

# MASSC

# METAL ARTS

SOCIETY OF  
SOUTHERN CALIFORNIA

Nov/Dec 2009



## Intermediate Stone Setting: Flush, Pave and Prong Setting With Wayne Werner

**Dates: December 5th & 6th, 2009**

**Location: El Camino College**

This class introduces the student to the more challenging aspects of stone setting. We will also discuss in depth the parts of a faceted stone and the terms used to describe them. Flush setting is demonstrated in three different approaches; flaring out, key holing in, and setting from behind. Pave setting will be demonstrated as; star cut, inside out, and cluster setting. Finally, students will set a 6.5mm faceted stone in a four prong solitary style ring. A discussion of the difference between diamond cut and colored stone cuts will also be covered. We will discuss the different hardness's of stones and how that should affect our designing or setting style. Consideration will also be taken as to the hardness of the metal we are setting in. Students are encouraged to bring in stones and discuss ways best suited to set them.



## **SPECIAL 30% DISCOUNT ON FOREDOM TOOLS ONE NITE ONLY!**

There will be a slide show **December 5th from 6-8 PM.** Werner will discuss his cold forged work in precious metals as well as demonstrate his favorite Foredom tools. Attendees will receive a 30% discount on all tools Foredom has to offer. Come out and see ways to save time with the newest most precision tools on the market. Sponsored by Foredom. Special promotions will be available the night of the demo.



## President's Message

Greetings to the MASSC membership. I thank you for the confidence you've placed in me and I look forward to the next 2 years as President of MASSC.

There are a few changes to your MASSC board. In addition to our 2 returning board members, LaVerne Christensen (treasurer) & Dianne Raven (Recording Secretary), I welcome two new members to the MASSC board. Brenda Wey has been elected to the huge job of VP/Program Chair & Trinh MacDonald will be our new Corresponding Secretary. Diane Wiemer, previously Corresponding Secretary, has moved on to General Membership Chair. I look forward to working with all in the upcoming term.

Pat Wierman had been our General Membership chair for the last 7 years. Pat did a wonderful job assisting members with any concerns regarding their membership and welcoming new members to the organization. Pat has stepped down from Membership Chair, but will continue to be one of our video recorders.

I would also like to extend a huge thank you to our outgoing President of the last 4 years, Corliss Rose. Under her leadership, MASSC had our 1st student show which was a big success and has continued to grow and expand the services to our members. I greatly enjoyed working with Corliss as a member of her board, and look forward to continuing to work with her, as she remains the MASSC webmaster.

I've had the pleasure of getting to know many members while I was Program Chair and I greatly anticipate meeting more members and continuing friendships.

Kindest regards,  
*Ketarah*

## Larry Stulorow - In Memorium

My Friend and Mentor Larry Stulorow

When I first became a jewelry student Larry was then 85 years young, and sharp and dynamic as they come. He was tireless in meeting, greeting, and mentoring every incoming class. He made use of every technique known, and added some of his own. Larry sawed out figures, and fabricated pins, bracelets, focal pieces in necklaces. He pierced, fused, soldered, riveted, you name it, Larry did it. His jewelry was shown in Galleries in La Jolla and Del Mar, and was anxiously sought out by fans at the bi-annual Student's Sale at UCSD. I respected Larry for all he did, alloy metal, shoot waxes, assist in soldering, finishing, maintaining tools and selling wheels, mandrels and burs. And he did it with ease for some 20 plus years.

Larry was a friend, mentor, advisor, and a great human. May his path be a peaceful one.

Terrie



## Yuma Symposium February 25th - 27th, 2010.

- Jennifer D Anderson • printmaking
- Sam Chung • clay
- Arthur Ganson • sculpture
- Zig Jackson • photography
- Becky McDonah • metals
- Bruce Metcalf • metals
- Stephanie Metz • fiber
- Pete Pinnell • clay
- Betsy Schneider • photography
- Lisa Slovis • metals
- Patrick Stafford • wood/multi-media
- Dale Wedig • metals

<http://www.yumaartsymposium.memberlodge.org>

## MASSC Board of Directors

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**MASSC web site: [www.massconline.com](http://www.massconline.com)**

### MASSC Newsgroup:

MetalArtsSociety-subscribe@yahoogroups.com

MASSC serves the needs and interests of artists working in metals and provides an environment for the exchange of information, instructional workshops, demonstrations, lectures, and panel discussions. Annual dues Sept 1-Aug 31); Regular Member, \$30; Family, \$45; Full-time Student \$20. Please add \$5 to your annual dues if you would like to receive a printed copy of the MASSC newsletter. All others will receive the newsletter via email. Membership forms are available at [www.MASSCOnline.com](http://www.MASSCOnline.com)

## Seen On-Line



# Maharaja

## The Splendour of India's Royal Courts

The word maharaja, literally 'great king', conjures up a vision of splendour and magnificence. The image of a turbaned, bejewelled ruler with absolute authority and immense wealth is pervasive and evocative.

The exhibition bringing together over 250 magnificent objects, many being lent from India's royal collections for the first time. It examines the changing role of the maharajas within a social and historical context and reveals how their patronage of the arts, both in India and Europe, resulted in splendid and beautiful objects symbolic of royal status, power and identity.

at the Victoria & Albert Museum

<http://www.vam.ac.uk>



**E**arlier this year I took the Photographing Jewelry Workshop at the Brooks Institute of Photography in Santa Barbara taught by Scott Miles. TableTopStudio provided assistance and their diffusion cubes (EZcube), lights and props. This article is a summary of what I learned and how I have applied it to my own digital jewelry photos.

Let's start with equipment. Here's what you need.

### Equipment

- Digital camera – digital SLR with manual controls and a 105mm lens is ideal. However, you can take great pictures with a point and shoot camera, so use what you have.
- Your camera manual

the direction of the light. A side light will define shape and texture. Front light can make the image flat, but can be used together with side lights to add highlights and sparkle to faceted stones. A top light generally works well. Experiment. Look at professional jewelry photos and identify the light sources. Study the composition and backgrounds as well. You can learn a lot from great photos.

### Set Up Your Shot

A quick, easy setup is the TableTopStudio EZCube. They sell a complete jewelry photography setup for about \$300 that includes the EZCube, lights, and accessories. Cubes are a great option if you do not have a lot of room because they fold flat for easy storage. Camera shops such as Paul's Photo

Black acrylic creates dramatic photos and reflections, but it scratches very easily. Another way to achieve the same results is to buy a piece of glass and put it on top of black paper or material. I bought mine at IKEA for about \$10 and it fits perfectly into the 20in cube. Also, if you are using this setup, insert a black piece of paper or cloth inside the back of the cube to eliminate unwanted reflections.

I'm not going to get into how to rig jewelry because there is an excellent write up on the TableTopStudio website. Their website is a great resource for jewelry photography in general and it goes in a lot more detail on how to set up lights, create reflections, photograph pearls, diamonds and more. Be sure to check it out at [http://www.tabletopstudio.com/documents/jewelry\\_photography.htm](http://www.tabletopstudio.com/documents/jewelry_photography.htm)

# Photographing Jewelry

## by Raminta Jautokas

- Tripod
- Lights - true color daylight balanced compact fluorescent bulbs recommended
- Diffusion material such as a TableTopStudio EZCube
- Background materials and props

### Lighting

Consistent, predictable lighting can eliminate a lot of frustration when photographing jewelry. The key is to photograph with no interference from constantly changing daylight and other light sources. I use a guest bedroom with shades drawn and photograph at night. The only lights on during the shoot are the daylight florescent. This setup significantly reduces the time to take good photos. Also, do not use a flash because you will not get good results.

You can use one light source, but two or three will make it easier to create a better image. Pay attention to

in Torrance also sell a diffusion cube package by American Recorder that includes a cube, lights and tripod for about \$100., or search the internet for "photography cube" or "photography light tent" for alternative options.

You can use all kinds of backgrounds and props for your shots. Sandstone, flagstone, fabrics, handmade paper, acrylic, bricks, rice, coffee beans, ferns, cut flowers, or driftwood work well. Use your imagination. This is the creative part of the process. But always remember that the jewelry is the star.

Don't forget to polish the jewelry and brush the dust from the set before taking the shot, especially on dark backgrounds or you will be spending a lot of time cleaning up dust specs in Photoshop.

elery\_photography.htm

### Set the White Balance – Once!

A properly white balanced image eliminates the burden of color correcting with image processing software such as Photoshop, and it accurately represents your work. If you block out all the light in the room and use the same light sources for each shot, you need to set the white balance only once. You can store the white balance settings in your camera and when you are ready to shoot again, just select your custom setting. Here's how to set the correct white balance:

1. Set up your shot and lighting. It does not matter if you have one or all of your lights on as long as light color temperature is the same (true color daylight balanced compact fluorescent is recommended).
2. Place a photographer's neutral gray card or a white object in your

set. If you are using manual exposure (recommended), set to the correct exposure.

3. Shoot the gray card or white object.

Do not focus on the card, but make sure the card covers the entire shot.

4. Use this image to set your custom white balance setting per your camera manual instructions. Look up White Balance manual/custom setting and follow the instructions on how to record and recall your custom manual setting.

5. Your done! As long as you use the same type of lighting, you can always use this custom white balance setting when photographing your metalwork.

## Get Ready and Shoot

1. Set your camera settings to

manual exposure and manual focus. If you do not have manual focus, spot focus is the next best option.

2. Use ISO 100-200

3. Adjust aperture between F/11 and f/22. Here are some guidelines:

- f/11 for flat images, such as suspended necklace
- f/22 for images with depth
- f/16 is good for most applications

4. Set the white balance to the custom setting you stored in your camera.

5. Before you set up your tripod and camera, look at all angles until you find a great shot. Set your camera up where your eyes are. This will save you time in adjusting and readjusting your tripod.

6. Focus on the part of your jewelry you want to highlight.

7. Adjust the shutter speed to correct

exposure. If your camera has a feature that highlights overexposed areas of the photos, use it to help you get the correct exposure. You can also use a photographer's gray card. As a rule of thumb, the brightest area of your photo should not go over 245 in the RGB value.

8. Use a cable release, self-timer or remote control to shoot the photo. Check it on your computer. Once the exposure is correct you can repeat the next shots with the same setting without making any changes to the camera



settings. Just keep the lighting the same. This is a great time saver since you can build one setup and use it for many objects.

## File Formats

File formats can get complicated, but here is what you need to know:

1. The higher the quality, the larger the file size. It's good practice to archive the original files and work on copies. Check your camera manual on how to set file formats.

2. TIFF- highest quality, file is not compressed which means that it will

not degrade when you edit and save it. However, it is a large file. This format is good for printing.

3. JPEG – standard web format, compressed and it will degrade when you edit and save it. There are different quality settings for the compression. Use the highest if possible.

4. RAW Format –very good image, unprocessed, but for advanced users. There are entire books written on how to take advantage of this file format.

5. Adobe RGB/sRGB – unless you are shooting exclusively for the web,

shoot Adobe RGB (check your camera manual on how to set this) and convert to sRGB for the web. Basically Adobe RGB has more colors and sRGB includes only colors that will display properly on the web. If you are sending the file to a printer, work in Adobe RGB and allow print shop to convert to CMYK.

Raminta Jautokas welcomes your comments and questions -  
raminta@flash.net

# Tufa Casting with Katherine Palochak

MASSC Workshop Summary by Stella Schloss



Katherine Palochak provided her expertise and excellent teaching skills to make the tufa casting workshop a great success. Tufa stone casting dates back to the Bronze Age. Tufa casting is a great low-tech method that can be used in the home studio with minimal equipment. Tufa stone is a soft, porous form of limestone that's easy to carve. Indian Jewelry Supply carries tufa stone. Look for fine-grained

compact stone without inclusions. The outside of the stone sometimes has a hard rind like appearance that should be initially cut away. Always wear a dust mask when carving tufa stone.

1. Begin by drawing your design on transparency paper. For your first

piece, start with a simple design. Avoid complex patterns with under cuts.

2. Saw off two thick tufa slices from the block using your design as a size guide. You should have about one inch circumference beyond your drawing to account for air vents and pouring spout (called a gate). One piece is for carving while the second piece acts as the backing.

3. Square off the two pieces and rub together in a circular motion against each other. This action helps sand the pieces equally. Take the time to make sure the

two halves line-up perfectly with no gaps. You should not be able to see any light coming through when pieces are aligned.

4. Pick one half to become the carved design side. Transfer your design to the surface tracing the outside first.

5. Carving can be achieved using wood or clay modeling tools, X-ACTO blades,

when cast, press a piece of clay into the mold, and adjust your carving as necessary.

7. Use the design transparency to help line up the design on the second piece of tufa (back plate). You can also use a ruler measured from the outside of your carved piece to help estimate the location of your pattern. You can draw your design on the back plate.

You may also need to carve out a small amount on the back plate to ensure thick enough casting.

8. Next, carve the pour gate into the back plate. Carve half of the depth of the desired gate and channel (refer to the illustration).

The width

of the pouring gate is dependent on your design. Leave plenty of tufa on each end of the gate to prevent the mold from cracking. It's best to make a very short channel to prevent the metal from cooling too quickly during the pouring process.

9. Place the 2 tufa pieces together lining up the back plate with the carved side. Mark the dimensions of the pour gate and carve the second half of the opening in the design half. A small knife is useful. Make sure the pouring gate and channel are smooth when aligned. Any lumps or bumps will cause the molten metal to get hung up.



wax carving tools, paring knife, burs, and toothpicks. Start carving your model from the middle. If your design turns out slightly larger, you will be able to compensate if needed. A good way to keep your carved lines consistent is to use a toothpick or small ruler to check the depth. The casting will pick up every detail so make sure to your design is crisp with smooth lines. Use a small brush to gently remove loose tufa sand as you carve. Tapping on the edge also works. Remember to wear your dust mask!

6. To check to see how design will look

10. Next, carve the air vents into the design side. These vents help to displace the expanding air as metal fills the mold. The air vent size should be about the diameter of a toothpick and 1/2 the depth for the average design. Air vents are carved in a V pattern and extend from the perimeter of the design to the tufa edge to allow air to escape. Angle the section touching the outside of the design initially downward and the rest of the V upward. Lay the toothpick in the air vent to check the width and depth.

11. There's no magic number of air vents needed. Make sure that you have vents along both sides of your design and one or more at the bottom. If any part of your design is angled higher than your gate, add a vent to this area. If you have any place in your design where there's a split, make sure to add an air vent. Vents can be connected to each other if needed.

12. Line up the two halves of the mold and look for high spots. Resand as necessary.

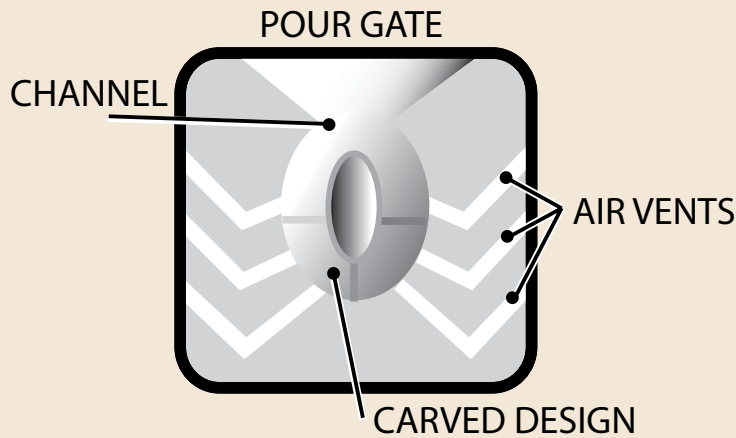
13. It is recommended to do an initial pour before "stabilizing" (sealing) your mold. Air vents often need further adjustment especially when first learning the process.

14. Soot provides the mold release agent in tufa casting. Light a candle and pass both inside halves of the mold over the candle to create a generous layer of black soot over both sides. Make sure to also coat the top of the mold where the pour gate is located.

15. When the pieces have cooled, use binding wire to tightly secure the mold together. Don't place the wire twists on the edges of the mold.

16. Place your mold in metal pan filled with sand or pumice to prevent molten metal from freely flowing if there's a leak or overflow.

17. You need to use at least 50% "virgin" metal that hasn't been previously cast. Unfortunately, there is no precise process of determining how much metal you will need. You can estimate by placing casting grain in your mold before sooting the mold. Extra is better than too little. You can pour your excess molten metal into an



ingot mold. Weigh your metal the 1st time you pour the mold, adjust and record for future use.

18. Wear protective gear during the casting process (e.g. safety goggles, fume respirator, and closed toe shoes) as you would during soldering.

19. Heat the mold to warm it up and then begin heating your metal. Follow the same procedure as you would for any type of casting (add borax flux to your metal, heat until molten, etc). When your metal reaches the molten stage, move the crucible close to the pouring gate. Quickly heat the outside of the mold again, the pouring gate and inside. In one smooth motion, quickly pour the molten metal into the mold.

20. Let the mold air cool. Once the mold air cools, open the mold. If it's not completely cooled, the metal will not release easily.

21. Access your piece. If there's a spot where metal didn't flow or there's a crack, you may need to add another air vent. Other causes include a mold that's too cool or metal that's wasn't hot enough.

22. Once you're happy with your mold, stabilize it. This process is done before you repeat the sooting process. Aqueous solution of sodium silicate also called "water glass" is used to coat the mold. It is available in drug stores and from Indian Jewelry Supply. Mix a 50% solution of sodium silicate and water; paint a thin layer on each half. Take precautions -- the stuff is very sticky and hard to get off. Apply a total of three coats allowing it to air dry after each application. Let the mold cure over night.

23. If you need to make repairs after the mold has been stabilized, use can use a small bur. If you need to patch a hole or dent, use a 50/50 mixture of water glass and tufa grain (formed during the sanding process)

Happy tufa casting!

## JANUARY WORKSHOP

# Fold Forming

With Betsy Manheimer

Dates: January 31st , 2010

Location: Saddleback College

Workshop fee: \$50

Fold forming is a great way to add a new dimension to your work. This workshop will address the basic folds and variations as well as a number of embellishment techniques using hammers, punches, stamps and other tools and equipment to produce interesting and unique effects. Join Betsy for a day of demonstration, hands on experimentation, and discussion of this fun and fascinating technique.

This workshop will be filled via the MASSC lottery system with MASSC members receiving priority. To put your name in the lottery, contact Brenda Wey by December 29th. Everyone will be contacted on December 30th with the lottery results. Send an email to [designsbybrendawey@yahoo.com](mailto:designsbybrendawey@yahoo.com) and put MASSC in the subject line. Or phone: 949-454-1213 (9am - 9pm) and ask for Brenda.



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## Upcoming Events

December 13th

MASSC Board Meeting 10 am

24413 Chancellor Ct. Laguna Hills

Host - Ketarah Shaffer RSVP - 949-643-9693

January 2010

Betsy Manheimer - Fold Forming

Saddleback College

March 2010

Betty Helen Longhi - Shell Forming

Saddleback College

May 2010

Demo day

Did you change your address or email? Don't miss your MASSC newsletter and workshop announcements. Send changes to Diane Weimer [diaweimer@verizon.net](mailto:diaweimer@verizon.net)