awards. Visit www.americanglassguild.org for more information on the AGG's upcoming events and how to become a member.



Mary Clerkin Higgins,
AGG 2017 Nicholas Parrendo
Lifetime Achievement Award
recipient.



Mary Clerkin Higgins panel
proposal, *Shield Me*, for
American Glass Now 2017.

© Copyright 2017
by Glass Art. All rights reserved.

www.GlassArtMagazine.com

OUR COMMITMENT To You:

- OVER 195,000 SQFT OF GLASS SHIPPED FROM SPECTRUM SINCE MAY '16 WITH MORE SHIPMENTS TO COME.
- HARD TO FIND SPECTRUM SYSTEM 96 FUSIBLE AND ART GLASSES.
- SYSTEM 96 ACCESSORY GLASS, GLASS PACKS, AND PAPYROS SHELF PAPER.
- EASY ONLINE ORDERING, KNOWLEGABLE STAFF, AND FAST SHIPPING MAKES GETTING GLASS FROM FRANKLIN SIMPLE.

Franklin Art Glass Studios, Inc.

FRANKLINARTGLASS.COM

Glass Art™ • July/August 2017 • 15

Sarah Hall

Energizing Architectural Glass with Photovoltaic Cells

by Shawn Waggoner

Photos Courtesy of Sarah Hall Studio

Sarah Hall has refined a unique and high-tech approach to architectural glass that gifts the world with both beauty and power. Through the use of photovoltaic cells that convert solar energy into electricity, Hall's windows can store sunlight by day to backlight the glass by night. They can also produce clean electricity that feeds directly into their respective buildings' energy systems. Though designing with photovoltaic cells presents some challenges, she moves viewers through her stunning mastery of light and color.

Hall designs large-scale solar and art glass projects for clients around the world including embassies, cathedrals, schools, universities, and colleges. Recent commissions include *Waterglass* at Harbourfront Centre Theatre and *Leaves of Light* for the Life Sciences Building at York University in Toronto, Ontario; *Lux Gloria* at the Cathedral of the Holy Family in Saskatoon, Saskatchewan; *Lux Nova* wind tower at the University of British Columbia (UBC) in Vancouver; and *The Science of Light* at Grass Valley Elementary School in Washington State.

Having studied at Sheridan College in Ontario, Hall continued her education in the Architectural Glass Department at Swansea College of Art in Wales, U.K. She followed this with an apprenticeship to Lawrence Lee, Glass Master at the Royal College of Art in London, U.K., and a year in Jerusalem studying Islamic techniques in glass. Her exceptional contribution to the built environment has resulted in Honor Awards from the American Institute of Architects and the Allied Arts Award from the Ontario Association of Architects. Hall's artistic achievements were acknowledged by her induction into the Royal Canadian Academy of Art in 2002. An Arts Fellowship from the Chalmers Foundation in 2005 supported her innovative work in Building Integrated Photovoltaic (BIPV) solar art glass.

In 2016, Hall's autonomous glass was featured in the exhibition *International Panorama of Contemporary Glass-Art*, held at the Centre International du Vitrail in Chartres, France. In addition to projects, lectures, and exhibitions throughout North America and Europe, Hall has co-authored 35 articles on glass art and published three books: *The Color of Light* (1999); *Windows on Our Souls* (2007) with Bob Shantz; and *Transfiguring Prairie Skies* (2012) with Donald Bolen. Her work was the subject of J. S. Porter's volume, *The Glass Art of Sarah Hall*, as well as the CBC documentary series, *Great Minds of Design*. The artist is presently working on a large-format retrospective book of her work, *A Thousand Colours—Sarah Hall Glass*.

Through her glass designs, Hall currently explores ways to generate power and save birds simultaneously. She endeavors to create colored, transparent solar panels that will help power the buildings they cover while preventing some of the 25 million bird deaths per year due to collisions with glass.



Sarah Hall, *Lux Gloria*, the Cathedral of the Holy Family, Saskatoon, Saskatchewan.
Photo by Grant Kernan.

A Perfect Storm for Going Solar

Hall has spent the last 10 of her 40 years in glass exploring the possibilities of photovoltaic technology. Her mentor Professor Ursula Franklin at Massey College, University of Toronto, shared with Hall a video titled *Power of the Sun*, which planted the early seeds for this new direction. Hall had seen many buildings in Germany created with BIPV and was convinced it was a great direction for solar. She began forging connections in Canada, the United States, and Europe with BIPV architects and engineers.

A solar/art glass collaboration between the studio that fabricates Hall's work, Glasmalerei Peters Studios, Paderborn, Germany, and artists Klaus Jansen and Christof Erban further inspired Hall's movement toward solar. In 2005, she was awarded a Chalmers Arts Fellowship from the Ontario Arts Council, which funded time and resources for experimentation. Later that year Hall created the first window in North America to incorporate solar cells. It was displayed in the Northern Lights House at the 2005 Solar Decathlon in Washington, D.C.

"I consider making an effort to care for our environment very important. I think we need to find creative, beautiful, ecological ways of living in the world. To my mind, renewable energy is part of that picture. As glass artists we are in a great position to make use of glass-to-glass solar modules. Creating windows that collect energy is a significant contribution to our medium and the built environment."

How It Works

Photovoltaic or solar cells collect energy from sunlight. The type Hall uses are wired together in a panel or array and encased in a glass-to-glass module. The artist's preliminary design combines her artistic response to the architectural site with composing an additional layer of graphic elements or patterns comprised of the solar cells.

These designs are integrated into an electrical field and wiring diagram by solar engineer Erban as an additional layer in the window. The wiring can appear strictly functional and almost invisible as seen in Hall's project for the Cathedral of the Holy Family, Saskatoon. It can also sometimes add an integrated graphic element to the overall composition as seen in her Regent College Wind Tower in Vancouver. "My projects are essentially collaborations with solar engineers. They make it possible."

Solar projects have brought a rigor to Hall's design process, requiring her to combine rigid graphic and technical elements. "There is a very big learning curve for everyone involved, and you need the team of engineers and electricians from the building site to be on board with work they may never have done before. This part of it can be very hard going." The panels themselves must pass CSA or UL certification as electrical components. Additionally, the site must be appropriate for solar energy collection.

Hall's work has introduced many people to a new concept of solar energy, proving it can look beautiful as well as carry meaning. BIPV touts many benefits including the fact that the cost of producing solar cells and panels is paid back within four years. The cells have a lifespan of 40-plus years and importantly do not pollute with greenhouse gas (en.wikipedia.org/wiki/Net_energy_gain). Compare this to fossil fuels, which provide one-time use, release pollutants into the atmosphere every minute, and use original material that is not recoverable or recyclable. For Hall, the benefits of BIPV far outweigh the challenges.



Sarah Hall, Lux Nova wind tower at Regent College, part of the University of British Columbia in Vancouver in daylight and at night. Photo by Michael Elkan.

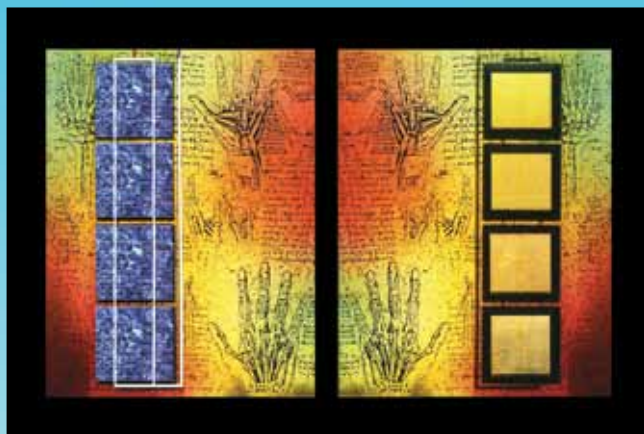
The Proof Is in the Pudding

Two of Hall's recent award-winning commissions, *Lux Gloria* and *Waterglass*, demonstrate BIPV projects that produce clean electricity that is fed directly into their building's energy systems. *Lux Gloria*, installed in 2013 at the Cathedral of the Holy Family, presented an important worldwide first and Saskatchewan's first BIPV system. These stained glass windows not only collect energy but are tied to the energy grid, translating into rebates on energy costs for the cathedral. This innovative project was the 2014 recipient of the American Institute of Architects (AIA) award for its combination of beauty, technology, and solar energy.

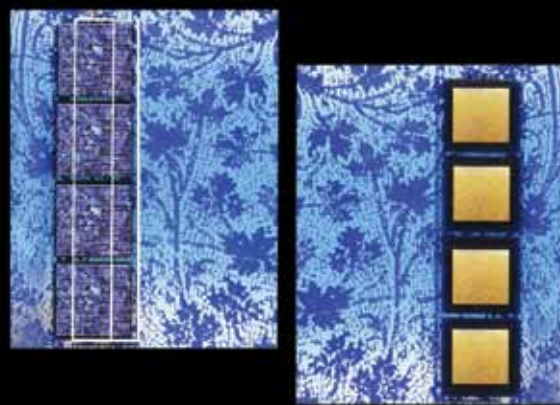
A landmark installation of three monumental south facing windows that grace the upper façade, this project pays homage to Saskatchewan's vast prairie skies. The largest window is 37 feet high by 12 feet wide and sits 107 feet above the ground. Each window is divided into 18 panels of unique sizes, shapes, and designs. With 1,117 hand soldered, silver colored solar cells embedded in the windows, *Lux Gloria* is expected to produce about 2,500 kilowatt hours annually. The city's motto, "Saskatoon Shines," is celebrated and embodied in this pioneering solar installation.

*Sarah Hall, Waterglass,
Harbourfront Theatre,
Building Integrated
Photovoltaic.
Photo by Matthew Lavoie.*

*Sarah Hall, Waterglass,
Harbourfront Theatre,
Building Integrated
Photovoltaic, exterior.
Photo by Matthew Lavoie.*



*Sarah Hall, Homage to DaVinci,
first panel prototype, 2004.*



*Sarah Hall, Blue Vine,
second panel prototype, 2004.*

Waterglass, Hall's 2012 work for Harbourfront Centre Theatre, Toronto, combines 1,736 square feet of glass art and photovoltaics in a three-story glass envelope that wraps the entirety of the north, east, and west façades of the building. The glass enables increased thermal insulation and features unique, electricity-generating windows. Sunlight is collected and stored by western solar panels during the day. At night, the multistory complex comes alive in an array of color changing LEDs.

A visual journey through the nautical history of Canada's largest city, *Waterglass* features artistic elements on glass created with airbrushed, fired cobalt mineral pigments and enamels on 6 mm float glass. The image gallery—including 360 images of maps, wildlife, the seasons, ecology, and historical figures from the country's first settlers to its Olympic athletes—combines screen printed photographs and dichroic glass.

An example of a different type of BIPV project, one that collects solar energy during the day to illuminate itself at night, can be seen in Hall's *Lux Nova*, created in 2007 for the tower of Regent College, part of UBC. The aerodynamic 40-foot wind tower was designed by Vancouver architect Clive Grout in collaboration with Walter Francel Architects as a natural ventilation system for the underground library building and a functional symbol of Regent's commitment to a sustainable environment.

Hall's task was to bring further beauty and interest to Regent's tower while continuing the theme of alternative energy. At the heart of her glass design is a luminous column of light, flowing like a waterfall in silvery blue, violet, and white. Included in this column is an array of solar cells that will collect energy during the day and use it for nighttime illumination, acting as a beacon for the surrounding park. Arranged within the design are 12 dichroic glass crosses, creating an ever-changing rainbow of color. Woven through the flowing waterfall of light is the Lord's Prayer in Aramaic, which acknowledges the theology library below.

In 2011, Hall's work *Leaves of Light*, a solar art installation, brought a similar living light to the northwest corner of York University's Life Sciences Building. The embedded, custom designed blue-gray solar cells were made in Germany and are a perfect match for the innovative sculptural façade of the building itself, which is based on the DNA molecule. The west facing layer of *Leaves of Light* is a tour de force combination of hand painting, digital painting, and screen printing on glass. Hall's artwork includes Goethe's poem *Gingko Biloba* in the original German and in Spanish, English, French, Dutch, Italian, Portuguese, and Japanese. The word *Gingko* is written in Chinese, Greek, Arabic, Hindi, Persian, Hebrew, Thai, Russian, Bengali, and Korean to acknowledge the multicultural character of York itself.



TAKE YOUR CREATIVITY TO NEW LEVELS



WHEN TO USE EACH ADHESIVE

A combination of both used in this installation

Flat Surface:

Hang Your Glass™
ADHESIVE

FAST
SETTING



Gap Filling:

HYTAL
FILLER



PRE-MEASURED

NEW



www.HangYourGlass.com | 650.353.4642

D&L ART GLASS
SUPPLY



Serving kiln forming,
torchworking, stained glass
artists and stores since 1974

Wholesale Pricing &
Quantity Discounts

800.525.0940

303.449.8737

dlartglass.com



D&L Art Glass Supply®
Denver, CO

- Aisles of Glass
- On-line Ordering
- Superior Service
- Domestic and International
- State-of-the-Art Classroom



Glastar

The Industry Leader Since 1978.

GREAT TOOLS, PRODUCT EXPERTISE & CUSTOMER SERVICE YOU CAN ALWAYS COUNT ON.



Glastar Corporation • glastar.com
8425 Canoga Ave., Canoga Park CA 91304

Specialty
Heads

Diamond Grinding
Heads

Jewelry
Head

(800)423-5635 • T (818)341-0301
F(818)998-2078 • GAM@glastar.com

“Every project I take on generates and encompasses a great story made from the purpose of the artwork, specifics of the site and architecture, fresh ideas, technical challenges, the process of designing, and all of the people involved. With *Leaves of Light*, I wanted to make a connection to the ginkgo trees on campus, look at languages overlapping with images, and make solar look beautiful.”

The Bright Future of Hall's Photovoltaic Glass

Nowhere is Hall's intention to demonstrate renewable energy in an imaginative and beautiful context more relevant than her 2009 work, *Science of Light*, Grass Valley Elementary School, Camas, Washington. “The artwork was designed to delight, to teach, and to inspire. Delight resulted from the transformation of sunlight into patterns and colors throughout the stairwell and visible energy showcased in the LED lighting fixture. Inspiration and teaching were accomplished through the innovative use of the solar cells embedded into the windows, offering an ongoing lesson in science, ecology, and the positive use of technology. Producing renewable energy through the sun's light enhances children's ability to see connections between themselves and the natural world.”

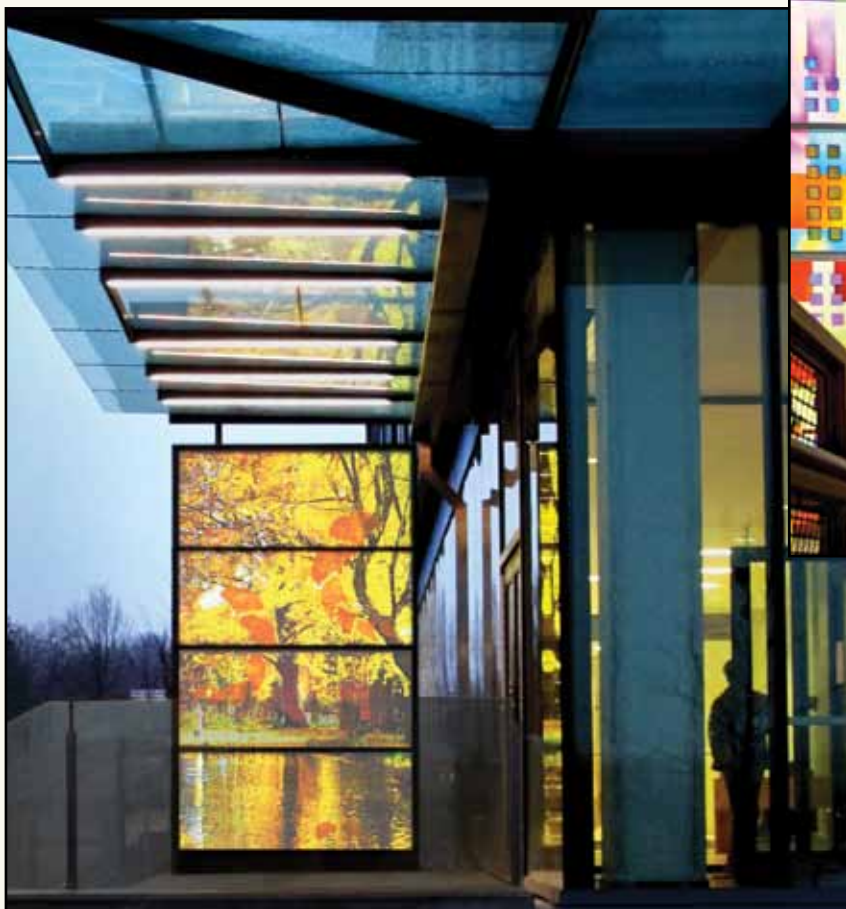
Working with integrated photovoltaics is neither a craft nor a studio practice, but rather a collaboration between artist and electrical engineer. Many artists and designers are interested in the ideas and technology. In the United States, Lynn Goodpasture created an interesting solar project at the San Jose Library in 2008. Artist Carol Bennett integrated photovoltaics at the Hawaii State Art Museum in a 2012 skylight sculpture.

As Hall's journey with BIPV art glass continues, her goals for the work have expanded. A couple of years ago, Toronto architect Paul Raff, encouraged Hall to explore how her solar windows could stop the bird problem. “Birds perceive the reflected image of the sky and trees as real, and they fly into it. Here in Toronto, about nine million birds die every year by colliding with glass. I was staggered by this statistic. Most of the new high-rise buildings being constructed are made primarily of glass. My goal is to replace this with bird friendly, energy producing glass that prevents collision.”

Hall's previous solar installations have all been produced with opaque multicrystalline cells inappropriate for high-rise offices or condos where people want transparency in the glass. However, new solar technology based on nanotechnology is being introduced to the market. It is lightly colored, has a low capital cost of manufacturing setup, and a simple screen printing process of application, which offers glass in a range of transparencies.

Hall currently works with Peters Studio to create prototypes of bird friendly photovoltaic glass. If her decade of previous work in BIPV is any indication, she will no doubt conquer the challenges of the bird problem with an artful, beautiful, environmentally responsible solution. **GA**

Sarah Hall was a recent guest on Glass Art magazine's new podcast Talking Out Your Glass. Visit the link under “What's New” at www.glassartmagazine.com to subscribe to this free podcast today.



*Sarah Hall, The Science of Light, Green Valley interior.
Photo by A.J. Rose.*

*Sarah Hall, Leaves of Light for the Life Sciences
Building at York University, Toronto, Ontario.
Photo by Andre Beneteau.*

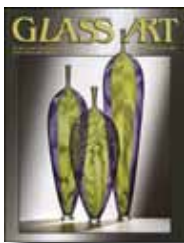
Sarah Hall
Sarah Hall Studio Inc.
 98 Boustead Avenue
 Toronto, Ontario
 Canada
 M16R1Y9
 (416) 532-6060
info@sarahhallstudio.com
www.sarahhallstudio.com

© Copyright 2017 by Glass Art. All rights reserved.

Readers' Forum

Dear Shawn,

Your article in *Glass Art* on Dante Marion is really superb. The whole article is exhaustively researched and very well presented. Thanks.



Ken Saunders
Ken Saunders Gallery



Whopper Vase by
Dante Marion

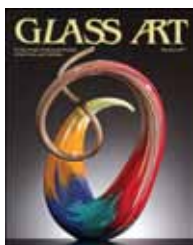
Dear Shawn,

As usual, *Glass Art* really does an incredible layout on the articles. Thank you for producing such a great resource for glass artists. The magazine looks great!

Tony Glander
Fitzpatrick Glass Studios

Glass Art would like to extend a sincere thank-you to our readers who take the time to let us know how we are doing. You can share your opinions by contacting us via postal mail, e-mail, or phone.

Glass Art
8300 Hidden Valley Road
Westport, KY 40077
info@glassartmagazine.com
(502) 222-5631



CBS 2017 Dichroic by Design Contest

Show off your artwork using
CBS Dichroic Glass and win
thousands of dollars worth of
prizes!

Categories include

- Professional
- Emerging Artist
- Dichroic Extract
- Blown Glass
- Lampworked Glass
- Fused Glass
- Glass Jewelry
- Glass Sculpture
- Glass Marbles
- Architectural
- Miscellaneous

Entries must be received by
November 17, 2017.

For complete rules & information, visit:
www.cbs-dichroic.com



Artwork by: Ken Skimpdin

Do you want to reach new customers?
The answer is simple.

Advertise in
GLASS ART
Magazine

Reserve your advertising
space today in our next issue!

Mosaic Arts International 2017



The 16th Annual Mosaic Arts International Exhibition (MAI) series sponsored by the Society of American Mosaic Artists (SAMA) is a creative, innovative, and diverse collection that offers a unique and compelling view of mosaic art in the 21st century. The 2017 exhibition, which ran from April 27 through June 15, was held in conjunction with SAMA's annual conference. This juried exhibit presents the best in contemporary fine art and site-specific mosaics from the organization's diverse international membership.

Fine Art Mosaics Exhibition

The selected works of the MAI Fine Art Exhibition reflect the multiplicity of the mosaic medium and its unlimited applications. Regardless of the style, colors, textures, materials, or vision, each of the works exhibited speaks an ancient language with a contemporary translation.

Jurors Gary Drostle, Sergio DeGuisti, and Shug Jones recently shared their thoughts on the exhibit, the high quality of work that was submitted to MAI 2017, and the criteria they used when judging the entries.

"I mainly focused on the individual artist's voice and the feeling of a clear communication of the artist's intent. After this vital ingredient comes the technical accomplishment of the work—the use of composition, scale, and design. This is a collective representation of where the art of mosaic is at this moment in time."

Gary Drostle - London, U.K.

"It was a pleasure for me to select works that dealt with the traditional elements of mosaic art as well as new materials that reflect methods that are modern, yet hold onto the history of this great, ancient art form. This exhibition will give the public a wonderful opportunity to learn and see the creative contributions of artists in this very unique art form." *Sergio DeGuisti - Detroit, Michigan, U.S.*

"The body of work submitted was extremely well thought out, showed a depth of knowledge of mosaic art, and was executed with skill and an eye to communicating each artist's personal vision to the viewer. The selected art pushes the boundaries of the ancient language of mosaic, introducing contemporary issues, complexity of thought, and clarity of ideas. *Shug Jones - Garland, Texas, U.S.*

MAI 2017 Site-Specific Mosaics

Juror Susan Goldcer Goldberg, who selected the winners for the site-specific projects, recently described the entries received for this category. "Submissions covered a diverse mix of mosaic methodologies, materials, and innovative three-dimensional sculptures, as well as a strong community interface. The selections exemplified excellence in design and installation methods, as well as harmony and timelessness with the surrounding architecture and environment.

"*Temple City Today* displays Carole Choucair Oueijan's impressive technical proficiency and artistic expression in romantically depicting city history through diverse mosaic materials. My selection of the *Creekmouth Heritage Mosaic* was based on the success of the artist to engage the community, resulting in a project that poetically reflected and enhanced their identity, sense of pride, and heritage.

MAI 2017 Fine Arts and Site-Specific Awards Best in Show

Toyoharu Kii
Ritual Contact
Tokyo, Japan
marble
29" x 7" x 1"
2016

"Why white mosaic? By using only white marble, we can better see the character of the tesserae. Excluding color makes creating images more difficult, yet I love this process of making mosaic. If my work gives other mosaic artists any inspiration, I can assure myself that these attempts were worth it."





Technical Award / Contemporary Innovation

Scott Fitzwater
Diversity Gradient III
 Portland, Oregon
 slate, thinset,
 handmade substrate
 20-1/2" x 30" x 1"
 2017

"The diversity of species dramatically increases as one travels from the earth's poles (low diversity) to the equator (high diversity). In spite of an expansion of diversity, species' populations become smaller, more isolated. As a result, they are increasingly susceptible to rapid environmental fluctuations."



Juror's Choice / Gary Drostle

Toyoharu Kii
Abandoned Land
 Tokyo, Japan
 marble, crystal
 22" x 20" x 1"
 2016

"We need to destroy the land before making roads and buildings in order to live. After development is over, we abandon the land. It is no longer useful to us."

Technical Award / Technical Distinction

David Chidgey
Celebration
 San Antonio, Texas
 smalti, gold smalti,
 carved terra-cotta
 23" x 14-1/2" x 1-1/2"
 2016

"*Celebration* reflects a return to feeling alive and ready to celebrate life following the loss of our youngest daughter, Sarah. This is a tapestry of life reflecting healing, exploring new possibilities, renewing dreams, and celebrating life itself."



Juror's Choice / Sergio DeGiusti

Pauline Mills
Intersection
 Lubbock, Texas
 wood, metal, glass
 18" x 18" x 2"
 2015

"*Intersection* represents a conscious change in how I create mosaics—a shift away from representation. At a SAMA conference, Karen Ami told me to 'use my words.' I had received my challenge. I enjoy the juxtaposition of opposites—metal against wood, shiny next to dull, nature beside manufactured."





Juror's Choice / Shug Jones

Deb Englebaugh

Long-awaited

Mercer, Pennsylvania
Pennsylvania sandstone,
smalti, handmade,
bisque-fired clay, metal
18" x 18" x 1"
2017

"*Long-awaited* is a timepiece that represents recollections of significant moments. They are never shown as complete structures. Like mosaic, they represent parts of a larger whole. *Long-awaited* represents that point in time when a long-anticipated event occurs."



Best Site-Specific Mosaic

Carole Choucair Oueijan

Temple City Today

Site Location, Temple City, California
smalti, marble, granite, cristallino,
millefiori, iridescent tile, pebbles, glass
44" x 28" x 1" 2015

"This public art project consists of five mosaic murals constructed in the Byzantine Indirect Method and installed in separate panels along Rosemead Boulevard. The subjects include Eastern and Western cultural festivities, the first Winchell's Donuts House built in 1948, local well-known local business Pete & Jake's Hot Rod Parts, the popular central bandstand, the iconic San Gabriel Mountains and wild parrots, and the award winning Temple City schools."



Best Community Project

Tamara Froud

Creekmouth Heritage Mosaic

London, U.K.

Site Location in Barking, U.K.

glazed ceramic, glass, and printed tile, mirror
1.70 m x 6 m x 0.10 m 2015

"This mural was installed as part of the Creekmouth Heritage Project, which preserves 150 years of history in Barking, U.K., with the help of local residents, who were engaged in the collection of historic material. It depicts the successes and tragedies of the past, such as the 1878 Princess Alice Disaster on the Thames the development of war and passenger planes by Handley Page, and the construction of Creekmouth Village by the owner of the Lawes Chemical Factory to house his workers."

GA

Glass Expert Webinars™

Live Two-Hour Webinars with Renowned Glass Artists
No Traveling Required!



Dennis Brady

Vitrigraph June 29



Dennis Brady

Selling Your Work Lecture

July 20

Lisa Vogt

Upscale Fusing July 25



Peter McGrain

Vitri-Fusaille® July 27

Lisa Vogt

Make a Fused Glass Sink August 8



Stephanie O'Toole

Flowers and Fountains August 17

Kent Lauer

Faceted Dichroic Glass August 22



Paul Messink

Exterminate Your Bubbles Lecture August 24



Cathy Claycomb

Working with Solderfields August 29



Gil Reynolds

Mold Making August 31



Lisa Vogt

Fusing for the Adventurous
September 5 and 7



Margot Clark

Layering Techniques September 12



Joe Porcelli

Tale of two Techniques September 19



Denny Berkery

The Copper Foil Method September 26



Visit the Glass Expert Webinars™ link under "What's New" at www.GlassPatterns.com for more details and local times.

Rick Silas

Upcycling Tempered Glass as Art

by Colleen Bryan

When Canadian artist Rick Silas sees the glass face of a commercial building, he thinks raw material. As a young man trained in the visual arts, Silas cast about for a way to establish himself with materials and a studio on a low budget. "At college, I took classes in oil painting, metal sculpture, fibers, and glassblowing. But when I looked at the world around me, I saw tempered plate glass, aluminums, enamels, and resins. Those materials were abundant, but none were being taught in the institutions." This insight opened him to the possibility of using these materials to make art.

Initially, Silas avoided glass due to high start-up, and ongoing material and energy costs. "Even 30 years ago, it was obvious that things were changing. Czechoslovakia and India were producing glass that could compete with what came out of American studios. I don't think any of the artists I studied with in college are still making glass, because they couldn't keep the heat on."

In the waste stream of tempered glass from office buildings, Silas identified a source of material and patented a technology for working glass without heat. As environmental concerns mount worldwide, the value of his techniques to other artists rises correspondingly. "It is green in the truest sense of the word."

Silas' home studio was easy to assemble, since it has no kilns or furnaces. "The most expensive tool I own is an \$80 tile saw." The fact that none of his processes require heat reduces energy costs. The investment in labor is also minimal, since all his processes proceed quickly to finished output.

Developing a Technology

Silas' choice of materials is not obvious. "The primary technical boundary for the 50 million tons of tempered plate glass we produce every year is that it cannot be recut once made. That limitation amplifies the environmental cost of any mistakes in its manufacture. "The tempered glass industry gets away with a lot of green washing. It turns miscut glass into road crush and calls it environmentally friendly, but the amount of material, money, and energy expended to create tempered glass is incredible, so that solution just seems wrong."

Silas first developed a benign and simple *Silastial™ Glass* technology he dubbed *Silastial Shatter* or *cold bent glass*, which allows him to bend and shape tempered glass without heat. His technology exploits shattering, the weakness of tempered plate glass, to produce



Rick Silas, *Silastial Bowl*, hand formed cold bent glass, 16" x 16" x 2", 2016. Photo by Darcy Silas.



Rick Silas, Shelter From the Storm, Silastial shatters encasing a 4,000-year-old wood bison, 15' x 15' x 15', 1993. Photo by Patrick Kornak.

a malleable, cuttable, durable product. He developed a few dozen ways of recycling the material in functional applications such as countertops, backsplashes, doors, and similar products, and patented his technology. Then he established a reliable supply of materials.

Every glass company has a stash of tempered glass they are reluctant to throw away. In Silas' experience, they will give away or sell that glass cheaply to avoid landfill costs. He has had remarkable success over the past 35 years sourcing such glass for free or for trucking costs. "Every week now I get a phone call with an offer of tempered plate glass." Most recently, a construction company had 2,800 glass sheets produced for a building complex in Victoria, British Columbia, that were 68 inches by 38 inches. One technical error rendered all of it waste. "I brought 300 pieces of the glass to my studio, and the other 2,500 sheets of lightly used glass were turned into road crush."

Technique

Silas' Silastial™ Glass technologies marries ubiquitous materials in unorthodox ways. "Everybody can access these materials. Liquid resins are cheaply available in hardware, marine supply, or automotive stores. Those materials have gotten better and stronger in recent decades, and I counter their biggest weakness, discoloration,

through the use of color and chemistry. My molds are cardboard sauna tubes that are typically used to roll concrete. As discussed, tempered glass waste is widely available for free." Silas shatters the glass to make Silastial™ Glass.

The industry already had one shattered glass product that involved laminating two sandwich sheets of glass and shattering a center sheet between them. That method works fine on a small scale, but slight warping occurs on larger projects. While it produced an attractive fractured crystal effect, that technology did not give the artist control over patterning or design.

Silas' innovation was covering the outside of the sandwiching glass with a temporary membrane to hold everything in place. He infuses a small amount of liquid resin, averaging half an ounce per square foot, and shatters the glass while the adhesive is still wet. The vacuum created by the force of the strike sucks the resin in to fill the cracks around the shattered glass.

He experimented with additional sheets of glass between the sandwich sheets, creating thick marble-like slabs that can be molded, cut, sculpted, and polished. At the suggestion of his artist wife, Silas introduced leaf patterning and other natural design elements, which are affixed by the temporary membrane and incorporated into the slabs.



When the resin is in its container, workers have 20 minutes to use it, since glass slows catalysis considerably. The artist has about two hours to manipulate, bend, and mold the material into the desired shape. After that, Silas can use power saws with diamond wheels or a waterjet to cut and polish the object. He uses the resulting Silastial™ Glass in all manner of flat and curvilinear applications.

The material is not thermally conductive, since heat is caught by a single chip rather than being transmitted through a crack or concentrated to explode as it would with tempered plate glass. Since glass is a wonderful heat sink, countertop surfaces made from Silastial™ Glass are not damaged by hot pots and pans and are perfectly flat. Due to thousands of complex vertical and horizontal bonds from the shattering, the countertops are also very strong. "Silastial™ Glass is a fabulous medium. You get the advantage of plastics with the strength and sparkle of glass."



(Top to bottom) Rick Silas, Silastial Shatter Countertop—
Lit from Within, topaz blue, single cut (no joinery) with
Organic Edge, 9' x 4' x 1-1/2", 2015; Silastial Shatter
Tabletop, cold bent glass base with clear Ice Glass,
Organic Metallic Edge, 36" x 40", 2013.
Photos by the artist and Darcy Silas, respectively.

Technological Leapfrog

Generally, Silas observes that technology leaps forward in response to a client presenting a problem with solutions that can be elaborate or as simple as hiding the view of a garbage bin outside a window. Silas enjoys identifying the complexity involved in a solution: How will materials respond over time to ultraviolet rays and temperature changes at the window? How best can light be maximized? What artistic solution will be most appropriate and pleasing to this unique situation?

Another Silastial™ Glass medium is one in which Silas uses a diamond grinder to etch drawings onto tempered plate glass. Some of his etched installations are massive. He has turned some productions into performance art, even etching a 50-foot glass mural while an audience watched.

"These days I'm also having fun with LED lights. In working with resins, a lamp radiating heat at a few hundred degrees damages materials over time, but since LEDs generate no heat I can build light into the piece as I form it. I incorporate glass lights below countertops so the counters themselves become the light fixture. I am now working on a 6-by-10-foot shattered glass tower that is lit from the bottom with LEDs. Clients and designers love the effect."

Several years ago he developed a product line called Night Ice, designed to consume the waste material from his own processes. "I gather shattered material chips, anything that falls away from my sculptures. Then I put them into a cement mixer, tumble them to break off any sharp edges, and add resin to glue the shards together to make candleholders." Once cured overnight, the vaguely stalagmite-looking objects sell from \$20 apiece.



**Your
Subscription
Any Way
You Want it**

- **Print**
- **Digital PDF**
- **PDF on CD**



Red Eagle by Preston Singletary.

For the
Creative Professional
Working in Hot, Warm,
and Cold Glass
www.GlassArtMagazine.com
502.222.5631



BECON 2017

T R A N S F O R M A T I O N S

Art • Science • Education • Commerce • And More

Save the date! June 22–24

On the campus of Portland State University

bullseyeglass.com/becon



DENVER GLASS MACHINERY

COLD

WARM

HOT

Supplying artists with quality tools to produce quality work since 1978
 2800 S. Shoshone St. Englewood, CO 80110 / Ph. 303 781-0980, Fax. 303 781-9067
 Web: denverglass.com Email: info@denverglass.com



(Top to bottom) Rick Silas, *Silastial Shatter Countertop and Backsplash, Ice Glass on cabinet doors, cut with tile saw, 2014*; *Mist Fantasy, reverse Ice Glass painting on reclaimed tempered glass, 24" x 30", 2010*. Photos by the artist and Darcy Silas, respectively.



Silas estimates that 95 percent of his work is commissioned to be installed in a specific location, many out-of-doors. As such, color, temperature variations, and chemistry become important design variables. Location affects both the technologies and materials that are appropriate for a given installation. His enthusiasm, satisfaction, and skill with working through solutions to clients' problems have allowed him to earn a solid living as a working artist for more than three decades.

Current Applications

Silas turns out a steady stream of Ice Glass paintings, light fixtures, bowls, coffee tables, countertops, doors, divider walls, sculptures and light towers. An installation titled *Undercurrents* represents a kelp forest under water. For one Calgary, Alberta, hotel Silas filled a lobby and elevators with shattered glass on mirrors. "That truly was a great example of upcycling waste material."

The artist's largest piece to date was *Shelter from the Storm*, a 15-foot cube glass sculpture of a glacier encapsulating a 4,000-year-old Wood Bison skeleton. The artist made it under commission for Sunlife Office Towers. He says the Sunlife sculpture is possibly the biggest freestanding glass sculpture in the country.

Silas produces flat sheets of Ice Glass and shattered glass that he sells to artists and designers from \$100 per square foot. "I considered opening a small factory to produce more of the material, but at my age, I am more interested in passing on technology than establishing a production line. An owner of a London glass company paid me \$20,000 for a week of training to teach him my process. Now his glass company is producing countertops using my Ice Glass technology on a factory scale."

The Arc of an Artist's Life

Around 1985, during recuperation from a surgery, Silas began to play with making jewelry using resins. That experience ignited the flare of insight from which the first of his Silastial™ Glass technologies would evolve. "Poverty drove me. The abundance of free tempered glass provided my opportunity, and the work is not hard to make or hard to sell."

Silas' life plan was founded in early formal arts education. Midlife development of user-friendly technologies provided him a livelihood as an artist. Now he looks ahead to retirement as a phase focused on teaching others his techniques. His students have tended to be both young artists and retired people looking for a hobby as well as companies wanting to introduce a new glass technology. "Once they learn the basics, students go off on tangents I've never imagined."

The most exciting venue Silas sees for transferring his technologies is through Webinars, which he expects to start offering through *Glass Art* in June 2017. "I thought at this point in my life I might have to create a retreat or join some institution where people come to learn." But Webinars fit perfectly and require far less investment by both the instructor and the students.

"Webinars open doors to so many people at reasonable prices and allow me to teach as many students as possible from all over the globe. The opening to do Webinars is the most opportune thing to arrive in my life lately. I don't like traveling and am not fond of airplanes. Vancouver Island where we live is a high-cost resort and retirement area, far away from large art markets, but Webinars make the whole world smaller." Since Silas and his wife Darcy and daughter Kashmere are soon planning a cross-country move, Webinars have the added advantage of portability.

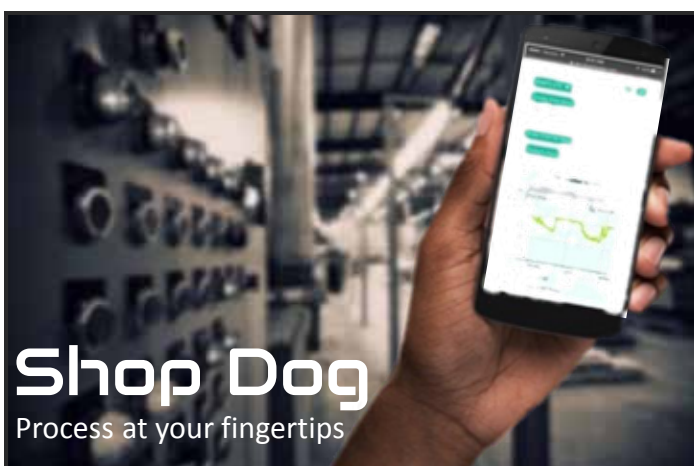
The Webinars that Silas now has in the works will focus on his various base technologies, starting with Ice Glass and the addition of color and three-dimensional printing in artwork on tempered plate glass. The artist says his techniques were designed to be easy to teach and pass on. "Once someone learns how to do this, it can be a wonderful ma-and-pa business. It has been rewarding to see how many young people want to learn this technology as an alternative way of earning a green living. And I can attest that I certainly sleep easier without feeling guilty about how I earned my own living for the day."

GA

Rick L. Silas
Silastial Glass Inc.
 1359 Highway 332
 Lunenburg, Nova Scotia
www.silastialglass.com
www.fineartamerica.com/profiles/rick-silas.html



Rick Silas, Pine Branch (detail), hand etched on reclaimed tempered glass with 4" grinder, 2011. Photo by Darcy Silas.



Shop Dog

Process at your fingertips

A web based interface platform for remote monitoring and control of Modbus enabled controllers. Connect, review and control from virtually anywhere.

shopdogapp.com

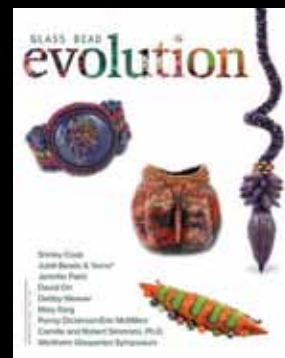
For details contact
 WDG - 910-428-4111 or
tech@wetdogglass.com

ISGB

International Society of Glass Beadmakers

The ISGB is the leading organization for the promotion, education, and appreciation of the art of glass beadmaking for wearable, sculptural and functional art.

Glass Bead Evolution is a quarterly digital magazine, included in ISGB membership.



Back issues are available for purchase at www.isgb.org

Join today to begin your subscription and take advantage of other member benefits like vendor discounts.

www.isgb.org | 614.222.2243

© Copyright 2017 by Glass Art.
 All rights reserved.

Celebrations Commemorating 20 Years of Service to Contemporary Glass Art

by Pam Reekie

Beginning at 4 p.m. on Friday, August 25, 2017, the Contemporary Glass Society (CGS) will welcome visitors to its open exhibition that is set to help kick off the August 25–28 International Festival of Glass in Stourbridge, U.K. *Celebrations*, which will continue through September 9, 2017, is part of the yearlong celebration of the milestone 20th anniversary year for CGS.

Supporting Glassmakers Everywhere

Over the past 20 years, CGS founders Peter Layton and Colin Reid along with many other glass artists and enthusiasts have worked together to establish an organization that would prove to be supportive to glassmakers in the U.K. and eventually throughout Europe and the rest of the world. CGS now has over 900 members and continues to grow significantly each year. This international, charitable organization continues to be very passionate about glass and the artists working in this amazing medium.

The exhibition will be held at the Ruskin Glass Centre in Stourbridge. It will include the work of 138 of CGS members, all of whom are making a piece of glass that celebrates any event of special importance, however large or small.

Exhibition Awards

Contemporary glass art collector, Mark Holford, is the main sponsor of *Celebrations* and will be presenting a £300 award to the winner of the People's Prize and a £100 award to each of two runners-up. Joining Holford will be collector Alan J Poole, who will present a £300 award for Best in Show.

All of the work created by CGS members for *Celebrations* is for sale and could make the perfect present that attendees will be looking for to mark their own special occasions. Some of the work that will be exhibited at Ruskin Glass Centre can be seen on the CGS website.

GA

Visit www.cgs.org.uk to learn more about the Contemporary Glass Society and how to become a member.

*Tamsin Abbott, No Title.
Photo by the artist.*





Featuring interviews and discussions with world-renowned glass artists and respected experts in hot, warm, and cold glass

Glass Art Magazine's Podcast

Join David Fode and Sarah Hall for podcasts featuring their distinctive techniques. Fode's autonomous panels painted in the Munich style provide a canvas for his highly detailed, elaborate contemporary renderings. Hall has refined a unique, high-tech approach to architectural glass that gifts the world with beauty and power through the use of photovoltaic cells.



David Fode, Metal Pals.



Sarah Hall, Lux Gloria Daytime.
Photo Courtesy of Sarah Hall Studio.

Visit the "Talking Out Your Glass" link on the *Glass Art* website to begin your free Stitcher or iTunes subscription to these and many other great podcasts.

www.glassartmagazine.com

Introducing the new TAP Controller

featuring touchscreen technology

TOUCHSCREEN
WI-FI ENABLED APP*
GRAPHICAL
FIRING VIEW
PRE-LOADED
FIRING SCHEDULES
SOFTWARE UPDATES

evenheat
Better by Design.™

www.evenheat-kiln.com



*Wi-Fi
expected December 2015



Ana-Maria Nava

KNOWLEDGE
IS
POWER

CREATIVITY
IS
FREEDOM



His Glassworks, Inc.

2000 Riverside Drive, Suite 19
Asheville, NC 28804 USA
p 828 254 2559
tf 800 914 7463
www.hisglassworks.com

Our Events Calendar has gotten too big for the magazine we had to move it to the Web.

Go to:

www.GlassArtMagazine.com

www.GlassPatterns.com

www.TheFlowMagazine.com

for all the newest workshops and events in glass around the world.



Forty Years of Marketing Madness

by John C. Emery, Sr.

One key to durability in the business world is marketing—being able to place your product in the right places where it counts. Often this means just plain perseverance, but at times something might just come your way and you really need to take advantage of it. It is important over time to make connections—meaningful relationships that can lead to further business. It is all about “building brand” and establishing a name within your community with a profile that stands for something.

Significant Connections

If your goal is to create works for residential installations, one major place to join in is the nearest chapter of your local Home Builders and Contractors Association (HBCA). There you can directly meet builders, architects, and designers who have influence and can suggest your work to potential patrons.

Preston Studios first joined the HBCA on the Space Coast in 1989 with a grand entrance created for the model home for Charles Boyd Construction. It was seen in two consecutive Parade of Homes by hundreds of potential home buyers, which resulted in commissions, some even years later. Since that time Preston Studios has not only created many entrances for Charles Boyd, but also later for his nephew Christopher Burton, who has used the works of Preston Studios in numerous model homes over the years as recently as 2012. This long-term involvement in the local HBCA eventually led to creating the entrance for the 2011 International Builders Show model home in Orlando, Florida, where over 24,000 design and construction professionals toured the massive residence over a four-day period. That again led to further commissions. Participation in home shows is just one avenue for building a brand.

If you also want to establish yourself as an artist instead of simply a craftsperson, it is important to build a reputation within the field of art as well. That means joining your local art league or supporting your local art museum. Even joining support for your local symphony can lead to desirable connections. In 1984, for example, Preston Studios was commissioned by Aquarina Developments to create a work for the Brevard Symphony Orchestra’s annual poster and show programs. It now resides in Symphony House in a light box directly across the street from the art museum. Two years before the studio had been commissioned by Aquarina to create five 3 foot by 4 foot nature studies that made up the studio’s first museum exhibit in what was then the Brevard Art Museum, now known as the Foosaner Art Museum. These two connections remained part of the studio’s arsenal from that time on.



Preston Studios, 2012 entrance created for Christopher Burton’s model home in Charolais, Viera, used for the Parade of Homes. The entryway represents the new “transitional design” using Preston’s “faux wrought iron” approach. Painted and fired by Stanley Klopfenstein, featuring the ultrathick 888 Action Bevel sets. Photo by Bill Kilborn.

Finding Serendipity in Chance Meetings

In 2016, our association with the museum proved invaluable for Preston Studios during a chance meeting I had with a local Space Coast society figure, Darcia Francey, after picking up our studio’s 40th Anniversary exhibit in Tallahassee. Later I was also able to meet with Carla Funk, the Director of the Foosaner Art Museum, and Fran DeLisle, the Director of the Brevard Symphony Orchestra. I had mentioned to Francey in passing my desire to do something local at one of the nearby galleries in Melbourne. She said, “We’ll do a nice weekend fundraising event in the educational wing at the museum!”

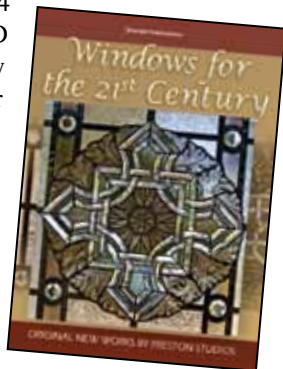
A meeting was scheduled that began with Francey explaining to Funk and DeLisle her idea of what we all could do to help raise funds for the two nonprofits. Funk explained that it wouldn’t work for the museum, because she had already booked an artist to exhibit in the educational wing a while ago during the time slot that Francey had suggested. There was a long pregnant pause. Then Funk added, “However, if you could leave the exhibit up for a month, you can have the main gallery in the museum.”

Francey lit up like a Christmas tree, and I replied that I thought that would be quite workable. Two days later, Funk e-mailed me that if it were okay with the artists, Preston Studios could have the gallery through December 21. Here was an opportunity that fell to our studio simply by being in the right place at the right time and having the right long-term established relationships.

Working Together

At the time of the meeting with Francey, Funk, and DeLisle, Preston Studios had supported the museum for over 30 years and benefited the symphony as a member of the Brevard Symphony Orchestra South Guild. That meant a lot to the directors of these two important local arts-related nonprofits. Everyone involved felt that the community would enjoy seeing the 40-year history of Preston Studios presented in an elegant manner in an appropriate setting.

The support we had given to the museum and the symphony led to two other happenstances resulting in even more “brand awareness.” The first was the launch of the fourth Wardell Publications book about the works of Preston Studios, *Windows for the 21st Century*, an e-book that includes 14 videos. The second is the virtual 3-D Web presence of the 40th Anniversary Exhibit that was held in the Foosner Art Museum. Both the museum’s book launch and the online museum exhibit would never have happened without the long-term relationships developed with these two entities that are so important to developing “brand” and surviving in a very difficult market.



QR code for the video of the Burton project.



QR code for the video of the Wardell Publications e-book launch.



QR code link to the matterport virtual 3-D of the 2016 Foosner Art Museum exhibition, best viewed on a touchscreen device or 3-D glasses.

For more than 40 years, Jerry Preston and John C. Emery, Sr have operated Preston Studios, creating one-of-a-kind collectible stained glass art. Their work continues the uniquely American tradition of placing art glass in the home as a lifestyle element as they fashion many beautiful commissions, including designs for bathrooms and privacy screens, entryways, lamp shades, accent panels for cabinet doors, and pieces with religious themes.

Preston and Emery have written two e-books produced by Wardell Publications. *Lamps for the 21st Century*, an e-book in interactive PDF form, features 14 embedded videos showing Preston and Emery at work creating their lamps. Their most recent e-book *Windows for the 21st Century* includes the studio’s 2016 exhibit at the Foosner Art Museum and can be purchased at www.wardellpublications.com. Visit www.prestonstudios.com to learn more about the artists and their work.

GLASS ART SOCIETY

The Chrysler Museum of Art

JOIN US in NORFOLK, VA

For the Glass Art Society conference, June 1-3, 2017
Reflections from the Edge: Glass, Art, and Performance

The Chrysler Museum of Art and its Perry Glass Studio will host the 46th annual GAS conference. Attendees will experience glass demonstrations, lectures, and special events such as a local Gallery Hop, International Student Exhibition, Live and Silent Auction, and groundbreaking theatrical glass performances. **Conference registration opens December 1, 2016.**

VISIT GLASSART.ORG TODAY TO LEARN MORE ABOUT GAS MEMBERSHIP.



GAS™

6512 - 23rd Ave NW, Suite 329, Seattle, WA 98117
206.382.1305 www.glassart.org info@glassart.org

The Flow Marbles and Paperweights Issue

Join *The Flow* for a look at the fascinating world of the glass orb. The 2017 Summer Marbles and Paperweights issue presents fresh, innovative articles and tutorials to help you gain confidence when creating “in the round” plus a gallery featuring the imaginative work of 35 exceptionalameworking artists.



With each issue of *The Flow*, you’ll find inspiration and information on ways to take your glass to a higher level. Visit the

“Subscriptions” link under “Store” on the magazine’s website to keep up with the latest techniques and begin a great new adventure with *The Flow*.



(Top to bottom) Marbles by Alex Craig, Richard Hollingshead II, and Susan Haskell. Hollingshead photo by Mason Linder.

www.theflowmagazine.com



*Paul Messink,
Pines at Sunset,
13-1/2" x 12".
Photo by the artist.*

GETTING INTO GALLERIES

by Paul Messink

Habatat Galleries Michigan Exhibit Photos by Michael Janis

Approaching a gallery can be intimidating, particularly if you are afraid of being told “No.” But it is extremely rewarding to hear “Yes!,” reach a new audience, and make some new sales. If you feel you are ready to look for (or increase your current) gallery representation, you’ll enhance your odds of success by learning a few tips and tricks that help you get to that yes. I’d like to cover four areas where artists can improve their ability to get into galleries:

- Have a sellable product.
- Select the galleries that best fit your work.
- Learn the best ways to approach a gallery.
- Be memorable.

Having a Sellable Product

Galleries have the same goal you do. *They want to sell artwork!* So before you begin approaching galleries, take an objective look at your work and make sure your work is gallery ready. Let’s define what that means.

First, your work should be consistent. Galleries look for a recognizable body of work. They want to continue selling your art, and a consistent body of work gives them confidence that after they sell your first pieces, you’ll be able to replenish their inventory with similar work. Your work should also be priced right for the size and quality of the work you produce. A little “wow factor” in your art also helps to draw interested buyers.

It’s a good idea to ask for input from other artists, collectors, or

gallery owners to see if your work is strong or weak in these areas. Make what you create attractive to galleries by eliminating any quality issues or pricing inconsistencies.

Since gallery owners will most likely be looking at images of your designs, make sure you have great photography of your best pieces ready. If your images are not outstanding, or if they are not well lit, this will unfortunately have a direct influence on their decision. You may want to consider hiring a professional photographer—ideally one who has experience with art glass—to make your work look its best.

Selecting the Galleries That Best Fit Your Work

Galleries look for new artists who fit into their segment of the art market. Good galleries are always looking for new artists, because they want to bring their collectors back again and again and present them with new buying opportunities, rather than the “same old work.” They will, however, be particular about the new work. Galleries will usually want to select work that is similar in medium and style to what their collectors expect, and they generally have a target price range they work with. You’ll increase your chance of getting noticed if you pay attention to the work they already have. Conversely, they will be reluctant to take new work that is significantly less expensive or more expensive, or if it just doesn’t fit what they think their collectors will buy.

Start by doing your homework. I do a lot of research in advance. If I feel my work seems to fit an existing gallery, I will add that gallery to my “target list” of those that I want to approach. It’s a good idea to keep your own short list of galleries that you want to be in and which you feel are a good match for you. Then only approach galleries on this list. Why? If *you* don’t think your work fits into a gallery, you are almost sure to get a “no” from that gallery owner. So what should you look for?

- **Your work should be in a similar style and medium to work the gallery already carries.** Why bring contemporary glass into a gallery that shows mostly cowboy and Western bronze figurines, or one that sells paintings but no sculpture?
- **Your work should fit into the gallery’s typical price range.** My goal is to be right in the middle of their price range, then offer the gallery pieces in a variety of sizes and prices. I don’t want to be lower than most of their work, and I don’t want to be the most expensive work they carry.
- **Exclude a gallery if they already carry work that is very close in style, size, and price to yours.** While a gallery will look for new work, they won’t want to duplicate work they already have. You should be able to bring something new to what they already offer.

Each artist has to find his or her own “fit.” While some artists like being the only glass artist in a gallery, I’ve found that I do best in a gallery if their existing work is at least 30 percent glass. Experience shows me that unless the gallery already knows and represents glass well, my work will languish, with few if any sales.

When starting your research, begin with the Internet. I go online to find galleries in a specific area or to look for a specific type of gallery (for example, all-glass galleries). Another good source of an initial list of galleries is art shows. Your area likely has periodic shows at a large hotel or a convention center. Attend the art show if you can just to check out potential galleries. If you can’t attend in person, check the art show website. They likely have a list of participating galleries, with links to their home pages.

Armed with a potentially long list of galleries, you then want to whittle it down to just the best matches. Again, start with online research using their websites, Facebook pages, or Instagram accounts. If they have good images of their current work, you’ll learn their style, medium, and maybe even price range. If the gallery’s website doesn’t give you clues to their price range, either visit the gallery or ask another artist who already shows there. Most artists are more than happy to share their experience of a specific gallery with you. (Fortunately, most galleries list their represented artists on their websites.) Artists may also be willing to share how well they enjoy working with a gallery, whether they pay on time, and other pertinent comments.

If the gallery still looks like a good fit, I advise getting to know them a bit first before formally approaching them. Visit the gallery, if you can, or visit their booth at a trade show. While there, compliment them on the gallery or booth, or the work itself. (If you don’t like the work, this might be a red flag that tells you to move on.) Strike up a conversation with any staff members who approach you. They might be the gallery owner or an assistant.

Remember that you are trying to make a good impression, even before you ask for representation. Be pleasant and positive, and *never* take up their time during a busy period. Avoid weekends, and if they seem to be engaged with other customers, you might want to leave and come back later. Remember, they are trying to sell artwork to art buyers. If you prevent them from doing that, you’ll make a poor impression.

In this first meeting, your goal should simply be an artist introduction. You want to get on their radar and leave a positive impression. You are also checking out the gallery, the work they already carry, and most importantly, the price range. Feel free to let them know you are an artist and you are there to learn more about the gallery. Leave them a business card. But my recommendation is that unless they bring up the topic, don’t ask for representation in your first meeting.



You *definitely* want to ask them if they have any specific process for selecting artists or if they have a specific time of year when they consider new artists. (Sometimes this information is posted on their website.) *Find out how they work, and work within their system.* It's important to realize that galleries receive multiple artist inquiries a week, and some get several a day. They are easily irritated by unannounced business meetings and by in-person requests for representation. On the other hand, they will appreciate your interest in finding out how to best engage them later on.



Approaching a Gallery

It's a good idea to view asking for representation as a process, not an event. It could take a few weeks or months, or even in some cases, a year or two. Don't expect an immediate answer or be discouraged if it takes some time. Like any relationship, good ones take some time to develop.

As mentioned above, follow the gallery's process exactly. It's easy for them to put you into the "reject pile" if you don't respect their way of doing business at the outset.



When you are ready to ask them to represent you and your work, always make an appointment if you plan to go to the gallery. If you plan to ask over the phone, call ahead and make a phone appointment. In most cases, don't walk in with samples under your arm or a big physical portfolio. If they want these they'll ask, but more often they'll want to review images on their own schedule.

Whether you meet with the gallery owner in person or talk on the phone, be professional. Tell them specifically that you are interested in having them review your work, with the hope that they will represent you in the future. Know what makes you or your work different or unique and be able to tell them why you think your work would be a good fit in their gallery.

Don't expect an answer on the spot or pressure them into a decision. Ask them when you can follow up. A friendly follow up phone call is usually better than an e-mail. If they aren't ready to make a decision, follow up again a few weeks later.

If the decision doesn't go your way or if it just doesn't seem like a good fit, be gracious and thank them for their time. If you are still interested, keep in touch with them periodically via e-mail or with another gallery visit. It's also a good idea to attend any openings they have scheduled. Show that you are interested. You might find their situation has changed in six months, and they may be more receptive at that point.



Being Memorable

Most of all, your work should stand out. Given that galleries receive many artist requests each week, your work should grab their attention, and they should have a good reason to remember you as an artist. Make a good impression, and don't be a nuisance.

I think it's a great idea to be a bit different—in a *good* way. One way to do this is to leave something behind (either at your gallery visit or in a follow-up thank you letter) that they will remember you by.

My favorite tactic is to mail or leave behind an envelope with some information—my business card with my contact info and a few 5-by-7 photos of my best work printed on glossy photo paper, along with a cover letter and a printed bio or CV. Printed glossy photos are so rare these days that they stand out, and they perhaps won't get lost in a gallery owner's inbox. I also clip a \$10 Starbucks gift card to this and thank them again for their time. Even if they aren't ready to include me in their gallery today, they will likely remember me in six months over the dozens or hundreds of other inquiries that they might receive. So find a way to be memorable!

Finally, be patient. It takes some practice. Don't be discouraged. You may receive more rejections than acceptances, but try to learn something from each rejection so you get better at it in the future. The more you approach galleries where there's a good fit, the more success you'll have over time. Good luck!

GA

The gallery photos included in the article were taken at the Habatat Galleries Michigan exhibit, NEXT: Habatat Galleries 45th Annual International Glass Invitational, which began on April 29 and will continue through July 28, 2017.

Paul Messink is a kiln formed artist and instructor who draws on prior drawing and painting experience to create hand painted, multilayered glass panels that present nature in deep dimension. While mostly self-taught, he has been fortunate to learn from artists such as Susan Taylor Glasgow, Richard La Londe, Mark Salisbury, Annette Baron, and Don Schneider and now teaches his own technique.

Messink has received many awards for his work including "Best in Glass" in the 2012 and 2014 Royal Oak Clay, Glass and Metal Show (Royal Oak, Michigan) and "Multi-Media Artist of the Year" in the Art Comes Alive 2013 competition (Cincinnati, Ohio). In 2014 he also received a category award in The Glass Prize 2014, sponsored by Warm Glass UK, and "Best in Show" at GATHERING: Contemporary Glass from the Heartland, sponsored by the Indiana Glass Art Alliance. In 2015 he received the "People's Choice Award in Glass" at the third Brea Clay and Glass Exhibit, in Brea California.



Paul Messink, Smoky Moonlight, 10" x 17". Photo by artist.

© Copyright 2017 by Glass Art.
All rights reserved.

"technical support is exceptional"

"...at the top for quality"

"we couldn't be more pleased"

"we love our Euclid kilns"



EUCLID KILNS

800-296-5456

euclidkilns.com

Getting Control of Your Slump

by Bob Leatherbarrow

One of the most common concerns of kiln forming glass artists is what makes a good slumping schedule. Unfortunately, in my opinion there is not a “one schedule fits all” program. The rate that glass slumps into a mold depends on many factors such as temperature, time, span, thickness, and viscosity, the impact of which will be discussed below for each element. With an understanding of the impact of these parameters on the rate of slumping, it is possible to develop a strategy for programming the kiln. This strategy, combined with making visual observations, will improve the quality of your slumped pieces.

Temperature

The hotter the glass, the more pliable it is and the faster it slumps. The main downside of slumping at high temperatures is that the slump happens quickly, and you lose control of the shape of the piece. The stretching of the glass, particularly in deep and drop out molds, is confined to a relatively narrow part of the bowl. Marks from the mold surface can also be embossed onto the hot glass. The lesson here is that slumping at lower temperatures takes more time but results in even stretching across the glass and relatively few mold marks.

Time

The longer the glass is held at any temperature within the slumping zone, the more it slumps, so with patience you can slump at lower temperatures. You can decide when the glass has properly filled the mold.

With a lower slumping temperature you can also recenter the glass on the mold at the very onset of slumping if the glass has started slipping off of the mold. The lesson here is that slow slumping rates allow more control over the shape of the piece.

Span

Span is the width of unsupported glass across the mold. The wider the mold, the lower the temperature at which the glass slumps. The range of slumping temperatures varies significantly with span. For example, with a collection of ball molds, all of which are about 3 inches deep, glass on slumping molds with spans of about 21 inches, 16 inches, 11 inches, and 6 inches slumped in my kiln at approximately 1100°F, 1120°F, 1150°F, and 1170°F, respectively. Your kiln might be different.

Figure 1 shows strips of various lengths of glass—12 inches, 14 inches, 15 inches, 17 inches, and 20 inches from top to bottom—that were slumped simultaneously to the same temperature on different spans. The wider the span the greater the degree of slumping. The lesson here is that to slump glass on molds with a narrow span, you have to fire to higher temperatures.



(Figure 1) Strips of varying lengths of white glass were slumped simultaneously. The strips with the greatest span slumped the most.

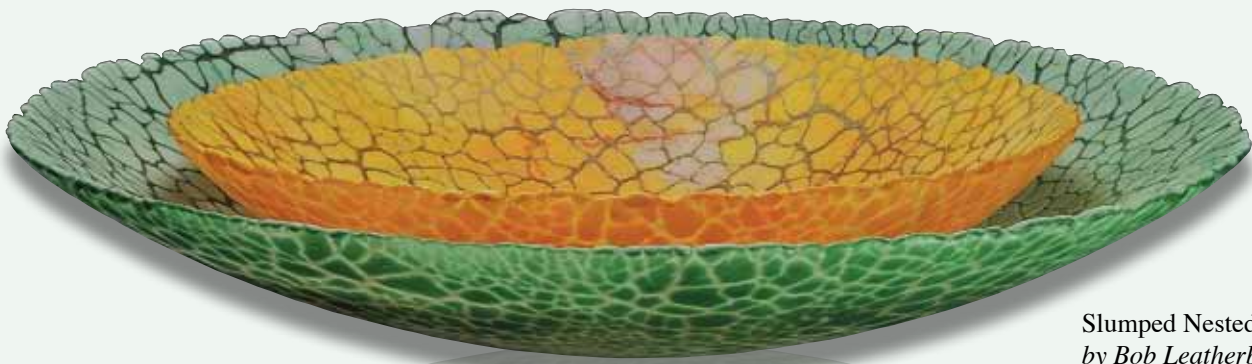
Thickness

The greater the glass thickness, the slower the rate of slumping for a given span. Figure 2 shows 8-inch-long glass strips with thicknesses of 1/16 inch, 1/8 inch, 1/4 inch, and 3/8 inch. These four strips were slumped simultaneously. The thinner glass has moved much more than the thicker glass.

Since glass is a poor conductor of heat, the thicker the glass, the longer it takes for heat to conduct into the interior of the strip. Therefore, the interior temperature of thicker glass is lower than thinner glass and will not slump as much as the thinner glass. The lesson here is the thicker the glass, the higher the slumping temperature.



(Figure 2) For glass strips of equal span, the thicker the glass, the less the degree of slumping when fired simultaneously to the same temperature.



Slumped Nested Bowls
by Bob Leatherbarrow.

Viscosity

Viscosity is a measure of the resistance to gradually deform, or slump. Glass with a higher viscosity, such as white, slumps at higher temperatures than glass with a lower viscosity, such as black. Figure 3 shows a collection of various colored Bullseye opal glass rods that were slumped simultaneously to the same temperature. The uppermost white rod is the highest viscosity, or stiffest glass, and has slumped the least. The red glass has slumped marginally more. The yellows are less viscous and have slumped more than the red. Black is the least viscous, or softest, glass and has slumped substantially more than the other rods.

If you were to slump two bowls of equal size and thickness into two similar molds but one bowl was white and the other was black, they would slump at significantly different rates. When the black bowl initially fills the mold, the white bowl would only be partially slumped. If, however, the slump progressed so that the white bowl completely filled the mold, the black bowl would be “overslumped” and may have picked up marks from the glass touching the mold.

The variation in viscosity within a piece is important when slumping into deep molds. If one side of the design is black and the other side is white, the glass will bend initially on the black side of the piece. The result is that the black glass will slip down into the mold first, and the piece will come out off center.

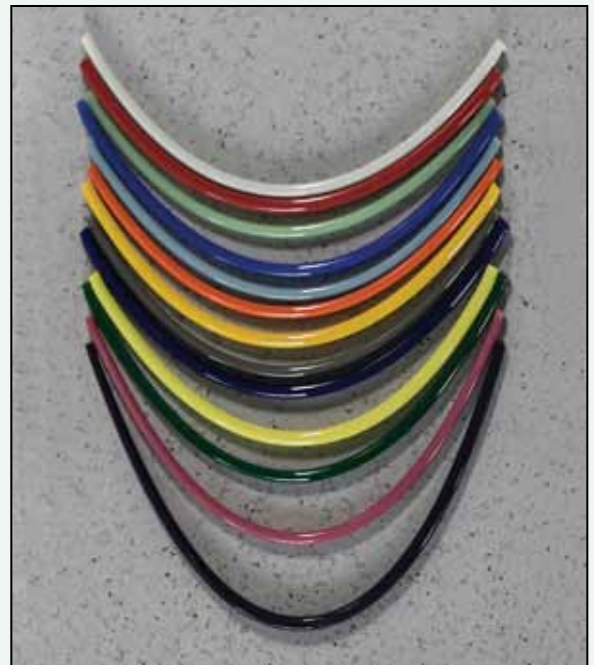
Figure 4 shows a strip of glass 9 inches long that has black along one third of the upper edge. The initial deformation of the softer black glass resulted in a lopsided shape to the strip. When planning deep slumps, remember to consider the viscosity distribution within the glass. The lesson here is to consider the impact of viscosity and viscosity distribution on the degree of slumping when designing projects.

The “Low and Slow” Slumping Strategy

By now you may feel that designing a slumping program might be impossible. Fear not, because there is a method that works. Many experienced glass artists use an approach called “low and slow,” which means to slump at a low temperature for a relatively long time. The concept is to heat the glass to the point that it starts to bend, then allow it to slowly slump into the mold. The time from when the glass starts to bend to the completion of the slump in typical molds is usually about 45 minutes.

The temperature at which glass starts to bend is going to be mostly a function of span. If the thickness of the glass is greater or thinner than 1/4 inch, raise or lower your estimate for the onset of slumping by about 20 degrees. If the piece is predominantly soft glass, slumping will occur relatively quickly after the onset. If the piece is predominantly hard glass, the slump will be slower.

Once the piece has started to slump, I make observations every 10 minutes to ensure that the piece is filling the mold properly. That means I attend every slump firing. If you make observations of the temperature at which the glass starts to bend and keep notes of the span, thickness, and glass color, you will develop a guide for the temperature corresponding with the onset of slumping.

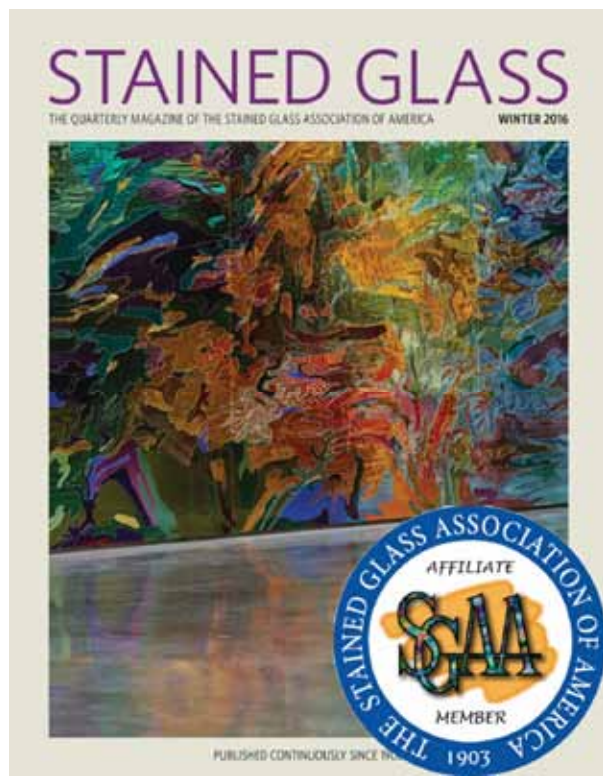


(Figure 3) Glass rods of equal length have been slumped simultaneously to the same temperature. The stiff, viscous colors have slumped less than the soft, less viscous colors.



(Figure 4) The variation in viscosity from soft black glass to stiff white glass results in a lopsided slump.

The SGAA Welcomes You!



BECOME AN AFFILIATE MEMBER & Receive an Annual Subscription to The STAINED GLASS Quarterly

The **Stained Glass Association of America** welcomes everyone to become an Affiliate Member of the only professional trade association for glass artists.

With your Affiliate Membership you receive:

SGAA Welcome Packet including:

- Current issue of **The Stained Glass Quarterly**
- Current Sourcebook
- The Story of Stained Glass
- SGAA Recommendations for Safety in the Stained Glass Studio
- PLUS MUCH, MUCH MORE!

Visit www.stainedglass.org to discover all the exciting programs the SGAA has to offer. Join on-line or call

800-438-9581

We will be glad to answer all your questions.!

My “Typical” Slumping Schedule

The temperatures outlined below are based on the assumption that the project is made from a soda lime glass that is made for kiln formed applications. For most projects I heat at 300°F per hour, from room temperature to the onset of slumping, as decided from the discussion, and plan to hold at that temperature for one hour. During that hour I make observations every 10 minutes.

When the slump is complete, I use the “Skip Segment” option on the controller to terminate the current segment of the program and advance the program to the next segment, which is the beginning of annealing. There are two options if the slump isn’t complete at the end of the hour or if the slump is progressing too slowly.

First, if the slump is almost complete, use the “add time” option on the controller to add 5 or 10 extra minutes. Second, I anticipate the possibility of the slump progressing too slowly by adding an extra hotter segment when I initially program the controller. If I anticipate that the slump will occur at, say, 1150°F, I will include a following segment that heats at 600°F per hour to about 1175°F with a 30-minute hold. If the slump is progressing too slowly at 1150°F, I use the “skip segment” option to advance to the hotter segment. On the other hand, if the slump is completed within the 1150°F segment I use the “skip segment” option on the controller to advance to the 1175°F segment, wait a few moments until the controller has completed the operation, and use the “skip segment” option to advance once more to the annealing segment. The annealing segments are programmed according to those recommended by the glass manufacturer for that thickness of project.

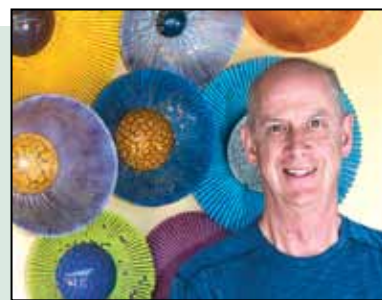
Final Thoughts

By using the five factors listed above to anticipate how the glass will slump in the kiln and by taking a “low and slow” approach to slumping, you will have more control of the shape of the project and have fewer uneven rims because of accidental slippages within the mold. There will also be fewer or no marks on the underside of the bowl resulting from the hot glass touching the mold. With experience you will have more control over and success with your kiln formed glass art.

GA

Bob Leatherbarrow established Leatherbarrow Glass Studio in Calgary, Alberta, Canada, in 1988 and has created original kiln formed glass ever since. Known for his innovative styles, techniques, and designs, he has taken an experimental approach to developing unique textures and color palettes using glass powders. His glass bowls and sculptures explore the subtle hues and delicate beauty of naturally occurring textures and encourage the viewer to ponder their origin.

In 2008 Leatherbarrow moved his studio to Salt Spring Island, British Columbia, where he continues to make glass and write e-books on his signature techniques. He has also been a popular instructor on both the national and international kiln formed glass scenes. Visit www.leatherbarrowglass.com to learn more about his work.



© Copyright 2017 by Glass Art. All rights reserved.

Your
Subscription
Any Way
You Want it



- Print
 - Digital PDF
 - PDF on CD

www.GlassPatterns.com
502.222.5631

Slide Your Glass Firing Up a Notch.



314 Slider – 240 or 208 volt
25" x 25" wide x 13.5" deep –
fully extended floor is 62"
front-to-back



OLYMPIC KILNS

Contact us for an Olympic Kilns Slider Distributor
800.241.4400 • 770.967.4009
Fax: 770.967.1196 • info@greatkilns.com

The Slider, Olympic Kilns' newest addition to its glass firing portfolio, is a square, clamshell-designed model equipped with a sliding floor for ease in loading and glass manipulation. The sleek wood handle keeps things cool so you can concentrate on things hot.

Sliders are completely assembled when shipped and are attached to an 8" or 18" tall heavy angle iron stand, ready to fire when received. Available in multiple sizes, Sliders are equipped with a 12-key digital RTC-1000 controller, or upgrade to the new GENESIS controller with touch-screen technology.



146 Slider – 120 volt
14.5" x 14.5" wide x 6" deep
– 35.5" in length front-to-back
when floor is fully extended

Learn Fused Glass Online! Visit Our **NEW** Education Center



aaeglass.com



The 2017 Glass Craft & Bead Expo

Gallery of Excellence

The 23rd Annual Glass Craft & Bead Expo, recently held at the South Point Hotel, Casino & Spa in Las Vegas, Nevada, concluded on April 2, 2017. Attendees from around the world participated in 255 classes offered by renowned artist instructors who are experts in their respective fields. The show floor provides an additional highlight to the event with everything from the latest types and colors of glass to the most innovative kilns, plus many tools and specialty items.

The Gallery of Excellence juried art competition was once again sponsored by *Glass Art* and sister publications, *Glass Patterns Quarterly* and *The Flow*. First, second, and third place winners were selected by a juried panel, and there was also an opportunity for attendees to cast a vote for the People's Choice Award. As always, professional and amateur level entries as well as those from local high school students demonstrated beautiful and skillfully made works of glass art. All of the winning entries can be viewed by visiting the "Gallery of Excellence" link at www.glasscraftexpo.com.



Michael Apfel
Children of Light



Filip Vogelpohl
Tehokwe Tribal Knife

Professional Category

Fused/Cast/Kiln Worked

First Place

Michael Apfel

Children of Light

Second Place & People's Choice

Nadine Booth

Journey

Third Place

Merilou Jenkins

73 Pieces

Blown & Flameworked

First Place

Filip Vogelpohl

Tehokwe Tribal Knife

Second Place

Beau Barrett

Alchemical Vessel

Third Place

Lisa St. Martin

Les Fleurs

People's Choice

Kylee Koenig

Tranquility in Motion

Stained Glass

First Place & People's Choice

Joseph 2Bears

My Angel

Second Place

Josh Krogman

Muerte

Cold Working

First Place

Ann Steenkiste

Geodesic Sphere Trio

Second Place

Kent Lauer

Glass Backwards Study #1

Third Place and People's Choice

Joe Manusia

Jelly

Beads & Jewelry

First Place & People's Choice

Gregory Burgard

SPLASH

Second Place

Paula Radke

Frozen Charlottes

Third Place

Terry Henry

Wookland Fairy Neckpiece



Joseph 2Bears *My Angel*



Ann Steenkiste
Geodesic Sphere Trio



Gregory Burgard
SPLASH

Amateur Category

Fused/Cast/Kiln Worked

First Place
Kristine Kelly
Sentinal Bridge Yosemite National Park

Second Place
Marty Miller
Splendor in the Rockies

Third Place
Denise Nelson
Backstreet Pass

People's Choice
Elizabeth Abel
Winter in Colorado

Blown & Flameworked

First Place
Domenico Cima
Wig Wag Disk Pendant

Second Place
Josh Wiedemeier
Misage

Third Place & People's Choice
Greg LeFrancis
The Stingray

Stained Glass

First Place & People's Choice
Gary Gill
Jewels of the Sea

Second Place
Webe Webowitz
1955 Plymouth Belvedere

Third Place
Sherry Bustin-Harned
Lighthouse

Cold Working

First Place & People's Choice
Lori Hudson
Valleys

Second Place
Anne Horst
Illuminated Soul

Third Place
Hope Morris
Paws

Beads & Jewelry

First Place & People's Choice
Lezlie Foster
Honey Bee Mine

Mosaics

First Place & People's Choice
Colleen Ehle Patell
What Was I Thinking?



Lori Hudson
Valleys



Gary Gill
Jewels of the Sea



Colleen Ehle Patell
What Was I Thinking?



Domenico Cima
Wig Wag Disk Pendant



Lezlie Foster *Honey Bee Mine*



Kristine Kelly
Sentinal Bridge Yosemite National Park

High School

Fused/Cast/Kiln Worked

First Place

Shelby Lanagan

The Archer

Second Place & People's Choice

Lily Pyle

Green Goddess

Third Place

Brooke Baxley

Moonlight Waves

Cast Jewelry

First Place

Lily Pyle

Bermuda Triangle

Second Place

Alexis Tackett

Passion

Third Place & People's Choice

Lily Pyle

Cat's Meow

Fused Jewelry

First Place

Annie Tackett

Temptation

Second Place

Glenda Hamm

Ice Palace

Third Place

Savanna Carey

Treasure Trove

People's Choice

Nicole Linscheid

Northern Lights

Copper Enameling

First Place & People's Choice

Morgan Spencer

Rhythm of the Night

Second Place

Lily Pyle

Blue Frosting

Third Place

Abbi Esinhart

Sky Garden

Hot Mosaics

First Place

Stormi Norton

Bellissimo Pavone

Second Place & People's Choice

Alexis Tackett

Rainy Day in New York

Third Place

Lily Pyle

Arctic Nights

Mosaics

First Place & People's Choice

Shelby Lanagan

Disconcerted

Second Place

Alyssa Knisley

Donuts

Third Place

Justine Rydosz

Beauregard

Shelby Lanagan
The Archer



Morgan Spencer
Rhythm of the Night



Shelby Lanagan
Disconcerted

GA



Lily Pyle
Bermuda Triangle



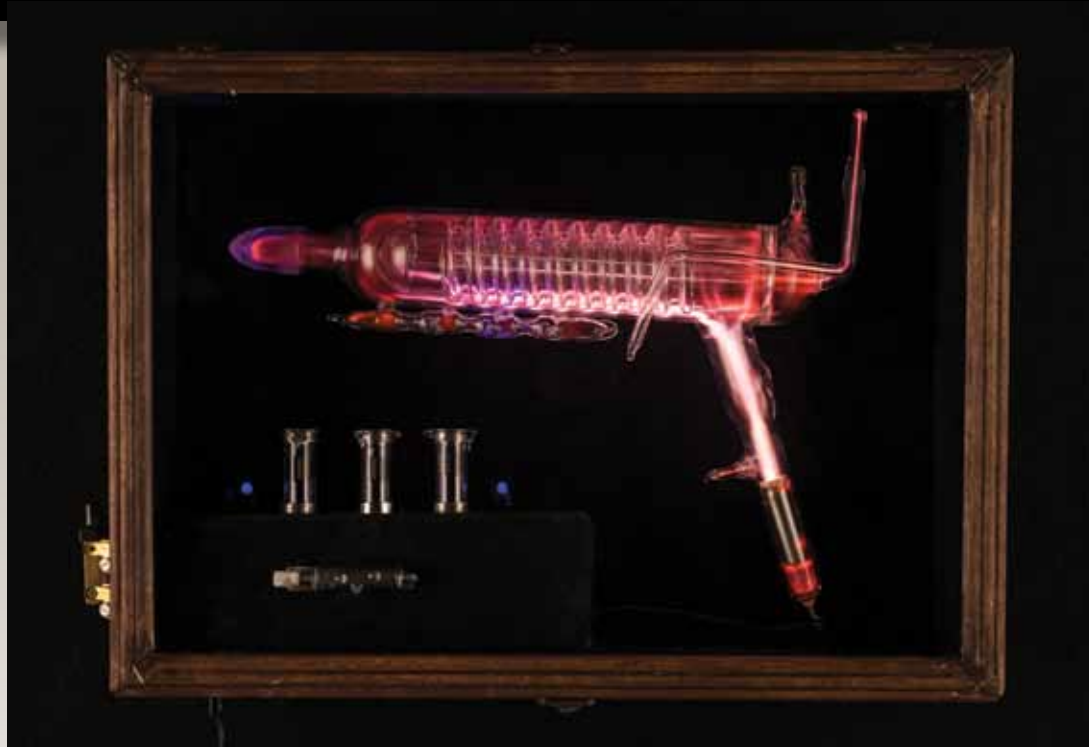
Annie Tackett
Temptation



Stormi Norton
Bellissimo Pavone

© Copyright 2017 by Glass Art. All rights reserved.

Audrey Wilson's Multimedia Glass



Audrey Wilson, Poison Atomizer Mist Gun, plasma, blown glass, found glass, LEDs, wood, 14" x 5" x 9", 2016.

by Colleen Bryan

Photography by Pete Duvall

On topics ranging from scientific questions to political conspiracies, Audrey Wilson's multimedia artwork tunnels relentlessly through the intricacies of *how*. Materials, methods, and the finer points of technique are almost incidental as the Washington, D.C., artist constructs machine facsimiles and symbolic pieces. The viewer gets the impression that Wilson's aim is not so much to communicate but rather to intimately know the nature of the concepts she explores and to document the truths she encounters along the way. We stand outside her process peering in, captivated by the nuggets she uncovers, and, she hopes, inspired to do our own research, the better to peer further into the depths.

Wilson has no formal background in science and asserts she has never been very good at it. Still, she finds scientific inquiry fascinating. As her curiosity translates to art, she pulls in both old-school industrial elements and a vintage aesthetic. "Some of my objects are actual replicas of historical objects, but I make a lot of things that are my own inventions and look very old but aren't."

The focal elements of the artist's pieces are consistently made of glass, the central material used to advance each narrative. Most of Wilson's creations, however, make use of other materials including wood, metal, and found objects. "I don't really specialize in any one technique. I use casting, neon, blowing, and fusing in my work. I've become quite skilled at *pâte de verre*, and branching into neon led me to learn torchworking. Mine is a very practical approach. I like to use different techniques and learn as I go to the extent that I need to get my narrative across."

Technical Exploration

In her latest pieces, Wilson uses a lot of neon. She focuses not so much on the lighting properties of neon as on the science behind it—how bombarding a tube with electrical current can cause it to glow and how using different transformers and gases produce varied colors and sizes. "The way light flows once the gas has been ionized is pretty, but I am more interested in seeing how the gas moves through glass."

Wilson grows animated describing for the uninitiated the differences between neon and plasma as well as how those differences play into her choice of materials for her art. A standard application for neon would be a bar sign. Plasma is typical of the plasma balls sold at gift stores. "Color comes from the gas. Different gases emit different colors depending on how they are electrified. Both neon and plasma use the same types of gas, but a plasma piece is bombarded in a kiln and neon is bombarded using a transformer. With plasma, you have only one electrode compared to two for neon. Neon is also a bit brighter. "The light sucked me into this study. Learning the science behind it made me want to engage more."

Her amorphous development of technical skills is easier, given the region where Wilson lives. "I work as the studio manager for the Washington Glass School in D.C. Many glass artists work out of the shop, and the area has a strong warm and hot glass community. An estimated 200 artists work within a two- to three-mile radius of my town of Mt. Rainier, Maryland, so I have a high exposure to various forms of art."

Chasing Truth in the How of Things

Scientific Inquiry

Artistic inspiration comes from many directions. “I am a huge fan of Neil deGrasse Tyson. I find it intriguing to imagine where we are going as a species and to research what earlier discoveries underlie the now common understanding or the machine that is now in widespread use. I like to replicate those ideas in my work.”

Her *Intemperance Detox Mask*, covered with ice cubes, replicates a 1940s experiment by Max Factor on ways to cure a hangover. A miniature pays homage to the Large Hadron Collider, the massive particle collider machine and experimental facility built deep into the earth near Geneva, Switzerland. “In these cases, I’ve tried to simulate how I’d proceed if I were making the actual machine.”

Another experiment was related to the Geissler Tube, an 1850s-era gas discharge tube and precursor to modern neon that was used to demonstrate the principles of electrical glow discharge. “There is always a story that I love behind each object,” Wilson says. “Each work has taught me something historically or technically and caused me to wonder more about what is in the world around me.”

The artist observes that Western science is about to take a hard hit from the current U.S. Administration. “Should we stop researching, looking to outer space, focusing on the world, being curious? There are reports that generations of data are being rendered inaccessible or destroyed. Science budgets are being slashed and scientific expertise in agencies eliminated.” Wilson’s mission to use the power of art to narrate the essential nature of scientific inquiry is fueled by greater urgency in this climate.

Exploring Conspiracies

Beyond scientific exploration, Wilson is intrigued by conspiracy theories. How does a theory capture the public imagination, then balloon and morph beyond all evidence that might anchor it in reality? “Whether the subject is chem trails or water or the recent election, I love delving into theories and trying to find out what sparked them, what powers them, then ultimately figure out my own truth.”

One of the artistic expressions to evolve from Wilson’s interest in conspiracies is *Anonymous*, a mask referencing the Internet hacking group that seeks to shed light and exact vengeance via political and online intrigue. She made a pâte de verre copy of their signature Guy Fawkes’ mask sitting inside a wooden box. “We are unsure who the person is behind the mask—what is true or not.”



Audrey Wilson, *Bleach Wash*, pâte de verre glass, wood, found objects, 12" x 6" x 12", 2016.

An artwork called *Dihydrogen Monoxide Converter* relates to a hoax that relabeled water (commonly referenced by its chemical formula H_2O) as dihydrogen monoxide (DMHO), then proceeded to feed hysteria and suspicions of government conspiracy by describing the myriad dangers to human life that can result from . . . *water*. The hoax emerged around April Fool’s Day 1983 as a test of gullibility and resurfaced on the Internet in the 1990s as a morality tale on the perils of scientific ignorance.

Another image, *Atomizer Mist Gun*, follows rumors that the government worked in the 1970s to create a gun that could induce heart attacks. Wilson manipulated old scientific glassware and added plasma to convey the gun’s dart finding its way to the human heart.

Much conspiracy theory, Wilson concludes, is driven by fear. “The fear of not knowing what lies ahead is terrifying for people. Humans crave a comfortable predictability and certainty, and we are facing a lot of new frontiers. Creating these ideas and filling in the unknown blanks with our imagination gives us a sense of power and direction.”



(Top to Bottom) Audrey Wilson,
Somatic Cell Nuclear Transfer, *pâte
de verre* glass, wood, found objects,
12" x 6" x 12", 2015;
Electroconvulsive Therapy, cast
glass, LEDs, wood, found objects,
14" x 8" x 8", 2016.

Wilson is bewildered by how differently people react to fear, and she wonders how environment might influence responses. "I live in D.C., where something is always going on. We are always prepared for something apocalyptic to happen. The tension feeds my artwork and gives me a lot to say. That is the point of my making art."

Millennial Pivot

As a millennial, Wilson sees her generation in a pivotal spot. "That quote about remembering history or being doomed to repeat it rings especially true now. That is one reason that different historical stances, discoveries, and challenges are thematic in my work. The generation that follows mine isn't as interested in learning about history anymore."

Wilson is convinced that a big part in this indifference is an adaptation to technological change. "Technology makes it so much easier to check news sites on your phone, even if that news is fake, rather than sitting with a newspaper or going to a library and reading. Speed almost makes us less critical of what we see. In the process of uncovering truth, it is important to take time to slow down."

"The generation behind mine accepts the technology without questioning how we get information and what trade-offs are made in the process. Computers are everywhere now. We don't ask whether they are good for us or how they might be changing us. A lot of people don't research anymore. They just Google something and accept the results at face value. I try, subtly, to question that in my work. My relationship with viewers invites them to continue to research, to determine for themselves what is fact or fiction."

"My generation is the bridge, having experienced pre- and post-Internet. We can Google but are also still able to question. The generation behind us doesn't do that as often. My artwork displays

a storyline next to each artifact. The printout looks like factual information, and the viewer is invited to decide whether to take it at face value or question its truthfulness."

Wilson believes this interrogation of "What is True?" is the critical question of our time. "We have to be able to get past this hurdle to move on to what comes next."

The artist asserts that the viewer's interaction with an object is the element that moves the piece into the realm of art. Her goal is to engage the viewers' curiosity, enlist their interactions, start a dialogue, and spur them to do further research on their own. She sees her objets d'art as stimulating the process of curious investigation rather than as ends unto themselves.



The Eye of a Multimedia Artist

Wilson believes that the use of mixed media in narrative-driven artwork is “kind of new for the glass world, a real contribution of my generation.” The approach shifts emphasis away from mastery of any single technique to a focus on narrative using any technique that works for the piece. She understands that this trend complicates distribution and collectability. “Certain collectors and art critics reject work in this style, finding it not as technically masterful as traditional glass pieces.”

Creating multimedia artwork, speculates Wilson, requires artists to cultivate a different eye than is necessary for traditional glass art forms. “It looks like outsider art,” where each object has its own meaning, and its function is imputed from form rather than the reverse. Each media and object is brought in to advance a narrative. “Some viewers don’t see the skill behind multimedia art, and as a rule, it is much more concept-based than skill-based.”

It is risky for an artist to toy with the craft. For her part, Wilson tries to do everything in glass as well as she can, and she is grateful to fellow artists at the glass school and at the Chrysler Museum for their support of her learning. She observes that artists of her generation learn differently than earlier master/apprentice or classroom training models. “With my generation, networking, getting around, hacks—learning what you can wherever you are from anyone around you—are normal ways of operating in every part of our lives, so we bring them to our work in glass as well. Perfecting a single glass technique can take years of practice. A lot of us are impatient to learn many skills so that we can combine them to make what we need to make.”



One major advantage of multimedia is that there are many more sources of material, which can be significant in an era of supply interruption or price inflation. “If prices go up or colors are restricted, I can work with window glass, beer bottles, or scrap glass.”

Wilson enjoys the frontiers of art and inquiry that she crosses with her glass. “Art glass gives us lots to learn and plenty of room to explore. I want to do more with neon. That will build my torchworking skills. I’m also still casting a lot in my pieces on conspiracy theories.” It will be interesting to check back in with this generation of multimedia artists to see where their explorations lead. **GA**

Audrey Wilson
www.audreywilsonglass.com

Audrey Wilson, The Small Hadron Collider, plasma, blown glass, cast glass, LEDs, wood, found objects, 7"x 6"x 48", 2016.

© Copyright 2017 by Glass Art.
All rights reserved.

MOBILE GLASSBLOWING STUDIOS



Photo courtesy of Shannon Campbell

**COMPLETE GLASS WORKING
SYSTEMS STARTING AT \$4,095**

**YOUR TICKET TO
CREATIVE FREEDOM!**

229-352-9988



Photo courtesy of David Pinks



Photo courtesy of Shannon Campbell



A REVOLUTION IN KILN TECHNOLOGY

INTRODUCING THE GK SERIES DROP-BOTTOM GLASS KILNS

*Your ideal solution to manipulating
hot glass with minimal heat loss.*

Professionals and hobbyists alike are enthusiastic about our new drop-bottom action technology, which allows for artists to manipulate their creations while hot and malleable.



THE GK SERIES

Cress Manufacturing • www.cressmfg.com • (800) 423-4584



GLASS
TOOLS
SUPPLIES
BEVELS & SAWS
GRINDERS & SAWS
BOOKS & VIDEOS
PATTERNS & KITS
LAMP MOLDS & PARTS
HOT GLASS TOOLS & SUPPLIES

Call for our catalog.

(Wholesale only)
(510) 505-9775
(800) 229-7728
FAX (510) 505-9917
(800) 229-7730



Franciscan Glass Company

35255 FIRCREST ST. NEWARK, CALIFORNIA 94560
www.FranciscanGlass.com

Visit our website and renew,
subscribe, order back issues,
and link to advertisers' websites.

www.GlassArtMagazine.com

Craig Mitchell Smith



What's New

AAE Glass has a new and revolutionary product, **Illusion Transfers**. Each sheet,



handmade specifically for the glass or ceramic artist, is a handmade, screen printed design with several layers of black enamel to ensure full coverage and opacity. The transfers are created with a mesh screen on top of a special backing that allows artists to soak their enamel in water and apply to the substrate. They can be used on any COE of glass. Even dichroic can be patterned with your choice of dichroic coloring with the enamel designs to create infinite combinations of patterned colored dichroic. After firing, images are thick, opaque, and glossy black, just as if you had screen printed the glass yourself. Be sure to check out Tanya Veit's free video class on using this extraordinary product, available exclusively at AAE Glass.

239-471-7724

www.aae-glass.com

The 23rd Annual 2017 Glass Craft & Bead Expo,



recently held in Las Vegas, Nevada, hosted 900 students in 255 classes. Students and other attendees hailed from 44 states, four Canadian provinces, and nine additional countries from around the world. The trade show featured 107 companies showing the latest glass technology and techniques plus many exhibiting artists. For the first time, the ISGB Gathering was held simultaneously and brought in over 250 framewerkers. The 2018 Expo will be held April 4-8.

800-217-4527

www.glasscraftexpo.com

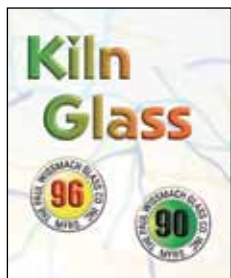


Glass Art magazine presents **Talking Out Your Glass** podcasts featuring interviews with world-renowned glass artists and respected experts in hot, warm, and cold glass. These artists, whose work covers a wide range of glass mediums, have shared their backgrounds and glass techniques and include glass greats Lino Tagliapietra, Richard Jolley, Robert Mickelsen, Judith Schaechter,

Nicholas Parrendo, Ginny Ruffner, Fritz Dreisbach, and many others. Recent podcasts have featured the architectural glass of Judson Studios and its *Resurrection Window*, the largest single composition fused glass window in the world, and Sarah Hall, who has developed and refined a unique way of capturing usable solar energy in art glass windows through the use of photovoltaic cells. There are currently 27 episodes of these incredible interviews, but more are being planned for the future. Visit the podcast link on the Glass Art website for a free subscription to *Talking Out Your Glass* via Stitcher or iTunes and check back often for new entries.

502-222-5631 info@glassartmagazine.com
www.glassartmagazine.com

Wissmach Glass Company introduces **96 COE Prisma** glass in the company's 2017 Kiln Glass Catalog. Prisma is Wissmach's fusing line of mixed colors that can result in some additional hues. Mixing the colors is a manual process, which means that each piece of glass will be different.



Colors include: 96-21 White/Deep Sky Blue tr., 96-22 Crystal/Deep Sky Blue tr., 96-23 White/Superior Blue, 96-24 Crystal/Superior Blue, 96-25 Crystal/Black, 96-26 Crystal/White, 96-27 Crystal/Reactive Blue, 96-28 White/Dark Blue tr., 96-29 Dark Blue tr./White, and 96-30 Crystal/Dark Blue tr. Additional color combinations include: 96-31 White/Violet, 96-32 Olive Green/White, 96-33 White/Hunter Green, 96-34 Olive Green/Blue, 96-35 Blue tr./Olive Green, 96-36 Black/Pearl, 96-37 Reactive Blue/Oyster Pearl, 96-38 Reactive Blue/Black, 96-39 Oyster Pearl/Reactive Blue, 96-44 Crystal/Sea Blue, and 96-45 Sea Blue/Crystal. Visit the company's website to find more information on these and all of the great products from Wissmach Glass.

304-337-2253 wissmach@frontier.com
www.wissmachglass.com

GA

Send your What's New information to
GLASS ART Magazine

Due date for Sept/Oct, 2017
 July 20, 2017

8300 Hidden Valley Road,
 P.O. Box 69, Westport, KY 40077
info@GlassArtMagazine.com

GAI

Glass Accessories International

TOYO TOOLS

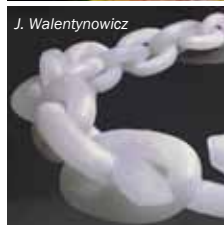
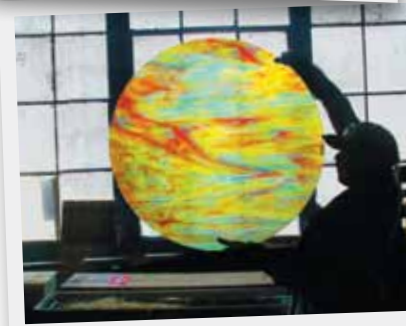
Wissmach Glass in West Virginia has been producing art glass for 113 years. On their production floor they use **Toyo Supercutters**, some with **Tap-Wheel** technology.

Amazingly, one employee estimates scoring 37,500 circles over 30 months before replacing the cutting wheel.

Circle Supercutter® | Toyo TC-6025



For more information visit: glassaccessories.com and wissmachglass.com



R&R® GLASS-CAST™ BANDUST™ 101 INVESTMENT

The Investment of Choice for Open-Face Molds

- Ideal for kiln casting/slumping of glass
- Very fine particles provide the smoothest of surfaces
- Sufficient strength for most small and medium sized glass castings
- Made with BANDUST technology; which reduces dust by up to 99% compared to other investments

R&R® GLASS-CAST™ 910 INVESTMENT

A Staple in the Glass Casting Community

- Widely recognized as the strongest mold material available for glass casting on the market today
- The glass caster's best choice for large pieces or configurations that will place significant stress on the mold material

R&R® GLASS-CAST™ MOLD MATERIALS

Mold Materials to Meet the Specific Needs of Glass Casters

- Unprecedented user flexibility
- Quick delivery
- On-line technical assistance

800.253.4502 | www.glass-cast.com

www.GlassArtMagazine.com



Robert Mickelsen

A Second Act in Functional Glass

by Shawn Waggoner

Robert Mickelsen's second act in glass not only pays homage to his early career in flameworking but couldn't have happened without it. The artist gracefully transitioned from sculptural to functional glass, promoting his artwork to an entirely new fan base and resulting in the most successful years of his career.

Born in 1951 in Fort Belvoir, Virginia, and raised in Honolulu, Hawaii, Mickelsen apprenticed with a professional lampworker for two years in the mid 1970s, then sold his own designs at outdoor craft fairs for 10 years. In 1987 he took a class from Paul Stankard that opened his eyes to the possibilities of his medium.

Mickelsen stopped doing craft shows in 1989 and began marketing his work through fine galleries and exhibitions in high profile shows nationwide. His work can be found in many prominent collections including the Renwick Gallery of American Crafts at the Smithsonian Institution, Washington D.C.; The Corning Museum of Glass, Corning, New York; and The Toledo Museum of Art, Toledo, Ohio.

Beginning in the mid 1990s, Mickelsen taught flameworking at major glass schools including the Pilchuck Glass School, Stanwood, Washington; Penland School of Crafts, Bakersville, North Carolina; and The Studio at The Corning Museum of Glass, Corning, New York. He has published numerous technical and historical articles on flameworked glass and served for six years on the board of directors of the Glass Art Society (GAS) as treasurer and vice president.

In June 2017, Mickelsen co-taught with Jared Betty the first flameworking workshop at Pratt Fine Arts in Seattle, Washington, to include pipe making as part of the curriculum. From July 17 through 21, 2017, Mickelsen returns for his ninth year in a row to Pittsburgh Glass Center, Pittsburgh, Pennsylvania, to teach the creation of organic forms made from bubbles of borosilicate glass. He also teaches private workshops at his home studio in Ocala, Florida.

Torchworker Turns Artist

Prior to his 1987 Penland class with Stankard, Mickelsen was relatively inexperienced in the art world at large. Most of his exposure to glass had come via the craft fairs from which he sold his work at the time. "It wasn't just Paul Stankard's class that changed my thinking but the whole Penland experience. I began to realize the potential of glass as an art medium and see my place in that. I realized I could make something that would express ideas, particularly in abstraction. This experience changed my perception of flameworking and what I wanted to do with it."

Mickelsen had been selling work from craft fairs for 10 years when he began a transition to wholesale shows. He was ripe for the change. "I would get all my work done, show up on time, meet all my obligations, then I wouldn't get paid because it would rain."

Robert Mickelsen, Dragon Cup, Graal imagery on cup and foot, sculpted dragon, 12" tall, 2017.





Robert Mickelsen, Post Apocalyptic Rifle, a collab Weapon of Peace with Nick Gabay (@snicbarnes), about 18" long, 2015.

The artist participated in his first Rosen wholesale Buyer's Market in Philadelphia, Pennsylvania, in 1989. Instead of selling to people directly, he now participated in an elegant indoor show and sold to stores and galleries. "That elevated the value of my work and made me realize that context really matters in art sales."

To the early craft shows, Mickelsen took a combination of small production work and big art pieces. Production work sold, while art pieces just sat there. At the wholesale shows, the opposite happened. People wanted larger sculpture, which enabled Mickelsen to put all of his energy into more ambitious work.

Narrative Goblets, *Organisms*, and *Networking*

In 1994 Mickelsen began making sculptural goblets inspired by the work of Italian Maestro Lucio Bubacco. Mickelsen's random narrative came to life in works such as *Fortune Smiles Upon Those Who Fish at Night*. This goblet featured Native American etching on its bowl and feet and a framework in the stem with a bas-relief of a figure sitting in a canoe along with a sun and a moon. One of Mickelsen's favorite works, the piece remains part of his personal collection.



Robert Mickelsen, Rainbow 44 #1 and #2, collab Weapons of Peace with Chris Kerner (@cowboyglasss), about 10" long each.

"I didn't set out to make *Fortune Smiles*. I built something, added imagery, flew by the seat of my pants. That kind of spontaneous narrative was something I really enjoyed doing. I let the work inform me. That's how I discovered the possibilities of flameworking. Just be a participant. Let it happen. Then try to analyze the meaning." The narrative goblets launched Mickelsen's teaching career.

His subsequent body of work, the *Organism* series, was a reaction to the criticism that glass is a poor artistic medium due to its inherent beauty. "The shiny surfaces and graceful forms that glass takes make working with it almost like cheating."



Robert Mickelsen, *Sekhmet's Throne*, a collab with Joey Malaquias (@joeymalaquiasglass), about 16" tall, 2017.



Robert Mickelsen, *Femalienne*, collab with Banjo (@banjoglass), 35" x 17" x 12", 2012.

Mickelsen set about trying to uglify the surfaces of his work and left narrative behind. He wrinkled the glass, tore it open, sliced it with shears, and sandblasted the surface. He had heard someone say you should never paint on glass, so he painted on glass with oil paints. "Painting the glass turned out to be the strongest aspect of that series. But ultimately it all turned out to be just another way that glass is made beautiful. I completely failed in my goal to uglify glass." The *Organisms* were completely random and appeared as foreign life forms in organic colors, forms, and shapes that were nested, stacked, and hung.

Mickelsen introduced his *Networking* series in 2007, referencing the technique of heating small-diameter rods of glass with a small hand torch and bending and welding them into a larger form. Counter to typical flameworking, Mickelsen's technique resulted in very light, low-volume forms defined by an intricate lattice of thin glass rods. His slow and meditative process took days, even weeks.

Unlike other forms of glass sculpture, Mickelsen did not have to keep the entire piece hot while working on it. Only the specific bend and weld was hot at any given time, and then only for a minute or so. The piece developed cracks from stress, but they were easy to remove simply by reheating. The process ended with heating out all the cracks and annealing the entire piece. The larger pieces were annealed many times, sometimes up to 20 cycles.

Circle of Giving

In 2011, following decades of commercial and artistic success, Mickelsen was not sure he had a career. The recession of 2008 produced a drought of interest in fine art sculpture felt around the country to which the veteran flameworker was not immune.

Mickelsen initially discovered the functional glass community in his 1994 Pilchuck class. "That fascinated me. It was the first time I'd really seen glass pipe makers. The techniques, the enthusiasm, the attitudes were very fresh and new to me at the time. I encouraged it and thought it was a great direction. I didn't understand there was a booming market to support it and wanted these young flameworkers to expand their horizons and learn to make objects in addition to pipes."

Pipe makers have been in every class Mickelsen has taught since. In fact, some of today's most prominent functional glass artists were early students.

Throughout the trials and tribulations of Operation Pipe Dreams, the code name for a 2003 Department of Justice nationwide sting operation targeting businesses selling drug paraphernalia, mostly marijuana pipes and bongs, Mickelsen encouraged his students to keep making pipes and hone the skills needed to create art. "I told them that if you work hard enough and long enough, the whole world is going to turn around and come to you. I had no idea at the time how right I was going to be."

After a decade of supporting functional glass artists, at some point Mickelsen needed their help and support to save his career. He received an invitation to teach a class at Austin Flameworks,

Austin, Texas, and while he was there Salt and Kevin Ivey worked with him for three days as he made his first functional glass.

Upon entering the market, an artist of Mickelsen's caliber went from his worst sales year ever in 2011 to his best in 2012. The next three years saw subsequent increases. "Every time I see Kevin Ivey, I buy him dinner. Every time I see Salt, I remind him that it was because of him that I'm still in this business. I'm very grateful, and I try to show that gratitude by giving back to the pipe community as much as I possibly can."

Mickelsen began promoting pipe makers in venues that weren't known for functional glass support. In 2015, he served on a panel discussion about glass pipes at the GAS conference in Chicago that introduced glass pipes to the glass community at large. Mickelsen helped organize the first ever exhibition in a commercial retail glass gallery at Habatat Galleries in West Palm Beach, Florida, *Counter-Culture Glass*, held in November 2014.

"Habatat recognized this as a significant new movement. At the time we did that show, we got a lot of resistance. Even the pipe community resisted the idea. They did not want their work to be commercialized. Other galleries were horrified and insulted."

Today, only three years later, Philadelphia's Liberty Museum, one of the most prominent glass museums in the country, featured an exhibition in April 2017 called *The Treachery of Images* featuring glass from American pipe makers. "At a class in the mid 2000s I said, 'Someday the Smithsonian Institution is going to call you guys, and you'd better be ready.' They haven't called yet, but they will. It's coming."



For a complete list of products, visit
www.glasscolor.com

Reichenbach Glass

96 COE - Rod, Frit, Cane, Casting
104 COE - Cane & Frit

Uroboros Glass

Full line of lampworking cane

Blockhead Tools

Custom Molds, Blocks & Paddles

Jim Moore Tools

Shears, Crimps, Jacks & much more

With over 20 years in business, Olympic Color Rods is the premier supplier for the art glass community. We offer a "Customer Rewards Program" where one can receive a 5% refund on glass color purchases.

Call for more information.

800-445-7742

sales@glasscolor.com

818 John St. Seattle, WA 98109



Robert Mickelsen, AK47 Woodgrain, solo Weapon of Peace, a 50 percent scale replica of an AK47, about 18" long, 2016. Woodgrain sections were made by Jake Miller (@blitzkriega), but this is not a collaborative piece.

Weapons of Peace

Salt and Ivey predicted that Mickelsen would be “a ninja” the minute he stepped into the functional glass arena, but the transition wasn’t quite that easy. People in the pipe community didn’t know who he was and didn’t recognize any of his functional work.

“I had to step up and prove myself. It was very healthy to be faced with having to do that after 40 years in this business. It was invigorating—a shot in the arm. All of a sudden I felt young again. Plus, I’m hanging out with all of these young people. They’re all half my age or less, and I forget I’m in my 60s.”

Mickelsen’s process for designing new work is the same as it’s always been—completely random. On a piece of paper he sketches out ideas, only now he designs function and aesthetics simultaneously.

Making pipes differs from creating sculpture in that the artist is faced with the primary goal of producing something one can use for smoking. And the quality of the functionality matters greatly to that audience. “I’ve gotten more interested in the plumbing. Some of my earlier work didn’t function well, though it looked fantastic, especially my early rifles. I’ve learned more in the last five years since I entered the functional glass community than the previous 15. It’s been a steep, very focused education. I’m a much better glassblower today than I was five years ago. I’m making much higher quality work.”

The artist purchased two lathes in the last two years to enable more complex construction. Creating exclusively with borosilicate glass and a GTT Delta Mag, Mickelsen works his magic. In the spring of 2015, Mickelsen’s current and most successful series was on view at Habatat Galleries in *Weapons of Peace*. Each of the artist’s 12 meticulously flameworked rifles was also a smokeable pipe.



Robert Mickelsen, By Any Other Name, a 50 percent scale replica of a Hotchkiss M1914 field machine gun. This piece has the word “peace” etched onto it in 150 different languages.

Initially Mickelsen flameworked a purely sculptural rifle, which he sold to the Toledo Museum of Art for its annual hot glass auction and sale. Following the session with Salt and Ivey, he turned his rifle form into a pipe. “Part of the reason the *Weapons of Peace* series didn’t take off as pure sculpture is because it wasn’t a complete idea. Making rifles that have an alternative function completed the idea.

“Guns are beautiful. They have an aesthetic, just like cars or buildings. It led me to question why we bother making weapons that are designed to kill into such beautiful objects? We’ve been doing it since the beginning of weapons manufacturing. It highlights the dual nature of being human, that we are both artistic and violent. The guns personify that for me.”

Collaborating—A Functional Glass Phenomenon

Half of the work exhibited in *Weapons of Peace* was collaborative. Mickelsen has produced pipes with top names in functional glass including Banjo, Darby, Buck, Snic, Zach Pucowitz, Nate Purcell, Cowboy, Chris Carlson, Joe Peters, Elbo, and Eusheen. “I’ve had such a fantastic time, and it’s been some of the most rewarding work I’ve ever done in my entire career.”

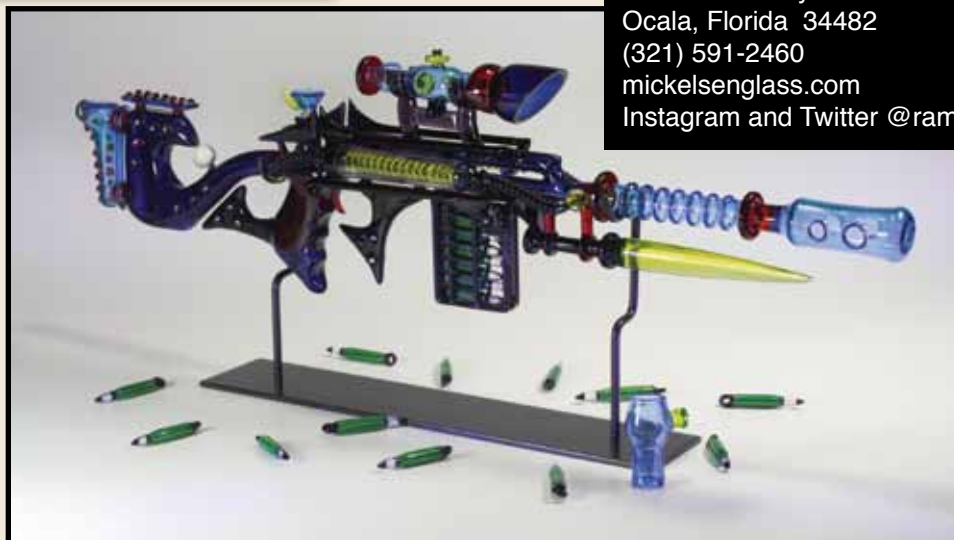
The first artist to invite Mickelsen to collaborate was Salt. At first Mickelsen declined, believing he was not a good candidate for this method of art making. But after Mickelsen started making pipes, he reconsidered. “The most important thing I discovered was not only that I was wrong about collaborating, but I was actually pretty good at it. I’m a good team player and don’t mind sharing the decision making process with another person or even two other people.”

Though the process is organic, Mickelsen insists on working from a scaled diagram. “If we’re making parts and pieces separately, we have to refer to the template for scale to keep us both on the same page. We’re stunned at what comes out at the end, because there’s no way to anticipate the results. I like that there’s another highly skilled person I can lean on for things I don’t know, and they can lean on me in the same way.”



Robert Mickelsen,
Golden Trebuchet,
collaborative *Weapon of Peace*
with Bryan Doshier (@doshworld),
about 20" tall, 2015.

Robert Mickelsen,
Intergalactical Tactical, a collab
Weapon of Peace with Darby Holm
(@darbyholmglass), about
28.5" long, 2014.



The Infinity of a Functional Future

In 1995, Mickelsen and Shane Fero prepared for their presentation, a worldwide overview of the contemporary state of flameworking, at the GAS Conference in Asheville, North Carolina. They searched the world for flameworking artists and found a grand total of about 30 from 12 different countries.

Currently that same number of world-class flameworkers can be located in nearly every medium-size city in the United States. There are 500 to 1,000 in the city of Eugene, Oregon, alone, and possibly 100,000 flameworkers nationwide.

“It’s the new hip way for young artists to become entrepreneurs. There are so many people in it now because you can actually make money. You develop the skills, do your marketing right, you work hard, and you can make a really good living. That is the most remarkable change. It’s very exciting, and I’m thrilled to have lived long enough to see this happen.”

That explains why 99 percent of Mickelsen’s current work is functional with a few goblets and sculptures here and there. “I’m responding to the market. The pipe community is starting to expand its horizons. In the future, they may be interested in glass that is not a pipe, but their sensibilities and aesthetics will always be shaped by their connection to the cannabis community.”

Radical change in the status of cannabis in this country has fueled advancement not only of individual artists but the art itself. Because of functional glass and the booming market it created, the quality and types of equipment and supplies for flameworkers has increased exponentially.

“At 65, my window is smaller than almost everyone else whom I encounter in this business. I have to make every day count. Every day that I wake up, feel good, go out to my studio, and do what I love to do, I’m grateful. And I’m going to keep doing that for as long as I can. I keep trying to make great work, and there’s still so much to learn.”

GA

Robert Mickelsen was a recent guest on *Glass Art* magazine’s new podcast *Talking Out Your Glass*. Visit the link under “What’s New” at www.glassartmagazine.com to subscribe to this free podcast today.

Robert A. Mickelsen
Mickelsen Studios, Inc.
36 Nashua Way
Ocala, Florida 34482
(321) 591-2460
mickelsenglass.com
Instagram and Twitter @ramickelsen

The 2018 Glass Art Society Conference *Il Percorso di Vetro—The Glass Path*



Glass Art Photos by Norbert Heyl

Murano Photos Courtesy of Kassandra Farooq

The Glass Art Society (GAS) is thrilled to announce the theme for its 47th conference to be held May 16–20, 2018, in Murano, Italy. Themed *Il Percorso di Vetro—The Glass Path*, the 2018 GAS Conference will lead attendees through the winding path of the island's remarkable history while exploring the future of glass and discovering the hidden routes connecting the conference venues. A selection of Murano's glass factories and studios will provide the Glass Art Society with the incredible opportunity to use these facilities as venues for the conference.



Cesare Toffolo, detail of Colori.

An Outstanding Conference

In order to accommodate this unique conference experience, GAS will be honoring the traditions of Murano, and some programs that are usually featured at GAS conferences will not be included. As a result, the Glass Art Society anticipates an extraordinary program emphasizing demonstrations with less focus on lectures.

The current Italian Steering Committee, led by glass maestro Lino Tagliapietra, is comprised of artists and community art supporters Cesare Toffolo, Lucio Bubacco, Davide Salvatore, Marina Tagliapietra, Roberto Donà, Adriano Berengo, and the Consorzio Promovetro Murano. The 2018 GAS Conference is sponsored in part by the Berengo Foundation and the artists of the Italian Steering Committee.

Upholding the Glass Arts

The Glass Art Society is an international nonprofit organization. It was founded in 1971 with the purpose of encouraging excellence, advancing education, promoting the appreciation and development of the glass arts, and supporting the worldwide community of artists who work with glass.

The organization's membership includes over 2,200 artists from 47 countries around the world. GAS holds its annual conference, publishes the Glass Art Society *Journal*, and provides the online version of *GASNews*. GAS also maintains an online Member Directory that features member profiles with an image gallery, bios, and more. Visit www.glassart.org for more information on the Glass Art Society and its upcoming events.

GA

Lucio Bubacco, detail of
Night's Creator Man.

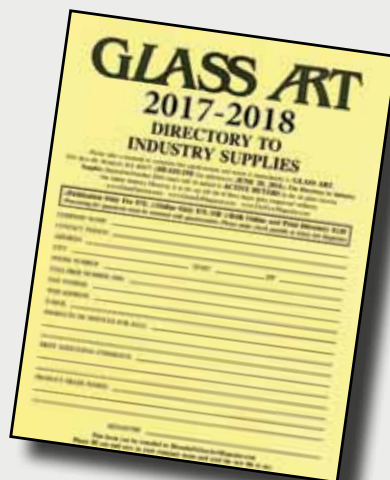


© Copyright 2017
by Glass Art.
All rights reserved.

GLASS ART

DIRECTORY TO INDUSTRY SUPPLIES

Keep a eye out for this form
coming in the mail in May.



Take advantage of this exceptional opportunity to have your company listed in **Glass Art Magazine's 2017-2018 Directory to Industry Supplies**.

Our New Online Directory is linked from our sister publications' websites and is linked to our Glass Art Website. The Directory will be part of the September/October 2017 issue and will be mailed to **Active Buyers** who will use this resource to locate and purchase products and services during the **next year!** You may advertise in the **Magazine Directory to Industry Supplies** or **Online Directory** for only \$75 or in both the **Magazine and the Online Industry Directory** for \$120.

**DEADLINE FOR
DIRECTORY LISTING SUBMISSION:
June 28, 2017**

**Advertising Space
Reservations** for September/October 2017 are:

Closing
July 20, 2017

Materials Due:
July 30, 2017

Contact

Rhonda Sewell or Kathy Gentry at
(502) 222-5631 Fax: (502) 222-4527
E-mail: Rhonda@glassartmagazine.com

You've got the passion, the drive, and the dreams ...



We've got the tools to make your dreams come true.

A.R.T.CO
ARTIST'S RELIABLE TOOL COMPANY
 408.288.7978 www.artcoinc.com sales@artcoinc.com

FIRELITE FORMS

WE HAVE THE MOLDS & STANDS YOU WANT..

1-888-800-3901

SLUMPING MOLDS & DISPLAY STANDS

FIRELITE FORMS INTRODUCES FIVE NEW REVOLUTIONARY "EZ4U MOLDS" THAT ALLOWS EASY ALL IN ONE HANGING



PATENT PENDING



11.95/ea.

INCLUDING CASTING MOLD & 2 JEWELRY EYEPINS. EZ GLASS REMOVAL WITH FUSED IN EYEPIN

www.fireliteforms.com
 Email: fireliteforms@yahoo.com.
 TEL: 941-371-5492 Fax: 941-870-3039
 5704 Lawton Drive., Sarasota, FL 34233

Advertisers' Index

Advertiser	Page
AAE Glass (239) 471-7724 www.aeeglass.com	43
Armour Products (973) 427-8787 www.armourproducts.com	13
A.R.T.CO +1.408.288.7978 www.ArtcoInc.com	62
Bullseye Glass www.bullseyeglass.com	29
Coatings By Sandberg, Inc. (714) 538-0888 www.cbs-dichroic.com	21
Covington Engineering Corp. (877) 793-6636 www.covington-engineering.com	12
Cress Manufacturing (800) 423-4584 www.cresskilns.com	52
D&L Art Glass Supply (800) 525-0940 www.dlartglass.com	19
Delphi (800) 248-2048 www.delphiglass.com	10
Denver Glass Machinery, Inc. (303) 781-0980 www.denverglass.com	29
Euclid's Elements (800) 296-5456 www.euclids.com	39
Evenheat Kiln, Inc. (989) 856-2281 www.evenheat-kiln.com	33
Firelite Forms (888) 800-3901 www.fireliteforms.com	62
Flow, The (502) 222-5631 www.TheFlowMagazine.com	35
Franklin Art Glass (800) 848-7683 www.franklinartglass.com	15
Franciscan Glass Company (800) 229-7728 www.franciscanglass.com	52
Gemini Saw Company, Inc. (310) 891-0288 www.geminsaw.com	5
GLASHAUS www.Glasshouse.de	12
Glass Accessories International www.glassaccessories.com	53
Glass Art (502) 222-5631 www.GlassArtMagazine.com	21/29/33/52//61
Glass Art Society (206) 382-1305 www.glassart.org	35
Glass Expert Webinars™ (502) 222-5631 www.GlassPatterns.com	25
Glass Patterns Quarterly (502) 222-5631 www.GlassPatterns.com	43
Glastar (800) 423-5635 www.glastar.com	19
Hang Your Glass (650) 353-4642 www.HangYourGlass.com	19
His Glassworks, Inc. (828) 254-2559 www.hisglassworks.com	33
Hollander Glass (800) 421-0449 www.hollanderglass.com	8/9
ISGB (812) 222-2243 www.isgb.org	31
Mobile Glassblowing (229) 352-9988 www.mobileglassblowingstudios.com	51
Nortel Manufacturing (416) 438-3325 www.nortelmfg.com	13
Olympic Color Rods (800) 445-7742 www.glasscolor.com	57
Olympic Kilns (800) 241-4400 www.greatkilns.com	43
Paragon Industries (800) 876-4328 www.paragonweb.com	63
Paul Wissmach Glass Co., Inc. (304) 337-2253 www.wissmachglass.com	64
Ransom & Randolph (800) 253-4502 www.glass-cast.com	53
SGAA News (503) 774-6000 www.stainedglass.org	42
Skutt Kilns (503) 774-6000 www.skutt.com	2
Touchstone Center For Crafts (800) 721-0177 www.touchstonecrafts.org	13
Wet Dog Glass, LLC (910) 428-4111 www.wetdogglass.com	31



CS-5630 Dimensions

- Exterior with top closed: 70 ½" W x 53" D x 52" H
- Exterior with top raised: 70 ½" W x 63" D x 76" H
- Interior: 56" x 30" x 17" (15 ½" deep when measuring from quartz tube surface)
- Flat load floor, 30" from ground level

Introducing the Paragon CS-5630 clamshell kiln with quartz tubes

Deluxe quartz tubes

Imagine the huge glass pieces you could make inside the new Paragon CS-5630. Enjoy complete access to your artwork from the sides and front. Add delicate stringers or frit without having to move the shelf into the kiln later.

The roof elements are protected in 10 quartz tubes for a cleaner kiln interior. There is less dust in the kiln, because there are no element grooves in the top.

Heat from the top, walls, and floor

The CS-5630 is 56" x 30" x 17" high. With elements in the floor, walls, and roof, you will enjoy unsurpassed heat distribution. The digital controller uses Power Ratio technology to vary the heat output between the top and bottom elements.

Extra insulation and woven gasket

Lift the kiln top section with handles in the front and sides and with assistance from gas springs. The roof is 3" thick ceramic fiber, and the walls are 3" firebrick backed by 1" of ceramic fiber board (4" of total wall thickness). The extra insulation helps to maintain even temperatures. A woven gasket between the kiln top and floor helps to hold in the heat. The floor

surface is a convenient 30" high from ground level. The 4 ½" thick firebrick floor includes two expansion joints.

Watch the glass through 2" x 3" peep-holes mounted in the left and right sides. The kiln includes locking casters.

Motorized vent for firing molds

If you fire molds, you will welcome the motorized Orton Vent Master, which is mounted in the back wall of the kiln. The vent, mounted on rubber isolators to prevent vibration, removes moisture from the kiln to reduce rust. The vent is standard on the CS-5630 and plugs into an auxiliary output in the back of the kiln. This allows you to turn on the vent through the digital controller.

Low maintenance

Deluxe, long-lasting mercury relays are standard. Gain convenient access to the electrical components by removing a single panel. The kiln includes access panels for replacing quartz tubes.

Rugged

The CS-5630 is the very picture of ruggedness. A ledge in front of the kiln protects the brick floor from damage caused by leaning into the kiln. The digital controller is mounted away from the

heat for long life. The kiln base is welded from 2" x 2" steel tubing; the upper kiln frame is welded from 1" x 1" steel tubing.

Optional touch screen controller

Order your CS-5630 with the optional Sentinel Smart Touch controller. The Sentinel can check the voltage and amperage and can be programmed with easy-to-follow screen descriptions.



For more details, please visit our website or call 800-876-4328. We look forward to hearing from you.

**Constantly finding
ways to make
better kilns.**

Paragon Industries, L. P.
2011 South Town East Blvd.
Mesquite, Texas 75149-1122
800-876-4328 / 972-288-7557
www.paragonweb.com
info@paragonweb.com

**Better
Designed
Kilns™**

The background of the entire advertisement is a detailed stained glass pattern. It features large, stylized flowers in shades of orange, yellow, and red, with green leaves and stems. The pattern is set against a black background, with the glass pieces separated by dark lead lines.

Wissmach

Since 1904,
manufacturer of
the largest variety
of opalescent and
cathedral glass.

Each sheet
of Wissmach glass
is a work of art
in itself, making
your work of art
easier right from
the start.



**THE PAUL WISSMACH
GLASS COMPANY**

P.O. Box 228,
Paden City, WV 26159-0228
Tel: (304)337-2253
Fax: (304)337-8800
www.wissmachglass.com
wissmach@frontier.com