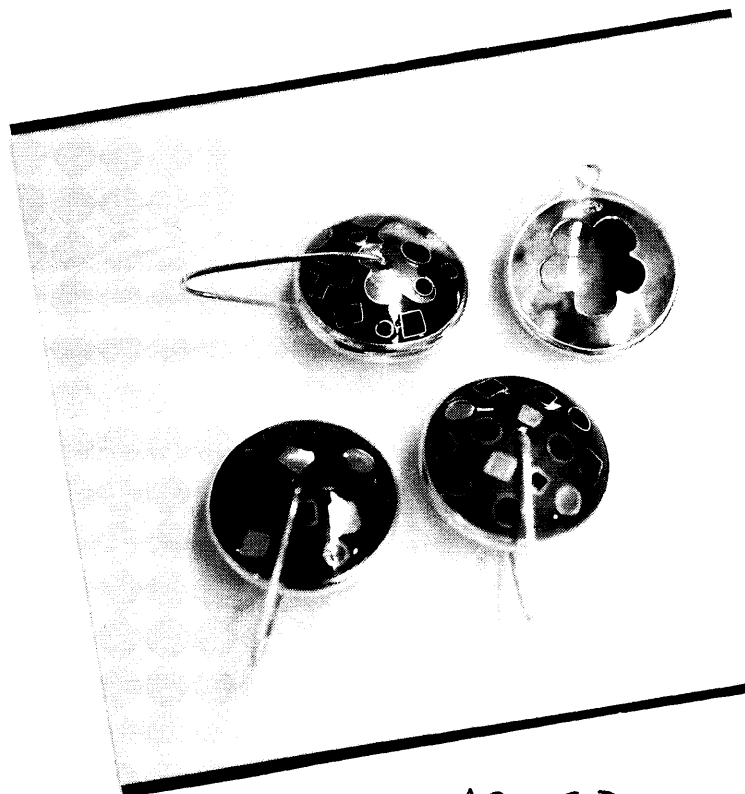


Australian Enamel Newsletter

Issue 58 - October 1999



MARGO CARTER



Beginning my career as a Graphic Designer and seeing the future revolving around computers, I wanted an outlet to create something by hand. I was captivated by the unique pieces of enamel jewellery in a Sydney exhibition called FIRE IN THE HEART. This was to be the inspiration and starting point to my own journey into jewellery and enamelling.

I learnt my silver jewellery skills with two very patient and thorough teachers - Barbara Ryman and Val Aked. I have to be honest and say patience is one skill that has taken longer to master than the skill of soldering. Later I enrolled in workshops with Carolyn Delzoppo - also a wonderful and patient teacher.

I was working full time and wanted more time to devote to jewellery. As luck had it, although I wasn't sure it was a positive experience at the time, I was made redundant - ironically because of computers. I now had the opportunity to negotiate three days a week in a new company and devote the other two days to jewellery. I found a lovely workshop space with a view of the garden. Dads small welding torch, and the gas bottle we used to take on family camping trips, reinvented its life as my soldering equipment. A lovely workbench was built by my father, tools were bought and slowly I gathered up my skills and started to sell pieces.

More positive forces were at work when Carolyn Delzoppo offered me her original kiln. I was delighted. The kiln needed repairing and sat for some time unused. Meanwhile my dentist of all people, who casts pieces of jewellery in his spare time, lent me his kiln while he went overseas for one year. There is something special about the people who share a passion for making. I finally had my own kiln repaired and felt a special spirit came with it, although Carolyn didn't guarantee any quick successes.

Discovering the lost opportunities of counter enamel I challenged myself by making pierced and domed pieces where the counter enamel is utilized as part of the final design. I could explore this avenue for some time but know if I am to progress, I need to move on and experiment with new designs and techniques. Peoples generosity and encouragement give me the motivation I need to keep going. I feel enamelling will be something that will follow me through life and give me and others much pleasure.

As enamellers, you probably don't need to know this, but I have been having the best time watching the Rugby Union World Cup.

It's on all night so I tape it and watch a match with breakfast. I find the Samoan, Fijian, Tongan and New Zealand war challenges most inspiring and I shall emulate them as I go to do battle with my enamelling. Aargh, roar, waving of imaginary spears! Heady stuff!



B. Ryman
Editor

NEWS

☞ An invitational enamel exhibition is being held at the Fremantle Arts Centre in WA.

☞ The Enamellers Association will be having a stand at the Craftmakers Fair at Homebush bay in late November 1999.

AROUND THE MAGAZINES

glass on metal Volume 18, No2. Aug '99.

-how the Enamellist Society was formed by Woodrow Wilson.

-Crossing Boundaries and the Canadian Conference.

-The Enamellists Gallery - a 25 year success story.

-the work of Vivian Kline.

craft arts INTERNATIONAL No 47

-the Contemporary Jewellers Guide. - see enamel images of Cath Large, Debbie Sheezel, Carolyn Delzoppo, Robin Phillips.

-'The Metallic Textile' -fabulous ancient metal Korean inlay techniques by Joung-me Do.

-Portfolio 188 - Robin Phillips.

Metal Stone and Glass

-'Old Fashioned' etching for Basse Taille enamelling by Sandra Kerr.

THANK YOU

Heather Calnan, Arch Raymond.

☞ **The deadline for material** for the next issue is November 23rd, 1999. All articles, comments and news are welcome. Send to Barbara Ryman, 71 George St, Thirroul 2515 NSW.

Ph/Fax 02 4267 2939

Email: bryman@ozemail.com.au

New Enameling Book

Book Review by Sandie Bradshaw and Judy Foreman
(Reprinted with permission from the Northern California Enamel Guild.)

Coincidentally, Judy and I both purchased a lovely book on enameling, *New Crafts Enameling* by Denise Palmer. Denise Palmer studied at the London Guild Hall University where she completed an HND and then a degree in Silversmithing and Jewelry. She exhibits nationally and internationally and teaches at a number of colleges across Great Britain. Her studio is in London.

The photography of Peter Williams is luscious. There is not too much tedious text. The projects are suitable for the beginning enamelist but not the beginning silversmith. Some of the metalworking procedures are rather advanced. And many of the projects require knowledge of and access to materials for photo-etching.

These are challenging projects with lovely designs, especially the pierced plique a jour. Templates are included in the back of the book. The author lists all the supplies and simple steps for each project.

The supplier's list in the back of the book is not helpful to Americans. For instance, the only supplier listed in the San Francisco Bay Area is Goodman's Lumber! Neither Leslie's Ceramics nor even Thompson Enamel Company are listed! Nonetheless, this is a beautiful hard bound book with lots of pictures, well worth the \$16.95 we paid for it.

Lorenz books, Arness Publishing Inc., 27 West 20th Street, New York, NY 10011. (800) 354-9657

TIME TO SURF THE NET!!

From Enamel Guild/ North East newsletter

June Jasen, Marian Slepian and Marianne Hunter are "Silverhawk Web Page Award" winners. The competition is sponsored by Silverhawk Craft Realm of Taos, New Mexico, and is open to artists in all craft media. The main web site is constructed of an exhibition of 47 juried artists. Individuals who win awards are in the internet 'gallery' as well as receiving a site of their own for one year. June and Marianne's sites can be accessed at:

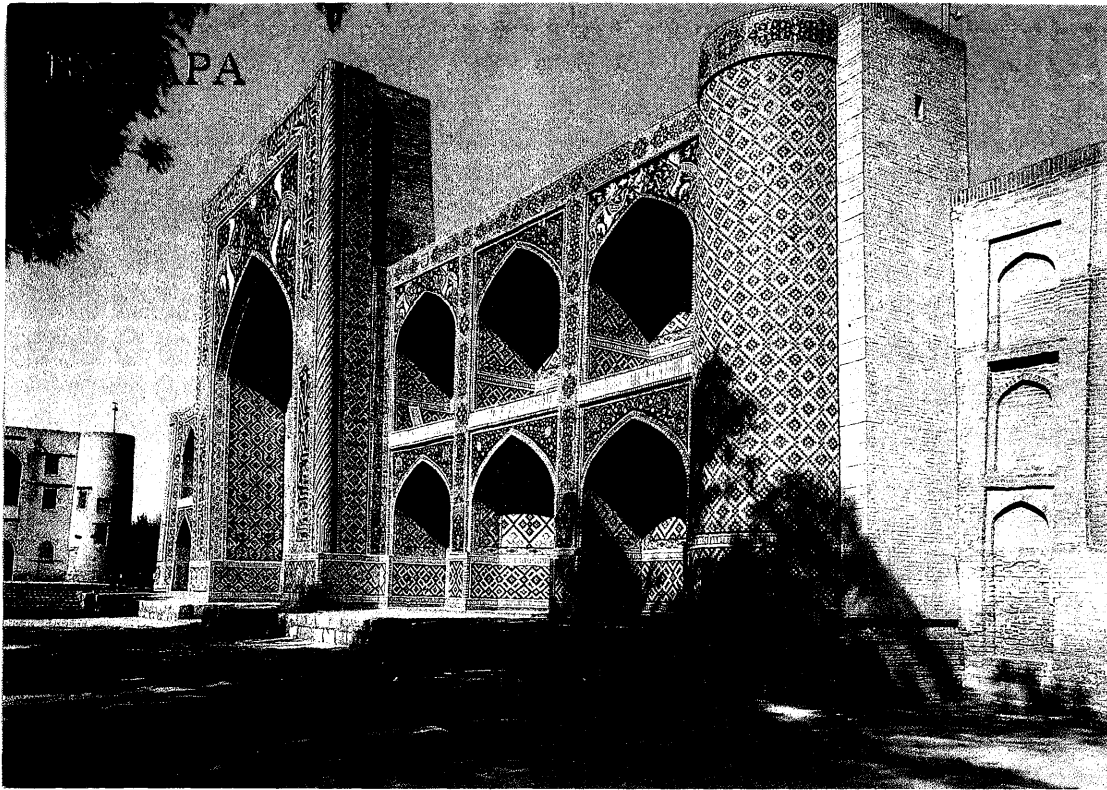
<http://www.silverhawk.com/crafts/ex98>.

Marian's site can be accessed at www.silverhawk.com/ex99/castellano.

From the Northern Californian Enamel Guild.

Charles Lewton -Brain has a web site chat room. The URL for the Orchid site is <<http://www.ganoksin.com/>> Orchid is a free, open,

.....Continued on back page.



A JOURNEY OF SURPRISES

by Heather Calnan

Flying by Uzbekistan airlines (as modern as Qantas), my friend Enid and I left Bangkok for Tashkent. This is quite a modern city - rebuilt after the 1966 earthquake. It has wide tree-lined streets, modern buildings and the 'old town' where remain some blue tiled mosques and "madrassas" (schools). The metro system was an item of pride, with marble mosaic platforms, chandeliers, wall sculptures (where our billboards are placed), and mosaic tile columns.

The next surprise was men, or young people, giving us our seats! The hotel was also resplendent in marble and very comfortable. We had our own car, driver and english speaking guide, in each of the cities along the silk route. The country produces cotton, cereal crops, silk carpets, and beautiful craft work. Bukhara has enamels in the old Russian style and, as we found in most countries, very little on show for sale.

The guides gave us three thousand years of history as we explored whole towns with endless, superb, mosaics - the intense blue and turquoise of domes against deep blue skies was unforgettable - many more than I have seen in Iran or Turkey. The streets were all swept clean (no paper and plastic), and people happy and friendly. They belong to a liberal Moslem group - no veils, no covered arms (and another surprise) dressed mostly in vivid velvets, sequins, and even lame, on women in daytime markets, selling bright red tomatoes, carrots and cucumbers - basins of butter, cream cheese, nuts and spices - colour everywhere.

Changing money was fun. 350 of local currency to US \$1 - it made a very large parcel! Uzbekistan received

independence from Russia in 1991 - Samarkand, Bukhara, Khiva, and Tashkent, were all different, but all had plenty of interest for about three days in each.

From there we flew to Moscow which had some aspects of the old grandeur in hotels, ballet, and buildings - they are however very poor. The Armoury had some wonderful displays of jewellery, clothing, silver and some enamels. We both enjoyed the old capital of Novgorod and travelled there by modern train overnight. Lovely spring-time trees, parks, and walks along the river to our new hotel. Then by car to Petersburg - this was where Katherine the Great assembled a wonderful collection of art. Inside these fabulous buildings much restoration is progressing, and the palaces interiors, with gilt, carpets, furniture, painted and tapestries, and wonderful parquetry floors throughout, were unforgettable.

Russia has kept painting crafts (as in Icons) alive by producing small paper-mache boxes with fine paintings of fairy-tales and many subjects on the lids. These were very reasonably priced considering the workmanship.

The last part of our trip was by bus and train down through the Baltic states. The charming old towns of Tallin, Riga, and Vilnius, are all slowly recovering from Soviet rule. We found two or three days in each was worth while and not expensive. Finally down through Poland, Warsaw, Krakow, and Zaczopane, to Prague, then a flight home. Six great weeks I can recommend to any would-be travellers. We travelled with a firm called "Russia and Beyond" and can say we had no problems - two "over seventies", and found it much less expensive than western Europe.



PMC CLAY with Kathleen Browne - by Barbara Ryman.

Kathleen Browne is an Associate Professor of Art and head of Jewelry/Metals/Enameling at Kent State University, Ohio. She exhibits widely and her work has been reviewed and/or featured in such publications as "Metalsmith" magazine, "New Art Examiner", "Dialogue" and the "New York Times." Ms. Browne has been awarded four Arts Council Fellowships, one from Illinois and three from Ohio where she currently resides.

I gave a brief review of this workshop in the last AEN and I would like to reiterate how hilarious and enjoyable it was. After the preceding frantically busy conference, it was very relaxing to 'play' with clay but I very quickly found that this medium had many exciting and interesting possibilities and applications.

Precious Metal Clay is a relatively new product which has Fine Silver or Fine Gold suspended in a clay like medium. It is very fine grained and is wonderfully malleable and takes extremely clear impressions of textures and patterns. I believe it will soon be produced in a wider range of gold and silver alloys. PMC is fired in a kiln for about two hours and the binding medium burns off to leave the metal residue. It must be remembered the piece will shrink by forty percent but no detail will be lost, in fact any texture will become crisper and sharper.

We bought lumps of PMC fine silver clay, about the size of a walnut (1 oz) and these were wrapped tightly in clingwrap and inside a little plastic box. This small amount, with care, can really go a long way. I started to think, in terms of my own work, that I could best use the clay for small sections of texture or an occasional detail that I wouldn't want to bother to get

cast. This would be economical and convenient. We did see plenty examples of larger work such as vessels, and it can be used to make rings so it does have structural strength. Apparently a ring can stand some hammering on a mandrel but too much pressure and it will break. I would think that this material could really be useful for people who don't have a lot of metal work skills.

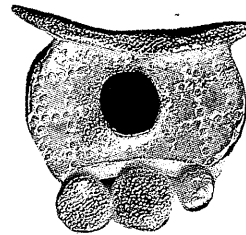
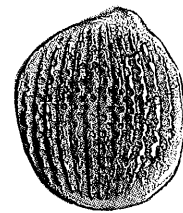
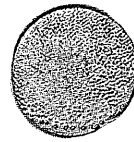
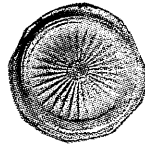
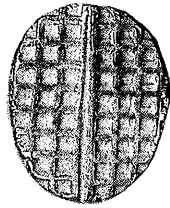
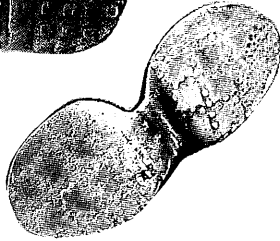
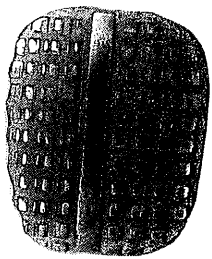
After firing, PMC clay can soldered using all grades of solder. The material remains porous so once the solder has run, heating must stop immediately or the solder will disappear.

PMC can be enamelled on too. When the clay has been fired, it has a dull surface that needs to be polished. For enamelling, the areas to take the enamel needs to be polished by burnishing. This makes the surface shiny by compressing the porous surface and the enamel will more successfully stay on the surface rather than being absorbed. We saw a few examples where enamel and even terracotta clay were mixed in with the PMC clay and then fired and this gave rise to some interesting effects. With such a new material, people are trying out all sorts of crazy and interesting things.

Working the Clay:

The clay dries out easily so you take out a small piece. Put a dab of water on the remaining mass and rewrap with plastic. Partly dried clay can be worked back up to full moisture but if the clay dries out totally, it can't reconstituted it but you can make it into a slip and paint it on as texture. Dried scraps can be mixed into a slip and put into a syringe and you can draw and dot with it. The mixture needs to be just right and I would think some experimentation would be required to find a workable consistency.

EXPERIMENTING WITH PMC



We had a simple collection of tools such as toothpicks, olive oil, plastic sheeting, a craft knife, a small square of perspex and textured surfaces and buttons. The clay can be rolled, worked freely with your fingers, made into three dimensional forms and impressed with patterns.

To roll the clay, place between two pieces of plastic and using a short length of stout dowel to roll out the clay (a plastic A4 pocket insert can be slit up one side to make a two sided sheet). A more even layer can be rolled by using a strip of cardboard either side of the clay to support the roller. We rolled our clay out to about 1.5mm thick. The plastic sheet helps to retain moisture.

Put some olive oil in a lid so you can easily dab a little olive oil on your hands to help keep the clay moist. Your hands will pull moisture out of the clay very easily if you don't. It's good to have some gladwrap to put over your working piece and scraps. When using the perspex slab to work on, oil it a little as the clay tends to stick to that.

To join clay pieces together use a little water on a fine paintbrush and run the moist tip along the join. It sticks together really easily.

The clay is beautifully malleable so a light touch is needed to work it. When it dries to leather hardness it can be carved and this will produce sharp lines and forms.

Dry the finished pieces on unglazed ceramic tiles on top of the kiln (the tiles could probably be obtained from a china painting supplier). Small terracotta dishes (the ones you put under pot plants) are used for holding larger pieces that need support to prevent slumping.

Support is provided by Alumina powder (Alumina Hydroxide or was that Hydrate? and can be purchased from pottery suppliers.) or Vermiculite (from garden centres), used. Vermiculite is better for nestling forms in and the Alumina powder is more suitable for hollow forms as the powder is able to squeeze up and out of a hollow form more easily. Not all hollow shapes need support. A dome about 1cm high by 2cm in diameter can support itself if placed rim downwards.

Findings can be embedded into the wet clay and fired into the PMC. They need to be well seated to allow some small edge of clay to shrink around and hold it on. The same technique can be used to incorporate a cubic zirconium in the clay. We used sterling silver for this but there is the danger of it melting. Some jewellery investment powder can be mixed to a pancake consistency and little painted on to protect the finding. If soldering with PMC and then pickling, the piece needs to be boiled up in bicarb and water to neutralise acid that may have gotten into the porous structure.

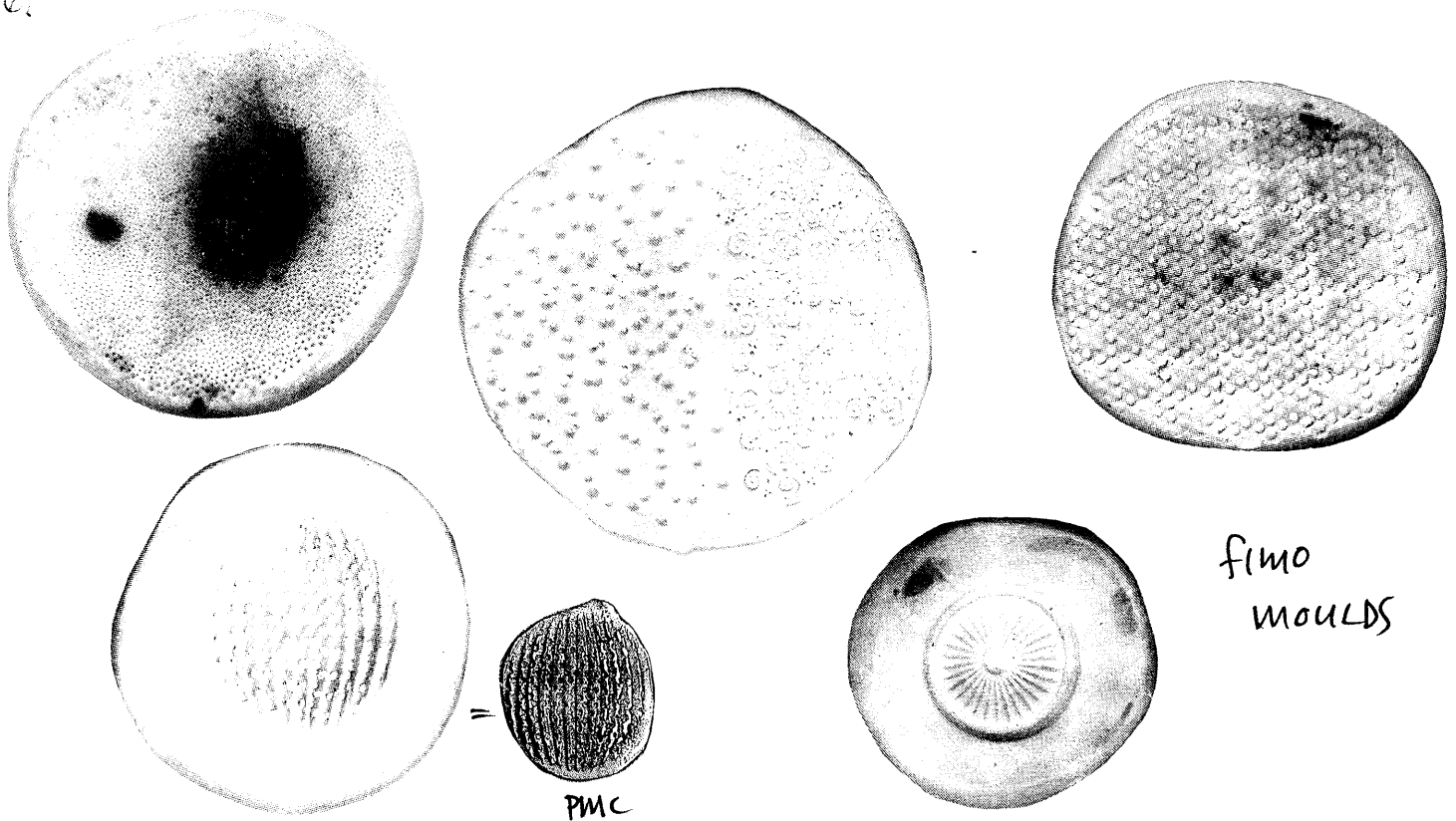
To fire:

The clay needs to be fired at 1650 F/ 900 C for 2 hours minimum to 2 1/2 hours. It must be held at 900 C (with a little leeway - we edged up to 950 C) but it will melt if overheated. I don't think findings could handle too much extra heat. You can use a burn-out kiln but we used a Neycaft Kiln and that was fine. You do need a kiln with a pyrometer and you can use ceramic cones from pottery stores to test the accuracy of your pyrometer.

The ceramic tiles holding the PMC work can be laid directly on the floor of the kiln. We used tongs to put them in and out - I guess a metal spatula could be useful too. Timing of the firing starts from when the kiln returns to temperature after putting the work in.

If adding glass or enamel to the PMC object, the glass/enamel will melt and can flow and soak through the porous PMC clay. You can use mica and/or the alumina powder underneath to prevent the glass adhering to the tile.





fimo
MOULDS

Making Moulds:

I had as much fun making moulds as I did working with the PMC clay. We used Fimo and also another material called Sculpty which is virtually the same as Fimo but a little easier to work (I don't know if this is available here). The great thing about making moulds is that you can use them repeatedly to reproduce a texture, pattern or shape and the mould material is easy to get, cheap, durable and you only need a kitchen oven to fire it (actually we tried firing it in a low kiln but they started to cook and filled the room with noxious fumes and we had to run away, so just use the oven!). Just keep in mind the shrinkage rate of 40%.

Rubber stamps, buttons, beads, natural objects, can all be used to create patterning. Stamps can be made using a lino cutting tool and carving into a rubbery material (used to make stamps for textile printing).

Making Beads:

We used tissue and masking tape wrapped around a central wire. The wire was removed before firing and the paper burned away in the kiln. I made a fairly squishy, soft core and shaping the clay was less controllable. About a 16g thickness of clay is good. I ended up using quite a lot of clay on my bead and made it quite heavy so I found it a bit wasteful. If making larger beads, you may find a paper core will burn out too quickly to support the bead during the two hour firing - experiments required.



PMC BEAD

Polishing:

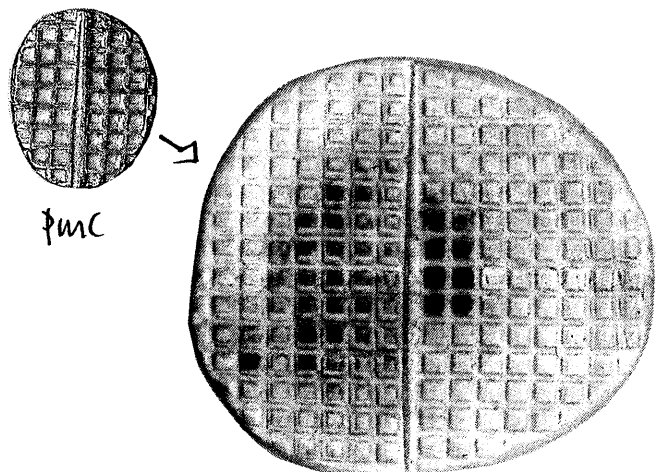
After firing, the clay has a matte surface and we started off by polishing our pieces with a brass brush and detergent. This produced a gentle polish and looked great just as it was. In addition I burnished some high spots to create some very shiny highlights. The pieces can also be polished in a tumbler.

The polished work can be oxidised with Liver of Sulphur or Silver Black and rubbed back with a rouge cloth. If you oxidise first and then tumble polish, the surface can look like polished iron.

There are many possibilities with this material and a small amount of clay can be used to produce a large range of experiments.

PMC Clay is available through RIO GRANDE
7500 Bluewater Rd NW,
Albuquerque, New Mexico 87121-1962
Fax 24 hour a day - 1-880-654-4859

Another similar product called Art Clay is just being stocked at Fordels in Sydney. Their no is 02 9264 3677. They might have a fact sheet.





EYE PROTECTION INVESTIGATION

Is Eye Protection Really Necessary and If It Is, What Are the Best Products? by Pat Johnson

(Reprinted with permission from BSOE Glass on Metal Artists Summer 1999)

Recently the possibility of enamellers suffering eye damage has been much written about, but very little specific information has been on offer. No studies are quoted, no references to scientific investigations have appeared as footnotes.

In an effort to find out some concrete information on this subject, I have searched the internet as thoroughly as I know how. Hard evidence is almost impossible to find, although I finally did come up with one authoritative study. (See below.) This report was full of information, but applied only to the case of one particular man.

Obviously, to establish the specific risk of eye damage to enamellers, a study would have to be done which compared the incidence of enameller's eye problems with that of the population as a whole. This has not been done, but anecdotal evidence abounds. I quote below part of an email I received from the States:

'I started enamelling professionally in 1972 and didn't wear any eye protection until 1981 when I first heard about calor lenses and their ability to filter out the specific width of infrared which can harm the eye during enamelling. In 1984 I was diagnosed with a posterior subcapsular cataract in the centre of the lens of my right eye only...there appeared to be no specific cause...one article in Glass On Metal (reported) a study in which rabbits were exposed to a high dose of the same band width infrared as myself and developed the same kind of cataracts...my doctor went to the local VA hospital and in her research found more links to intensive IR exposure and cataract development...The cataract forms as the eye is exposed for several seconds to the heat of the kiln as the door is opened and closed.

The exposure has to be repeated, heating up and cooling down the front of the eye for several hours a day over a long period of time. I had the cataract in only one eye because of the way the kiln door was hinged...'

A sobering account, but it can be compared with the experience of a jewellery enameller in the UK who says that he has been firing at 1000 degrees centigrade every day for decades, with many firings a day during which he watches with unprotected eyes throughout the firing to determine exactly when to

remove the work from the kiln. He has no eye problems, never even suffered from eye dryness, and he does not know that any of his colleagues either take precautions or suffer any kind of eye damage themselves.

Another craftsman in the US, a man making glass products whose techniques employ a kiln very like an enamelling kiln, took the rational step of asking the National Institute for Occupational Safety and Health (NIOSH) to investigate his workshop and practices. During their investigations the kiln door was opened for a period of five seconds at a time. In the summary of their report NIOSH state that 'UV and visible radiation did not exceed applicable standards, although it was possible to be exposed to excessive IR levels.' This is in line with the experience of the enameller who developed cataracts, specifically that IR radiation, i.e. heat, would be the chief cause of eye damage for workers in this field. (Note: anyone can contact me for copy of this report, with its wealth of information about requirements for eye safety.)

The subject of the NIOSH report subsequently found a source of gold coated polycarbonate didymium glasses of the type recommended by NIOSH as suitable for people working with kilns. He now sells these glasses from his web site <www.glassschell.com>, at a cost of about \$30. I have a report from one enameller in the States who compared these glasses against the cheaper calor glasses and found that her eyes were much more comfortable after enamelling with the gold plated lenses.

Lisa Hamilton, a former student of Elizabeth Turrell, also attempted to research the subject of eye protection for enamellers. She found, after contacting several experts in various universities and institutes, that no solid research has been done in the area. Lisa did locate a source of glasses, which cost \$10 at the time, which seemed superior to X-dark Calor lenses, in that they transmitted only 14% of the visible light. (Contact Pat Johnson for details).

But is all this protection really necessary? The main danger to enamellers, according to the NIOSH report, is IR radiation, i.e. heat. This can be readily detected, and over-exposed eyes often react by feeling dry and itchy. And apparently, a great deal of repeated exposure is required to do any damage. In general, wearing any kind of glasses while enamelling would provide protection against the greatest danger, IR radiation. But psychological comfort must be considered here too. If wearing protective lenses enables an enameller to be free of worry while enamelling, then they are worth it. I will wear mine, but feel relaxed about taking them off for a quick look inside the kiln to see if the work is ready to come out.



THE PLEASURE OF PARTICIPATING IN WORKSHOPS - ENAMELLING WITH DEBBIE SHEEZEL by Barbara Ryman.

The Enamellers Association held a three day workshop in September at Mary Raymond's house in Lindfield. Debbie was demonstrating the methods she uses to make her beautiful bowls that depict coral reef scenes and flowers.

I have become a bit of a workshop junky as I just love hanging out with my enamelling mates. Many of the enamellers in the Association have about a thousand years of enamelling experience and I am always amazed at the depth of their knowledge and their nonchalance at all this experience and information they hold in their care. So you can see it is fascinating to spend time with this group.

I had a slightly different idea I wanted to try out while protected by the safety net of the Association. I am not much good at working on copper and I confess to being just a little nervous every time I go to use it. I have attended a variety of workshops over the last six years and have gradually been building up some knowledge and experience by producing various test tiles. I had a couple of images in mind and could never quite figure out how to produce them. You know how it is - you work out some of the process but one or three important details are missing.

Well somehow this time, all that information that I had gathered fell into place. Couple that to the fact I had the support of all my class mates. When working on my bowl, I had my 'team' on hand to nurse me through basic things like firing, spraying with glue and sifting and what colours I could use for what I was depicting. It was hilarious and I thank them all for their indulgence at my gummy uncertainty. They all thought I was mad because I am perfectly able with metal work and enamelling on silver. I've talked to other silver enamellers about this and they too find copper challenging.

The conversations that happen around you in a workshop are often entertaining and informative and so specific to enamellers that an outsider would be puzzled. At one stage we were discussing enamel colours - over the years colour formulas change, colours disappear, new products are made - someone mentioned ".....(a colour code number), what a beautiful colour that was" and a nostalgic sigh and murmur of agreement went around the room. It was one of those esoteric enamel moments. With enamellers, you can practically have a whole conversation based on enamel colour numbers or their names.

Now, everyone else who was actually devoting themselves to the workshop topic, were producing some very impressive pieces. Debbie showed some

very nifty ways of using silver foil, fine line black and P3. I've fallen in love with the possibilities of P3.

Amongst all this activity, Debbie sat quietly working away on demonstrations and fielding a multitude of questions and steering a calm ship through occasionally ruffled enamel oceans. Observing the way someone like Debbie Sheezel (or any tutor) works is a lesson in itself - I think, seeing an unfamiliar technique performed by somebody who has perfected it over time, if one observes the rhythm and movements involved in its application, it can visually and subconsciously provide a breadth of information.

Thank you Debbie, the Enamellers Association, Mary Raymond and my co-enamellers for their knowledgeable and immensely good company.

Web Sites continued.....

electronic forum for jewelery manufacturing methods and procedures. The postings are geared toward the professional jeweler but in the "digest" posted in the site there are lots of tidbits about enameling and about things of interest to enamelists.

NCEG members Linda Crawford, Judy Stone, and Pilar Castellano are 3 of the 4 awardwinners in this year's Silverhawk On-Line Exhibition. You will be able to see their work, as well as the work of past winners in the enamel category, at <www.silverhawk.com> (click on "Call for Entries" to access this year's winners).

The Kunstverein Coburg, which sends its newsletter to 500 enamelists, has a new website at <<http://home.pfaffenhofen.de/em-enamel/>>. The site is mostly in German, although Edmund Massow, who is in charge of the site, reads and writes English. Many of the listings under links and workshops are in English.

Northern California enamelist, Merry-Lee Rae, has a web site at <<http://www.merryleerae.com>>, which is intended to be a primary marketing site for her work. Check it out!

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