



Studio PMC

Member Magazine of the PMC Guild

Beautiful Backs

page 5

“Sundial” Pendant

page 6

Etching Texture Plates

page 8

Quilling PMC

page 12

features

- 5 Beautiful Backs**
Nancy Hamilton offers tips on three-dimensional thinking, so that your jewelry looks as good behind as in front
- 6 "Sundial" Pendant**
Moving dials make this clock-inspired pendant an intriguing PMC Project. By Hadar Jacobson.
- 8 Etching Texture Plates**
Copper etching offers PMC artists another method for making unique texture plates. By Lora Hart.
- 12 Quilling PMC**
This PMC+ Sheet technique is inspired by the genteel art of paper quilling. By Maryanne Mott and Robin Layton.
- 14 PMC Pen**
Using a woodworker's pen kit, Lauren Halling explains how to create a PMC pen.

departments

- 4 As I PMC It**
- 10 Gallery**
- 15 Portfolio**
- 16 Happenings**
- 18 Q & A**

On the Cover: "Pinctada Maximus" by Barbara Becker Simon.

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• E-mail files (under 4 MB) to editor@PMCGuild.com

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PMC Firing Chart

All versions of PMC should be dry before firing. Air dry or use a hairdryer, stove, or lightbulb. PMC3 takes a bit longer to dry because of its high density.

PMC	1650°F	900°C	at least 2 hours	PMC3	1290°F	700°C	at least 10 minutes
					1200°F	650°C	at least 20 minutes
PMC+	1650°F	900°C	at least 10 minutes		1110°F	600°C	at least 45 minutes
	1560°F	850°C	at least 20 minutes				
	1470°F	800°C	at least 30 minutes				

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Imagine this....

- Shelley Jones visits her favorite gallery and sees a new display of pieces made from a material called Precious Metal Clay.
- John Wilson, a new student to the arts scene, reads an article about PMC in the latest issue of a trade magazine.
- Jane Smith has just stopped by her favorite shop to replenish her studio supply of beads and materials. She sees a display of beads made from something called Precious Metal Clay.

They're curious. Their interest is piqued. But where do they go from here? How do they find more information about PMC? Is there anyone locally who works with PMC?

We can help! The PMC Guild is pleased to announce a new feature designed to assist those who have recently discovered PMC. It is called the Ambassador Program, and you are the Ambassadors!

The PMC Guild is compiling a list of Certified PMC artisans who want to be advocates for PMC within their community. The job of these Ambassadors will be to assist people in your area who are new to PMC and seeking direction. The Ambassadors will be



our front line of communication to the general public, which could take the form of answering a few questions, recommending sources for tools and supplies, or directing newcomers to classes, including their own.

We are all participants in an ongoing historical event, the discovery of the capabilities of Precious Metal Clay, and I am continually impressed by the willingness of our membership to share information about these discoveries. This spirit of sharing, which permeates our PMC community, is what we hope to pass along to those who are just learning what PMC is all about.

The Ambassador Program will be posted in the public section of the PMC Guild website.

Anyone who has successfully completed a certification program can list themselves as an Ambassador. If you would like to participate in this program, it's easy to enroll. Follow these simple steps.

1. Go to our website, www.PMCguild.com, and enter the site.
2. Click on the 'Ambassador' link.
3. Click on 'Become an Ambassador'.
4. You should now be on a page where you'll find a simple form to fill out. This form will ask for your name, city, state, zip code, and e-mail address. You will also be asked to identify which program you have been certified with—Rio Rewards, PMC Connection, or both. This information will appear immediately on the posted Ambassador List.

Help us to help others. Become an Ambassador today! If you are certified and want to sign up as a PMC Ambassador, go to <http://pmcguild.com/ambassador/signup.php?key=GuildAmbassador> and fill in the form there.

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Member password: PMC2005 (be sure to use uppercase letters)

Visit the PMC Guild Web site to join or renew your membership in the Guild, find certification classes in your area, view back issues of *Studio PMC*, or participate in online discussion forums.

Studio PMC

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Beautiful Backs

by Nancy Hamilton

I started my art career as a painter, and then moved on to printmaking. Neither of these mediums required me to think in three dimensions — my primary concern was what was happening on the surface. When I began working in jewelry, I brought this two-dimensional view of art with me. Then an embarrassing incident taught me to view my new art form differently.

One of my first pieces was a pendant. Proud of my creation, I wore it all the time until the day a woman flipped it over and asked, "When are you going to finish it?"

"But, it's the back," I whined. Didn't she know that you were only supposed to look at the front? That evening I looked at my pendant in a new way. As I re-examined the back, I saw its many flaws. Before me was an oddly shaped chunk of copper that was dented, scratched, and lumpy. The rivet was cracked, and what about that sloppily soldered chain? It looked like something from my kitchen junk drawer!

The woman was right: the piece was unfinished, not to mention ugly. I realized the need to see each piece of jewelry as a three-dimensional construction, that is, beautiful all-around.

I have since found that many new jewelry makers do not think past the front of their design. When I ask my students to design their first piece, most draw only the front.

Some consider a side view, but none consider the back. I ask them to think about their artwork from all angles, and pose the following questions: Do the edges add interest, work with the whole, or add contrast? How does the clasp or bail affect the appearance of the piece? Is it neatly attached? Does it function? And what about that back? What are you going to do with this lovely, blank space? The answer is usually, "I hadn't thought of it."

A beautiful back should, at the very least, be neatly finished. That means there are no fingerprints, pits, cracks, or voids. The findings should be cleanly and precisely attached and they must also function as they were designed to do.

But the back also presents opportunities. You can use the blank space to embellish



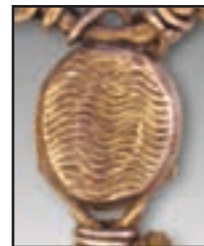
"Asian Story" by Nancy Hamilton, front and back view. PMC, CZ, Aura 22, and fine silver wire.

the piece, to add another point of view, to write a message, or to tell more of your story. Think about how often pendants are accidentally flipped over, and remember those days when you're distracted — by screaming children, spilled coffee, or an alarm clock that went off late — and you've worn them backwards. And don't forget my "pendant flipper."

If you sell your work, your customer will appreciate having a piece that can be worn both ways: It adds value for their dollar. Your beautiful back might even sway them into purchasing your piece over someone else's. Above all, it shows that you are a thoughtful, meticulous craftsperson.

Here are a few tips that help me to create beautiful backs:

- To pattern both sides, roll out the clay between matching or complementary pattern sheets.
- Blend bails, findings, and attachments while the clay is still wet. This will allow you to get rid of the lines that can mar such attachments.
- Remove all fingerprints with a damp brush while the clay is still damp.
- Once the clay dries to leather hard, sand away any unsightly marks. Use graduating grits of sandpaper for a smooth finish. This is also the time to fill cracks and divots.
- Let the front dry out completely before you work on the back. You don't want to



squash all of your hard work. It's also a good idea to place the piece on a soft cloth or a piece of leather to avoid marring the details. Don't use kiln fiber because it sticks to wet PMC and is a pain to remove.

- When firing, use vermiculite, kiln fiber, or alumina hydrate to support and protect the details on the back. For torch firing, I've found that a stainless steel screen on a tripod works well.

- After firing, remove new scratches, cracks, or divots before tumbling or buffing. Tumbling and buffing act like cars bouncing over a pothole: They don't remove the hole, they enlarge it.

- Keep in mind that this advice isn't just for pendants. Pay attention to the insides of rings, the backs of brooches, findings for necklaces, etc.

One final note: The other day, two fellow jewelry artists came by my studio and I showed them a few of my new pieces. Standing unobtrusively (I hoped) across the room I was glad to hear them say, "Wow, look at these backs."

I had a sudden urge to find my first critic and give her a big hug.

Nancy Hamilton has been a jeweler for more than 10 years, and has taught both jewelry fabrication and PMC. She writes, "I'm 50 going on 13, have a generous and patient husband who has somehow managed to stick around for 25 years, and a great 19-year-old son who grays my hair on a daily basis. I also have four cats, one of whom is a full-time studio assistant and contributes great quantities of kitty fur to my PMC work. Each piece is .999 silver and .001 cat fur."



"She Has Risen" by Nancy Hamilton, front and back view. PMC, fine silver, lab-grown sapphires, and glass beads.

“Sundial” Pendant Project

by Hadar Jacobson

Tools & Supplies:

Original PMC

Original PMC slip

Texture source

Ziploc bag

Roller

Playing cards

Drinking straw

Coffee stirrer

CZs, lab-grown gemstones, or other kiln-safe stones 3mm or less in diameter

Alumina hydrate

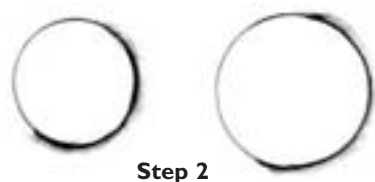
Liver of sulfur

220 and 400 grit wet/dry sandpaper

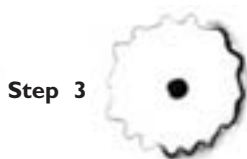
Coarse and extra fine mini fiber wheels

Rotary tool

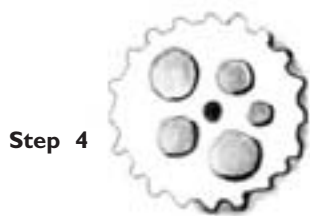
Fiberglass brush or steel brush



Step 2



Step 3



Step 4

The “Sundial” pendant was inspired by a photo of ancient gear wheels from an archeological find known as the London Byzantine Sundial-Calendar, one of the earliest known efforts to mechanize the telling of time. It also draws on my love for old mechanisms, such as old pocket watches, mantelpiece clocks, balance scales, pulleys, and gears. The pendant consists of two moving wheels, but despite the movement, the pendant is fired as a single piece and does not require assembly after firing.

Step 1. Choose a texture mold, such as a piece of wallpaper, and oil it. Place two stacks of four cards on the mold. Place a lump of Original PMC between the cards, cover with a Ziploc bag, and roll the PMC out with a rolling pin. Roll out a second piece six cards thick with a different texture.

Step 2. Cut a circle out of each of the textured pieces using circular cutters. The circles should be two different sizes: use the bigger cutter on the four-cards-thick piece and the smaller cutter on the six-cards-thick piece. These circles will become wheels of the sundial.

Step 3. Pierce each circle in the center with a drinking straw. Cut the edges of the circles with paper shapers, using a different shaper for each circle.

Step 4. Cut several holes of different sizes out of the larger circle. Let the circle dry.

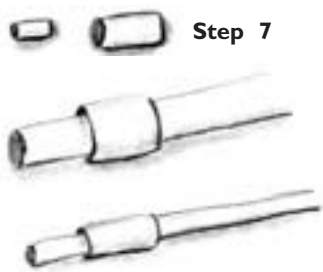
Step 5. Decorate the smaller circle with gems no larger than 3 mm in diameter. When the piece is assembled, the stones should show through the holes in the larger circle. To determine how to place the gems, place the larger circle over the smaller one, and use a needle tool to mark spots for stones through the holes.



Step 6. Set the stones while the smaller circle is still wet. If it has already dried a little, spray it with water and wait for it to soften. Faceted stones should be pressed down into the circle until their top surface is lower than the surface of the clay; cabochons can be pressed down halfway. Allow the small circle to dry.

Step 7. Prepare two tubes by rolling a strip of PMC two cards thick and ½" long. Wrap the strip around a drinking straw to make a tube, and cut it where the ends meet. Wrap the rest of the strip around a coffee stirrer to make a second tube. Leave the tubes on the straws until dry.

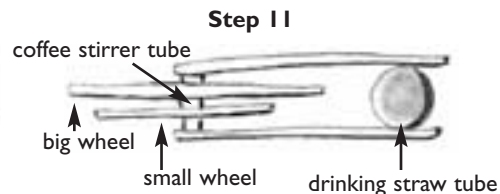
Step 8. Roll out a lump of PMC four cards thick. Cut two identical panels in the shape shown in Figure 2. These will be the base and pointer of the sundial, respectively. Each panel should be ½" wide at the top, with the length somewhat longer than the radius of the larger circle. Let the panels dry.



Step 8 Step 10



Step 11



Step 11

Step 9. Attach the smaller tube, hole down, to the bottom of one of the panels with slip. This will form the base. After the joint has dried, reinforce it with fresh PMC.

Step 10. Attach the larger tube with holes facing sideways to the top of the second panel with slip, and reinforce the dry joint with fresh PMC.

Step 11. Assemble the pieces. Slide the small circle and then the larger circle onto the small tube on the base through their center holes. The length of the smaller, vertical tube should be equal to the width of the bigger, horizontal tube. If the vertical tube is too long, cut or sand it down. Brush slip on the top of the small tube and on the wide end of the bottom panel. Place the second panel, with the big tube facing down, on top of the whole structure, parallel to the bottom panel. Let dry, and reinforce the joints with fresh PMC. Add PMC on top of the big tube to fill any gaps between the two panels.

Step 12. Fire the piece supported by alumina hydrate. Rest the piece on its back and press alumina hydrate between the layers to prevent them from sticking to each other during firing. Fire for two hours at 1650°F.

Step 13. Once the piece is cool, dip it in liver of sulfur until it is black. Polish the patina off the texture surfaces with a course mini fiber wheel, leaving the black patina in the crevices. To polish the smaller wheel, use a fiberglass brush or a steel brush mounted on a rotary tool to reach through the holes of the bigger wheel.

Step 14. Sand the edges with 220 wet/dry sandpaper mounted on a sanding stick. Follow with 400 grit. Using a rotary tool, sand all smooth surfaces, including the panels and the back of the smaller wheel, with 220 grit wet/dry sandpaper mounted on a slotted mandrel. Follow with 400 grit sandpaper.

Step 15. As a final step, put a matte finish on the smooth surfaces with an extra fine mini fiber wheel, touching them lightly to eliminate the marks left by the sandpaper.

Hadar Jacobson is a PMC artist living in Berkeley, California. She teaches classes from her studio, Textures, as well as at several California colleges. Her work has appeared in many jewelry magazines, and is displayed at galleries and exhibitions nationwide.

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Example of typical etching setup.

Tools & Supplies:

Ferric chloride (Radio Shack PCB Etchant) 20 gauge copper plate approximately 3"x4"

Sharpie or Speedball "Painters" Paint Pen

Rubber gloves

Eye protection

Shop apron

Glass or plastic container with a tight-fitting lid

Distilled water

Electrical tape or contact paper

Degreasing cleanser or copper cleaner like Penny Brite or Bon Ami

Thin green scouring pads (Scotch-Brite)

Q-Tip

Chopsticks

Ammonia

Baking soda for neutralizing spills

Warming tray

Paper towels

"You've got to be original, because if you're like someone else, what do they need you for?"

—Bernadette Peters,
Inside the Actor's Studio

One of the first things we all fell in love with is the way metal clay takes texture, and there are any number of commercially available texture plates and other tools out there to help us take advantage of that property. But there comes a point when buying commercially available tools just isn't satisfying for creative artists. We want to make our own.

When I saw a lovely copper bracelet a friend had formed and etched herself, I realized that I could make texture plates using the same technique. Etching copper for texture plates allows me to control the overall depth of the recesses, creating shallow or deep impressions with crisp clean edges. As an added bonus, a deep etch imparts a slight texture, similar to textures obtained through reticulation. Etched texture plates are a great way to imprint PMC as an integral design element or as a pattern under enamel, transparent epoxy resins, or the rainbow of colors produced by liver of sulfur.

There are many different methods and mordants that can be used to etch metals, but my choice is ferric chloride. It is sold at Radio Shack as PCB Etchant and used to etch circuit boards. Although ferric chloride is a chemical and requires care in its use, it is less hazardous than most other choices for etching metal, and is safe to use in a home studio.

Ferric chloride stains just about everything it comes in contact with, so wear rubber gloves, eye protection, and old clothes or a shop apron. Be sure to have some clean wash water nearby in case of mishaps. Ferric chloride doesn't have a nasty scent or give off toxic fumes by itself, but when it's heated, the solution remaining on the fully etched metal is cleaned off with water and



Making your own etched metal texture plates allows for unleashed creativity.

ammonia, or spills are doused with baking soda, dangerous fumes are produced. Work in a well ventilated area!

Because iron and steel tools will contaminate the etchant, use chopsticks or copper tongs if you need to move the metal around in the solution to dislodge any sediment created by the etching process. An individual batch of ferric chloride solution may be used multiple times, but eventually loses strength and takes longer to complete etching. When it no longer etches efficiently, take the spent solution to your local hazardous waste disposal facility. Never pour it down the drain or throw it in the trash.

Sketch Your Etch

Preparation is critical in this process. Clean and degrease the metal with cleanser or copper cleaner until water sheets off the surface. Neither the resist nor the etchant will adhere to dirty or oily metal.

Cover the back of the plate with contact paper or electrical tape and burnish it down. The contact paper will prevent the back of the plate from etching. Attach a tape tab in the center of the back as a handle.

A Sharpie or Speedball paint pen works well as a resist. Using the pen, coat the edges of the plate and let dry. Then, handling the plate by the sides, draw your design on the front of the copper. You may



Photo by Laurie Latham. Other photos are by the author.

Examples of PMC jewelry created by Lora using etched metal plates.

find it helpful to trace the pattern onto the metal with pencil prior to using the ink resist. Slight imperfections may be finessed away with a toothpick. You can also coat the entire plate with resist and use a blunt toothpick or skewer to scratch an image in the dry ink. Keep in mind that the metal covered by resist will be left behind by the etching process as a raised surface. When the etched plate is used to imprint the clay, the image will be reversed, including letters and numbers.

Etch Your Sketch

You will need a plastic or glass container to hold the etching solution. I find that using a container that is roughly the same size as the metal plate works best: a plastic or glass loaf pan with a tight fitting lid will enable you to etch two plates at a time and store the used solution in the same container.

Pour in enough ferric chloride to completely cover a thin, green scouring pad. (The scouring pad will be used to suspend the metal just below the surface of the solution.) You may use the etchant full strength or dilute it to three parts ferric chloride to one part distilled water. Be sure to add the ferric chloride to the water (acid to water, just like you oughter), not the other way around.

For a faster etch, put the solution on a warming tray (like the one Mom used at

dinner parties in the '60s). The temperature should not rise above 135°F (57°C), and be sure to use good ventilation.

Place the metal plate art side down on top of the scouring pad in the ferric chloride solution, leaving the tape handle on the back above the solution. Etching should take one to two hours, depending on the strength of the solution and the depth of the desired etch.

Check the progress every 15 to 30 minutes by removing the plate from the solution using the little tape handle and "squeegeeing" the ferric chloride solution clinging to the metal into the container with your gloved finger. Rinse the plate in fresh water and test the depth of the etch with your finger or a needle.

If some of the resist has come off, carefully pat the plate dry with a paper towel, reapply the ink, let dry and continue to etch. The longer you leave the plate in the ferric chloride solution, the deeper the etch will be.

When you're happy with the results, rinse the plate again, place it in a neutralizing solution of water and baking soda, and then clean in a bath of water and ammonia. This will stop the action of the chemical. Scrub the newly etched plate with cleanser to take off any remaining ink. Your plate is now ready to make its first impression!

Lora Hart began her jewelry-making career in 2000, when an actor's strike left her idle in her 17-year career as a make-up artist. Since then, her jewelry has been featured in galleries in Southern California, and she has taught extensively in the Los Angeles area. Certified in four programs as a PMC artisan, she began NewMetal Artists, the Los Angeles chapter of the PMC Guild, with fellow PMC artist Chris Brooks in January 2004. Lora can be reached via e-mail at LoraHartJewels@earthlink.net.

Gallery

To submit your photos to our Gallery send slides or digital images to:

**Studio PMC, P.O. Box 265,
Mansfield, MA 02048.
E-mail: editor@PMCGuild.com**

Please include your name, address, country, phone, e-mail address, a brief bio, photo credit, plus the size and materials used in your piece.



"Party Fiesta" by Holly Gage. PMC with liver of sulfur patina, ruby gold glass, and Keum-boo.



PMC rings by Linda Facci



Brooch by Lisa Wollman Bolick. PMC, sterling silver, freshwater pearl, and labradorite.



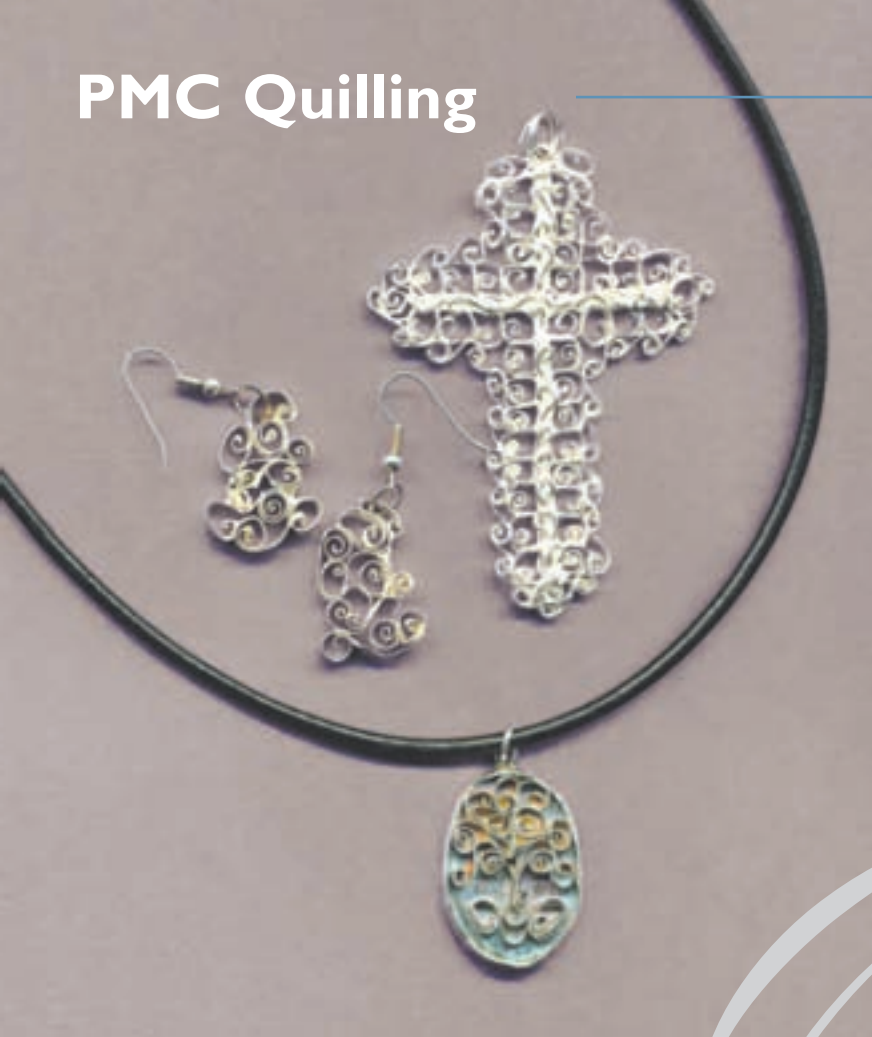
"Sea Triad" by Terry Kovalcik. PMC and sterling silver.
Photo by Corrin Jacobsen Kovalcik.



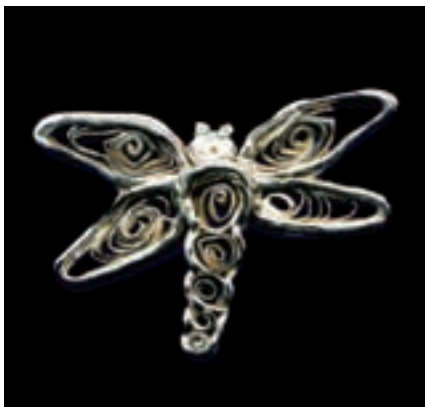
Brooch by Claire Bridge. Sterling silver and Aura 22.

PMC Quilling

by Maryanne Mott & Robin D. Layton



Pieces by Maryanne Mott created using the quilling technique with PMC+ Sheet.



Maryanne Mott is the secretary of the Southern Arizona Silver Alchemists, a PMC Guild local chapter in Tucson, Arizona.

Robin D. Layton has been working with PMC for a little more than a year. She studied with Mary Ann and Ken Devos at the William Holland Lapidary School.

Quilling, also called paper filigree, was developed several hundred years ago as an imitation of metal filigree. Paper quilling is done by rolling sheets of paper around a tool, then gluing and shaping the curls. The technique gets its name from feather quills, which experts say 18th century ladies used to roll the paper.

Today, the technique is often used to decorate picture frames and wedding invitations, and is taught at many paper arts stores. The simple act of rolling a narrow strip of paper and adhering it to cardstock turns a plain card into a work of art. Using PMC+ Sheet, slip, and a little imagination you can use this same technique to create your own works of art in fine silver.

The first step is to choose a quilling design. Begin by drawing your design on graph paper, with each box section representing a rolled strip of paper. The rolls can be placed onto a PMC base or glued together with slip to build the final shape.

The strips for quilling should be $\frac{1}{8}$ " wide, cut from either square or rectangular sheet, depending on how long you want the strips. Longer strips can be made by pasting pieces together. Precise width measurement is crucial to the finished piece, so you may want to cut, measure, cut, measure, rather than measure all the strips at once, in order to avoid inconsistencies caused by material lost in cutting. Cut the PMC Sheet through the plastic sheet, to keep it from moving.

Insert a single strip into the slot of a quilling needle and roll

Quilling Fish Project by Robin Layton

- Supplies:** Toothpicks
 Quilling needle Tweezers
 Quilling board PMC+ Sheet
 Ruler PMC+ paste
 Pencil Tracing Paper
 Scissors Pattern

Step 1. Cut strips 1/8" wide from square PMC sheet.

Step 2. Place a strip in the quilling needle slot. The inserted end should not hang out of the quilling needle.

Step 3. Roll the strip by twirling the needle, holding the PMC sheet with one finger to keep the roll smooth and tight.

Step 4. Place the end of the quilling needle in the smallest circle on the quilling board. Gently use your fingernail to remove the quilled PMC strip from the needle. The circle will contain the PMC strip so that it doesn't completely unroll.

Step 5. Using a toothpick, loosen the quilled circle to make a loose circle. Use a toothpick to paste the two outer rolls together for strength. Paste the inner free end of the inner circle.

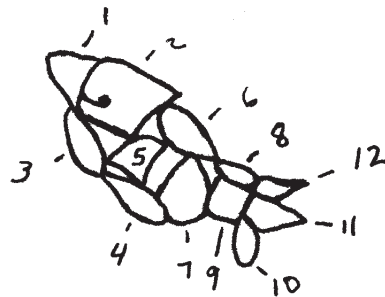
Step 6. Let the quilled circle dry, then remove it and repeat until you have enough circles for your pattern.

Step 7. Make one larger circle for the head of the fish by placing a rolled strip in a larger quilling board circle.

Step 8. Paste shapes together to form the fish shape. (Figure 1) Be neat with the paste so it doesn't show.

Step 9. Fire at 1650° F for 10 minutes. Check the piece for places where the components have pulled apart and add paste to repair. Fire again at 1650° F for two hours.

Step 10. Tumble to finish. (I use a vibratory tumbler.)



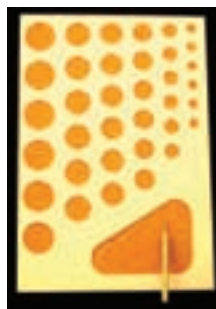
Here are the shapes for making the fish:

Piece #	Name	Shape
1	triangle	
2	half circle (fish head)	
3	teardrop	
4	marquise	
5	triangle	
6	teardrop	
7	shaped teardrop	
8	shaped teardrop	
9	rectangle	
10	oval or teardrop	
11	triangle	
12	oval or teardrop	

it around itself with the tip of one finger. You can also roll the entire sheet and then slice it into tiny scrolls, rather than cutting strips and rolling each individually.

The filigree shapes are formed by placing tightly rolled curls into a circle on a quilling board, then loosening each roll with a toothpick. If you are working without a base, paste the two outer rolls together for strength, and paste the inner end to the inner circle. (You must do this after rolling, because pasting strips together before quilling results in a wrinkle toward the end of the roll.) Be sparing with the paste: you don't want it to show in the finished piece.

If you are working with a base, place a piece of



Quilling Board with Quilling Needle

waxed paper over the graph paper, and then place the rolls into the squares. Use PMC slip to adhere the curled paper to the base. Go completely around the base once, check the rolls' alignment, and then attach the next row. To finish the outside row, use an S-scroll and interlock each end with the next roll to give create a filigree look.

The rolls can also be pinched to form triangles, squares, and diamonds. These shapes can be combined together into a larger shape, or used individually to enhance other pieces. With a little practice at making the correct shapes, you can adapt them to fit any patterns you draw or trace.

PMC Pen Project

by Lauren Halling

Tools & Supplies:

Pen kit

Two 6 cm x 6 cm sheets of PMC+ Sheet

Flat metal file

Fine diamond file

Wire brush



This silver pen was made using PMC+ Paper fired onto pen blanks from a kit designed for woodturning projects. These kits can be found at many woodworking and hobby stores and through online retailers, such as www.woodcraft.com.

I used a "European Slim Style" kit, priced at \$5, that included two brass tubes, a pen mechanism, an ink refill, and a 24k gold-plated clip, tip, and center trim. I chose to leave off the center trim ring, but the gold tip, clip, and top pieces provided a nice contrast to the pure silver of the PMC. Other styles are available as well, although since the kits are designed for woodworkers, they may not all work as well for this project. Kits for big barrel wooden pens, for example, will require a cost-prohibitive amount of PMC to fill the wide barrel, and will be too heavy for comfort when finished.

Step 1. Take the brass tubes from the kit and determine the direction of the taper on each. The center of the pen is designed to be slightly wider than the ends. This taper can be too subtle to determine by eye, so test by inserting the pen mechanism into both ends of each tube to see which end is looser.

Step 2. Lay out the PMC+ Sheet and lightly moisten one side with water. Roll the sheet around the brass tube. Trim off any excess PMC, allowing a slight overhang on each end for shrinkage (about $\frac{1}{8}$ "). Repeat for the second tube.

Step 3. Cut shapes from the trimmings to decorate the pen, or cut out designs from a fresh piece of PMC+ sheet. For example, I used strips cut from the trimmings to wrap around the end of the barrel and top of the pen. Allow to dry.

Step 4. Fire for 10 minutes at 1650°F (900°F). Since the melting point of brass is over 1700°F (925°C), there was no problem firing the PMC on the brass tubes.

Step 5. To file the ends, hold a tube perpendicular against a flat metal file. Draw it several inches along the file with medium pressure, then turn it several degrees and repeat. Continue until an even edge is achieved. Smooth any roughness with a diamond file. Polish with a wire brush for a satin finish or burnish for a polished finish.

Step 6. Assemble the pen, taking care to properly position the pen mechanism so the writing tip extrudes enough for smooth operation, yet also retracts fully.

Lauren Halling came to PMC with a background in ceramics and watercolor painting. A student since December 2002 of Steve Murdock in Santa Rosa, California, she made this silver writing pen as a class project after just a few classes.

Portfolio — Barbara Becker Simon

Barbara Becker Simon of Cape Coral, Florida, needs little introduction in the PMC world. A senior instructor in the Rio Rewards Certification Program, she has taught PMC to hundreds of artists across the country, and many accomplished PMC artists call her mentor and inspiration.

In 2004, Barbara created a presentation for the Society of North American Goldsmiths entitled "PMC: We're Serious About This" demonstrating the artistry emerging in this medium. The presentation was so well-received she was asked to be a keynote speaker at the PMC Conference in 2004, and the PMC Guild is now distributing a CD based on the presentation.

PMC wasn't Barbara's first love, though. A jeweler for more than 35 years, Barbara learned to make glass beads a year before she discovered PMC. Her beads have been featured in *Lapidary Journal* and

numerous other publications, including *Formed of Fire* by Bandhu Dunham and *Beads of Glass* by Cindy Jenkins. Her hollow core vessels grace the cover of the third edition of *Contemporary Lampworking* by Bandhu Dunham.

"Within the first week in jewelry class in college, I knew that this was where I wanted to be: designing and creating art to wear," Barbara says. "When introduced to the world of lampworking, I was gleefully consumed with the drive to create small, intimate objects in glass. Manipulating hot glass is, for me, an exciting joyful process. When I can combine my glass with my metalwork, I feel that the best of both worlds can be achieved."



"Peaches in Regalia," glass, PMC, raku, pearls, and sterling.



"Broken Bead Ring" and interchangeable bead ring.



Lampworked hollow glass beads over PMC cores.



PMC beads.



PMC rings with Aura 22 and gold paste.

Happenings

PMC Conference 2006

The third biennial PMC Conference will be held July 20-23, 2006, at Purdue University in Lafayette, Indiana. The conference will include a half-day session on Thursday, a full day of presentations Friday and Saturday, and conclude at midday on Sunday.

The Conference will include at least 30 presentations on topics of interest to PMC artists, such as new techniques for working with PMC; working with PMC and stones, glass, gold, findings, and polymer clay; and presentations on marketing and teaching. A major exhibition is being planned, as well as a large vendor showcase.

Close to both Indianapolis and Chicago, Lafayette is within 500 miles of 70 percent of the population of the United States, making it an ideal central location. Visitors flying in from most U.S. cities will make the journey in under three hours, which means many participants will be able to leave in the afternoon and be home for dinner.

Conference attendees will have the choice of staying at a deluxe hotel adjacent to the meeting site, air-conditioned dorm suites, or several national chain hotels within a 15 minute drive of the campus.

For more information, visit the conference Web site at www.pmc-conference.com.

Member News

PMC Guild member **Marianne Pickett** of San Diego, California, brought PMC to her son's first grade classroom, creating this leaf print necklace and supporting the elementary school's annual auction to raise money for art, music, physical education, and science programs.

"Imagine fine silver jewelry made by 6- and 7-year-olds," writes Marianne, who worked with another parent volunteer to help each of the 20 children in the class create leaf prints for the necklace. "Each student was given a ball of standard PMC which they rolled out and pressed a leaf into. After allowing it to harden a bit the children wrote their names in pencil on the reverse side of their leaf." Once fired and finished, the leaves were strung on Softflex with pearls, crystals, and sterling



Leaf print necklace by Marianne Pickett and her first graders.

beads. The finished necklace sold for \$650 at the auction.

Studio PMC Technical Editor **Tim McCreight** will jury a special exhibit of jewelry and wearable art at gallery M.I.M. in Baltimore, Maryland. The exhibit, entitled *Secret Identities: An Exhibition of Intriguing Wearable Art*, will be on display Oct. 28 to Nov. 27.

"We all know who we are, but do we know who we want to be? What better time than Halloween to investigate our hidden selves?" writes exhibition coordinator Jeff Fisher. "Since the beginning of time, jewelry has been used to broadcast identities — club associations, marital status, and royal affiliations. But why should we let popes and kings have all the fun? This show will give artists and designers a chance to invent and broadcast their own identity."

For more information about the exhibit, contact Made in Metal, "Secret Identities," 3600 Clipper Mill Rd. Suite 130, Baltimore, MD 21211, phone 410-662-6623, e-mail madeinmetal@netzero.net.

The Tucson Chapter of the PMC Guild, called the Southern Arizona Alchemists, formed in August, 2004, got off to a big start by hosting two gatherings for PMC enthusiasts during the world renowned Tucson gem shows in February.

PMC Connection sponsored an open house on Feb. 2, hosted by the Southern Arizona Alchemists at the Bead Renaissance Show at the Tucson Air and Space Museum. The evening included demonstrations by PMC Connection

Senior Instructor **Tonya Davidson** of Whole Lotta Whimsy and **Elisa Cossey** and **Sherry Viktora**, also PMC Connection Senior Instructors. PMC Connection provided the refreshments and set aside an area where the Tucson Chapter members could display their metal clay work and meet with visiting PMC artists.

On Sunday, Feb. 6, the chapter enjoyed an evening sponsored by Rio Grande at the Hilton East Hotel, where Rio's Catalog in Motion show was held. **Jessica Bell** of Rio Grande coordinated the event, which included another opportunity for Tucson Chapter members to display their work and talk with new and experienced metal clay artists from across the country. The group also welcomed **Celie Fago**, **CeCe Wire**, **Sherry Fotopoulos**, **Akira Nishio** of the Mitsubishi Materials Corp., and **Kevin Whitmore** and **Judi Anderson** from Rio Grande.

"We would like to extend our sincere appreciation to PMC Connection and Rio Grande for their generous support, which enabled us to make our idea of a gathering for visiting PMC enthusiasts a reality, not once but twice!" says **Pam Bosch** of the Southern Arizona Alchemists. "The events also helped us cover all the ideas set forth in our mission statement: we provided education to the public, displayed artistic talent, enjoyed mentoring and support of metal clay artists from all over the country, and most importantly, we had a lot of fun. We hope to be able to host similar gatherings next year."



Saul Bellow Award Winners Announced

Kate McKinnon of St. Louis, Missouri, took home the top prize in the PMC category of the fifth annual Saul Bell Awards. The winners were announced at a celebration gala at The JCK Show – Las Vegas in June.

McKinnon's necklace, from her "Spiky" series, was made of PMC3 shapes that had been fired, patinaed, and tumbled, then strung on stainless steel cable with glass seed-bead spacers and 4mm wired freshwater pearls.

The second place winner was **Gordon Uyehara** of HonuDream in Honolulu, Hawaii. His necklace, "Ancient Life," was constructed of PMC3 formed over cork clay and fired. Rolled and stenciled clay formed the backing shape, with surface details carved with needle files. A 7mm amber cabochon formed the piece's "eye."

Finalists in the PMC category were: **Michelle Berlin** of Mosshill Studio in Vashon, Washington; **Linda Kaye-Moses** of Plumdinger Studio in Pittsfield, Massachusetts; **Bianca Terranova** of Biancanova in Groton, Connecticut; and **Wendy Wallin Malinow** of Wallin Malinow Illustration in Portland, Oregon.

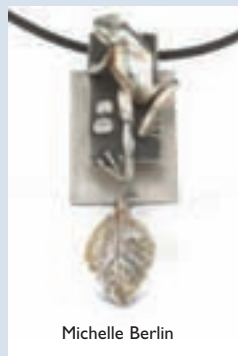
The first place award winner received a \$2,500 Rio Grande Gift certificate, with the second place entrant taking home a \$1,000 Rio Grande Gift certificate. The competition's Grand Prize winner receives a \$10,000 Rio Grande Gift certificate: This year, that award went to **Joost During** of Yoast Silver in Warwick, Rhode Island, for his fabricated teapot, which was entered in the holloware category.



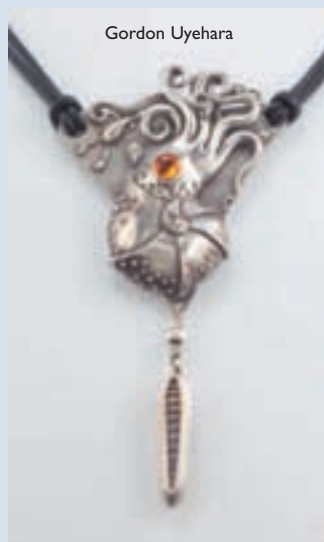
Kate McKinnon



Linda Kaye-Moses



Michelle Berlin



Gordon Uyehara



Bianca Terranova



Wendy Wallin Malinow

The Saul Bell Awards challenges jewelry designers to push the boundaries of creativity in five jewelry categories: gold/platinum, silver, beads, holloware, and Precious Metal Clay. The deadline for the 2006 competition is Sept. 23. For complete competition details, visit www.saulbellaward.com or call Rio Grande at 505-839-3247 or 800-396-9890.

Textures Studio in Berkeley, California, will celebrate five years of teaching PMC with its first all-student exhibition and sale on Thanksgiving weekend. Textures Studio is owned by PMC Guild member **Hadar Jacobson**, an award-winning PMC artist and certified PMC artisan.

The exhibition will include the work of 40 students from a variety of art backgrounds. Visitors will enjoy food, wine, music, and live demonstrations while they

view the displays of PMC creations, which will also be for sale.

The exhibition will be held at Northbrae Church, 941 The Alameda, Berkeley. Opening night is Friday, Nov. 25, 7:30 p.m. to 9:30 p.m., with the show and sale continuing on Saturday, Nov. 26, from 11 a.m. to 6 p.m.

For more information about the show, including directions, visit Hadar's Web site at www.artinsilver.com.

Q What is depletion gilding, and why should I know about it?

A Depletion gilding refers to a process that is used to create a thin layer of pure metal on the surface of an alloy. In the case of sterling silver, which contains 92.5 percent silver and 7.5 percent copper, the idea is to remove the copper, leaving behind a layer of pure silver.

This is usually accomplished through the use of pickle, a mild acid solution used by jewelers. The pickle attacks copper oxide, which forms on the surface of sterling silver when the silver is heated in air. To depletion gild silver, heat the piece until it turns gray. It is then put into a pickle bath, where the acid acts to remove the copper oxide. The process is repeated up to six times, with each repetition removing a little more copper, until only fine silver is left on the surface.

Depletion gilding is of interest to PMC artists because a piece of sterling with this surface layer of fine silver is more likely to bond with PMC, and is easier to clean after firing.

Q What's the difference between tumbling and burnishing?

A Burnishing is the process of rubbing a soft material with a harder one to create a smooth finish. When we rub PMC with a polished steel rod, a glass stick, or a teaspoon, we are burnishing it. The effect is the same whether we're using a tool as large as a bowling ball or as small as the head of a pin — and yes, both of those could be used in the right circumstances.

Tumbling is a mechanical process in which many small pieces (called media) are trapped in a rotating or gyrating drum with work that is to be polished. If the media is made of steel, the effect is burnishing. Instead of one tool making long swipes across metal, in tumbling, hundreds of tiny impacts occur as steel shot of various sizes cascades over the work. In both cases, but especially in tumbling, a mild soap is used to lubricate the process.

Q What happens when I mix scraps of different types of PMC?

A Not much. Remember that all the firing times you read about in firing schedules are minimum times. When we speak of PMC3, for instance, we are saying that it should be fired to at least 1110 °F for at least 45 minutes. All types can safely be fired to 1650 °F for as long as you please.

The downside to mixing different types of PMC is it limits you to the firing time of the slowest-firing version. For example, I have a jar of paste made from all types of PMC. Because part of the paste is made from Original PMC, I need to fire the paste at 1650 °F for two hours to achieve full strength. If I knew for certain that all the scraps in the jar were PMC3, I could confidently fire for a shorter time or at a lower temperature. It could be that the addition of the finer particles of PMC+ and PMC3 will offset this a little bit, but it's too chancy to risk it. I can't be certain of the proportions, or know for sure that the various types are perfectly blended, so I'll need to fire at full schedule.

There are times when I use PMC3 specifically because of its low firing temperature, for instance when working with certain stones or glass. If I combine my PMC3 scraps with other types of PMC, I give up this convenience. Except for that drawback, though, there is no problem in mixing scraps.

Q Tell me again about the white stuff on my PMC when it comes from the kiln.

A I know it looks like a white powder is coating the PMC after firing, but this is not the case. Pure silver appears white to the naked eye, especially when the surface is microscopically irregular. The irregular surface scatters the full spectrum of light, which we see as white. When we burnish PMC, the smooth, highly reflective surface bounces back most of the light that hits it, which we see as bright and sparkly.

Although we talk about “getting the white off,” we should really call this process “flattening out the surface.” In broad areas, this is easily done with a burnisher, steel wool, or by tumbling. Small recesses are a little more difficult to reach: try a brass or stainless steel brush, steel wool, or hand burnishing with a needle tool.

Q Can all PMC be soldered?

A There are two kinds of soldering, a low temperature process that uses an alloy of lead, tin, and other nonprecious metals, and silver soldering (a.k.a. brazing), which uses a high melting alloy of silver and zinc. The former has a few applications for PMC, but is neither as strong nor as attractive as silver soldering. It can be done on all types of PMC, but it is not recommended.

Silver brazing can be done on all three versions of PMC, but it is easier on the later versions. Original PMC has microscopic pores, even when properly fired, and these allow solder to penetrate into the structure deeper than we want. PMC+ and PMC3 are much denser materials, making this much less of a problem.

If you need to solder on a piece made with Original PMC, remove the torch as soon as the solder starts to flow. If you are making a piece you know will require soldering, use PMC+ or PMC3, and fire at 1650 °F for two hours for maximum density. For Original PMC, it's a good idea to burnish the area to be soldered to compact the surface. This does no harm on the other versions, but it is not necessary.

Jewelers with experience soldering sterling will find that the familiar visual cues are missing. Sterling shows several shades of grays and dull reds before it reaches soldering temperature, but fine silver, including PMC, does not go through these changes. For this reason, it's best to solder in dim light, where the subtle red color will be more obvious.

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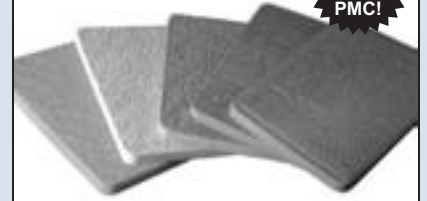
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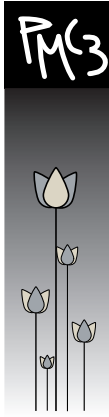
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Ivy Solomon

Textures never escape me. I pull pattern molds from turn-of-the century silverplate, landscapes from vintage buttons, and damselflies from antique sconces.

Like squares in a crazy quilt, I weave the textures into little stories. And, like any good story, it stops people and draws them in.

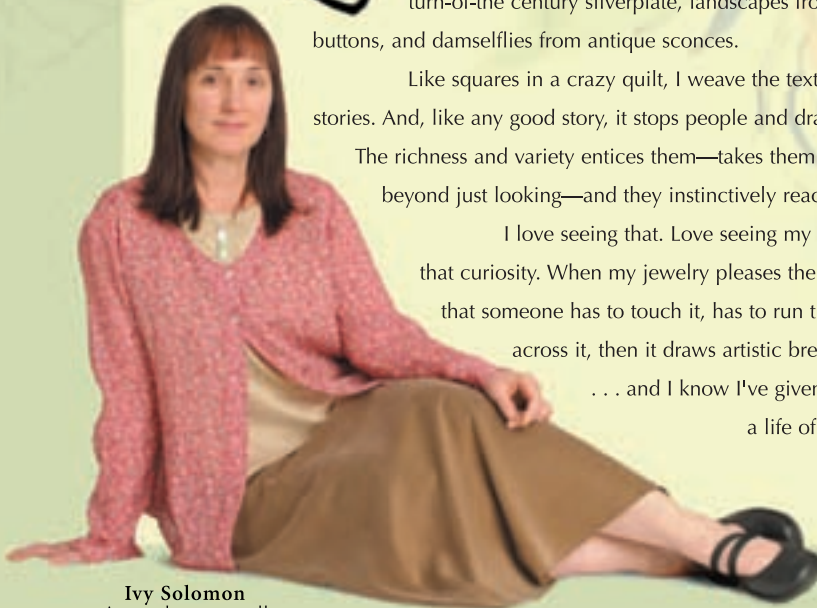
The richness and variety entices them—takes them to a place beyond just looking—and they instinctively reach out to touch.

I love seeing that. Love seeing my pieces arouse that curiosity. When my jewelry pleases the eye so much

that someone has to touch it, has to run their fingers across it, then it draws artistic breath. . .

. . . and I know I've given it

a life of its own.



Ivy Solomon
artist, seeker, storyteller
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