

Australian Enamel Newsletter

Issue 45

August 1997



I was given a good opportunity to study and work with enamel in September 1996 when I was studying Jewellery Design at the Enmore Design Centre. After five weeks studying enamelling I was totally attracted to it because I could express ideas in colour that I had never been able to successfully achieve in metal. I love nature and all its colours so a lot of my works were about our environment and the beauty of nature.

I was born and grew up in China. I was strongly influenced by the Chinese culture and also by my parents who both can draw and paint well. Since I was very little my father started to teach me wood and stone carving but I wasn't allowed to study art further as my parents said I would have no future with it. At school I was no longer allowed extra time to draw so I thought my art life was going to end there. There would be no colours, paint brushes, tools for carving and no pleasant sensations any more.

I came to Australia in 1992. I started to pick up the bits and pieces of art skills I thought I had lost. I got into the Jewellery Design course after I did my HSC in 1994. Valerie Aked was my first teacher in enamelling. She gave me a lot of courage and has been wonderful to me. During the five weeks of learning enamel, if it hadn't been for Val my first piece of enamel would have never been made. I attended Carolyn Delzoppo's enamel workshop this July and it was a pleasure to meet and learn from her. The techniques she taught me were very new and it was an invaluable experience.

I like to contemplate my subjects carefully before I design and choose colours. Moreover, I always design the backs of my work. I think the backs are very personal and important to me. It is something I do for myself. The colours in my work range from pastel to vibrant tones. My design partly reflects traditional Chinese folk art and I also incorporate design of a modern society.

It is fascinating for me to see people's work and understand their ideas because I can always learn something new. It is only the beginning for my learning, practising and studying of enamelling. Gaining good skills and knowledge of enamelling will take a long time, however because of my love of the art of enamelling and my thirst for learning, I can put all my heart into it and try my best to achieve.

Grace Zhao's enamels have been displayed in her colleges exhibition and the National Enamel Show, both at Craftspace Gallery, and an image of her enamel brooches has been used in TAFE's Art and Craft courses advertisement in Craft Arts magazine.



OPPORTUNITY TO EXHIBIT

I know most of Australia doesn't have what could be called a serious winter but it's been a bit grey of late and isn't it gorgeous when we get a clear sunny day. Just find a protected spot and warm your bones. We've some good feedback on kilns for Alexis Buckby (and us too). If there's no sun, turn on the kiln and enamel and keep warm at the same time!

B. Payne
Editor

NEWS

- Jill Parnell had an enamel panel displayed in the El Mon de l'Esmalt exhibition in Salou, Spain. Also exhibiting were Hiltrud Blaich and Edmund Massow.
- Sandra Kerr is going to be the associate editor for glass and beads for Metal, Stone and Glass. Congratulations Sandra.
- Anna-Margot tells us the opening dates for "Painting with Fire" has changed to 6th Sept, 4-8pm.

WANTED TO BUY

Betty Wilson would like to buy some Thompson lead bearing medium firing Flux and some Uhlig transparent Light Red.

Also, does any one know where I can buy black silk cord, suitable for pendants. (the editor would like this info too)

Betty has had some difficulty in getting replies from Glass on Metal when enquiring about a missing magazine and when querying if a subs cheque had been received. To check through the bank would have cost her \$20. She would like to know if any one else has these problems.

- Things do seem to take ages to sort through when dealing overseas, especially when goods are coming surface or sea mail. I try not to think about it and most things arrive eventually. But when something does go astray, it would be comforting to know ones letter of enquiry had actually reached its destination and was being dealt with. -Ed

THANKS

AEN would like to thank the following contributors to this issue: Heather Calnan, Carolyn Delzoppo, Roy Fettke, Sandra Kerr, Joan Millton, Mary Raymond, Betty Wilson.

1997 18th BIENNIEL CRAFT EVENT -

At the Mornington Peninsula Regional Gallery will be held from 7 December 1997 - 25 January 1998. This year there is a total of \$9,500 available for non acquisitive awards.

Entry forms, slides and an entry fee of \$20 are due by Friday 12 September. For an entry form and information Phone (03) 597 4395 or Fax (03) 5977 0377.

AROUND THE MAGAZINES

Craft Arts

In Issue no.40 there are two excellent articles on enamelling, one being on Carolyn Delzoppo and her latest collection of work that is going to exhibit in Germany, the other on Val Aked and her Plique-a-jour work.

Glass on Metal

Includes an article on Jenny Gore, who will be conducting workshops at the US Enamelist Conference in October 1997.

Antiques in NSW

(a free magazine from antique stores) has a small article on enamel on page 15.

NEW PRODUCTS

From Thompsons,

Pre-Enamelled copper boxes -Bases and lids available with white or green enamel; ready to be painted. Round, 2" and 3" diameter with gold plated metal rim parts. Example price : 2" diameter US \$29.

Enamelled Steel Plates -Thin steel (015", 28g US) with ground coat and white on face side, ground coat only on rear. Squares and rectangles of various sizes available. For example, 6" square : \$2.75.

Anna-Margot Originals - has a new catalogue out.

There are a few new extra items not in the catalogue. Ceramic mortar and pestle, mica sheets of various sizes, Brass sheet(260 & 1/2 Hard, 70% Ca 30%Zn, Melt 1749 F(94 C) in various sizes, and plastic bags in a range of sizes.(more details from Anna-Margots)

SUPPLIES

A&E Metal Merchants-

Are having their once a year sale on all standard sterling silver sheet and wire at 49 cents per gram (includes sales tax).

WORKSHOP REPORT

After the success of the first workshop at Inverell the word spread and I found myself again with 11 students, five of whom had attended the previous session. Two of my "new" students were the art teachers from the high school who had been given the day off to learn about the lead free enamels which they had in their storeroom and didn't know how to use.

In the first workshop I had taught various techniques for enamelling bowls. Since I had five of the same students I felt it appropriate to start them on something different. The plan was to show them how to use ferns and leaves as stencils to create a design on a copper tile and utilising the oxides formed in the first firing. The idea was that while these were drying we could move onto the bowls that they all wanted to do.

We had just reached the stage where we were committed to the two pieces when we discovered that the big china-painting kiln which we had used so successfully the first time would not come up to temperature. This meant that all firings had to be done in my little JEKO! To my way of thinking the workshop became rather chaotic after that. The temperature of the kiln kept dropping with so many firings being pushed through and work that was drying was being bumped and needing repair because of the time lag in firing.

At 5pm my husband Arch returned from a very enjoyable and productive day of photography and announced that he would be dragging me away at 6pm. One of the teachers volunteered to stay on and help everyone with the remaining firings and I believe they did not finish until 8.30pm! I did not feel as satisfied with this day as with the first but most people finished their pieces eventually and were happy with the results.

The outcome of all this is that there is now a group that meets every week for an enamelling session and they love it!

Mary Raymond.

Enamel Medium for Fine Art by Margarete Seeler

ISBN: 0-8059-3942-3.hardcover, 312pp.

To order write to Dorrance Publishing Company, Inc., 643 Smithfield Street, Pittsburgh, PA 15222. US. Ph (412) 288 4543, Fax (412) 288 1786. It costs US\$55 plus \$5 shipping.

You can also try ordering it through your bookstore.

REVIEW

Book Review - Enamel Medium for Fine Art by Margarete Seeler

This is an oversize book with very good photography. Margarete promised a coffee-table quality art book, and I think her Heirs have delivered.

I don't quite understand her diagrams of how to test for skin tones. Her written explanation is more understandable than the diagram. She did not, in general, give step-by-step directions as in her first book (The Art of Enamelling-Ed), but rather she gave guidelines for inspirations for your own projects and overall artistic philosophy. I can mentally hear her say all this in her delightful German lilt. I think that there are delightful gems contained in the text, such as why she would have matted the surface of skin tones versus leaving surfaces shiny; however, the lack of an index is an unfortunate omission.

As an adjunct to her earlier book, this is certainly a must have book for an intermediate to advanced enameller, but it would not guide a beginning enameller into the field. The step-by-step section for champléve by Audrey Komrad is a rather delightful addition and very clear. all in all, a very beautiful book.

Sandie Bradshaw

(Reprinted with permission of the Nthn. Cal. En. Guild)

Australian EnamellinG Newsletter
71 George St Thirroul NSW 2515

Subscriptions - 6 issues per year

Regular - \$20.00

Student - \$10.00

New Zealand - \$25.00

International Economy Air mail - \$25.00

The deadline for material for the next issue will be Sept 23rd 1997. All articles, comments and news welcome. Send to Barbara Ryman, 71 George St, Thirroul 2515, NSW.

ACID ARTICLE FROM 'THE ENAMELLIST', CANADA -

FINAL



FERRIC CHLORIDE - Continued



INGESTION: Salivation, intense thirst, difficulty in swallowing, chills, pain and shock. Oral esophageal and stomach burns are common. Potential for circulatory collapse is high with ingestion of Hydrogen chloride.

Long Term Exposure - to low levels greater than 5 P.P.M. can cause dental erosion, apart from that, no long term effects have been associated with low level exposure.

* * Make sure when using Ferric Chloride that it is completely neutralized before you put the piece into the kiln as it will turn into hydrogen chloride and if your kiln is not vented, you'll get it right in the face when you open the kiln door. * *

MEDICAL TREATMENT for Ferric Chloride and Hydrogen Chloride Exposure

SKIN: Wash well with lukewarm water and soap for at least 15 minutes.

EYE: Proceed immediately to eye wash station. Remove contact lenses. Immediately flush with water for 15-30 minutes holding the eyelids open. Get immediate medical help.

INHALATION: Remove to fresh air. If breathing has stopped give artificial respiration. Get immediate medical attention.

INGESTION: Drink large quantities of milk or water (24-32 ounces). Do NOT induce vomiting. Get immediate medical attention.

NEUTRALIZING & Spill Cleanup for Ferric Chloride and all other acids is the same as for Hydrofluoric Acid.

NON TOXIC ALTERNATIVE - Learn Hand engraving

PROTECTIVE CLOTHING is the same for all these hazardous chemicals.

There are no known carcinogenic or reproductive effects from the use of Nitric, Sulphuric and Ferric Chloride.

AMMONIA

USES in the enamellists studio - Neutralizes Acid.

As stated ammonia is an alkali and as such will neutralize acid, it is also corrosive.

POTENTIAL HEALTH HAZARDS

SKIN: Solutions of 2% can cause burns and blisters after 15 minutes of exposure. The burns may be slow to heal.

EYE: If not flushed with water immediately, contact with eyes may cause partial or complete blindness.

INHALATION: Inhalation of the gas can produce severe alkali burns of the airways and lungs. Household ammonia contains 5-10% ammonia and rarely causes severe burns.

INGESTION: Ammonia will cause pain if swallowed and burning of the throat and stomach. May cause vomiting. One teaspoon of 28% aqueous ammonia can cause death.

LONG TERM EFFECTS: No chronic long term effects have been reported in humans.



AMMONIA - Continued



MEDICAL TREATMENT:

SKIN: Flush with water.

EYES: Proceed immediately to eye wash station. Remove contact lenses. Flush eyes with water for 15 - 30 minutes holding the eyelids open. Get immediate medical attention.

INHALATION: Remove to fresh air. Give artificial respiration if unconscious. Get immediate medical attention.

INGESTION: Get medical attention immediately. Do NOT induce vomiting.

METAL FUME FEVER

Under intense heat, some metals (notably zinc, copper, cadmium, lead, mercury, tin and nickel) may volatilize and burn to finely divided airborne particles of metal oxide. Inhalation of freshly formed fumes may produce an influenza like illness called metal fume fever. Signs and symptoms include chills, fever, malaise, generalized aches, dry cough and sometimes nausea and vomiting. Typically the disease has an acute onset and short duration. Metal fume fever can be avoided by working in a vented kiln.

LEAD AND OTHER TOXIC ENAMEL ADDITIVES

The addition of lead to enamels provides clarity and sparkle, it also provides additional health hazards. These can occur mainly through inhalation and ingestion of enamel dust and the inhaled lead vapours from unvented kilns. Certain colourant oxides contain hazardous materials which are toxic by inhalation, ingestion and as airborne particles of that oxide when the enamel is fired.

Some of the toxic oxides which will provide you with a workplace hazard are as follows:

LEAD compounds - Harmful by inhalation and if swallowed. Danger of cumulative effects.

ARSENIC - Toxic by inhalation and if swallowed. May cause cancer. Danger of serious damage to health by prolonged exposure.

ANTIMONY & BARIUM Compounds - Harmful by inhalation and if swallowed. Danger of serious damage to health by prolonged exposure.

CADMIUM Compounds - Harmful by inhalation, in contact with skin and if swallowed.

PERSONAL PROTECTIVE MEASURES

INHALATION: Wear a respirator mask for airborne silica when dry sifting all enamels. Use under a vent fan if possible. Wet clean your work area frequently. Vacuum do NOT sweep.

INGESTION: NEVER lick your wet packing tools, NEVER eat or drink uncovered beverages in your studio. Use a vented kiln to avoid inhalation of toxic airborne particles. Avoid overfiring. To avoid the toxic effects of lead, use lead free enamels. To make sure you are not accumulating lead in your body, have blood lead levels checked annually.

An informed enamellist is a healthy enamellist. Take all precautionary measures when working with toxic substances. Many enamellists use toxic substances on a daily basis without an accident, but all it takes is one accident (particularly with Hydrofluoric Acid) to spoil your day. Develop and use safety procedures in your studio until it becomes second nature.

Work safe, play safe, stay safe.

Happy Enamelling!

From Sandra Kerr, Narrabeen NSW.

I have a Hi-Fire kiln custom made by Eric Cauvin. This is excellent from my point of view for enamelling and small glass pieces for jewellery. The heat control is not computerised so although I can control the temperature for enamelling, in order to put glass through its slow temperature rise and descent, I have to stay by the kiln and do it manually. I have had the kiln for five years now and it's like brand new. I think a kiln like mine would now cost \$1500 or more. I traded in a kiln that had been barely used - it was more suitable for pottery than enamel. It was front loading with a door that opened to the right hand side and left you standing in the full blast of the heat when the door was opened. The Hi-Fire kiln is front loading with a very light spring loaded door that lifts up with only the effort of a couple of fingers and protects you from the main heat blast without loss of viewing. I use a normal garden fork for stability when loading the kiln but the handle is home made with a little extra length. I don't find it necessary to use asbestos gloves or any other forms of protection when using this kiln, not like some I've been around. My two old small kilns, still the ones I use most, are Jekos which as far as I know are know longer made. One is over 30 years old. They are excellent but have no form of temperature control, only the on/off switch.

The exterior measurements of the Hi-Fire kiln are 43cm wide, 40cm high and 47cm deep. There is a power element on the side and a separate Brainchild heat control which is graduated in 20 C jumps. Interior measurements are 28cm wide, 23cm high and 30cm deep. The model is HF68CF. Volts 240, Amps 10, Power 204KW and Maximum temperature 1000 C.



KILN CORRESPONDENCE

Kiln Report - reprinted from AEN issue no. 21 August '93 by Carolyn Delzoppo, Mullumbimby NSW.

The new enamelling kiln at the Queensland College of Art is one of the best I have ever used. Made by Bob and Nola Davidson at SEI Kilns in Brisbane, the kiln was a pleasure to use during the recent Cloisonne Enamelling workshop there.

The kiln, with quite a large internal capacity, has a separate digital read-out controller on the side and a side hinged door for ease of use. With 15 people making constant demands, it was never more than 30 seconds away from firing temperature. The controller has a push button control so the temperature can be set and at any time the digital readout lets you know the exact temperature to the degree. Watch those numbers climb as the kiln responds quick-smart and reheats the kiln after a firing. No guess work as with the gauge settings that are slow to respond to the change.

Earlier this year I had my Neycraft kilns adapted to one of Bob's controllers. The thermocouple can be attached from the outside through a small hole in the wall of my kilns so that I can swap the controller on to any of my kilns. The control unit is quite separate.

In years of enamelling I've never had such a responsive and reliable kiln. It's heaven.

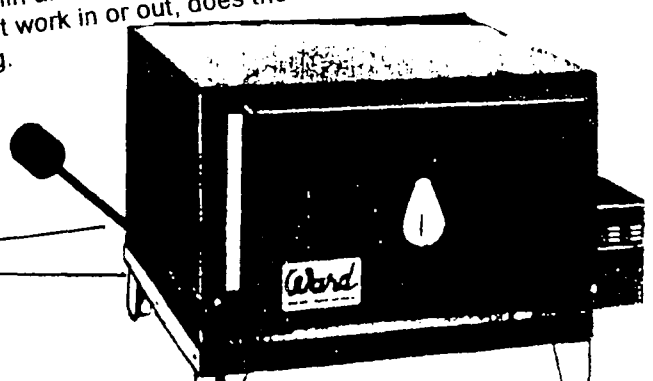
SEI Kilns can be contacted at:
113 Brodie St
Holland Park QLD 4121
Ph 07 3349 3558

Carolyn also suggests getting a "surge buster" which plugs in between the power point and the kiln's plug and if there is an electrical surge, the kiln is protected from it. This is probably most useful in country areas where this can happen reasonably frequently. I think they are available from hardware stores for about \$. These devises are now a built in feature of new computers for the same reasons.
A FEW \$

From Mary Raymond, Lindfield NSW.

Mary Raymond has a Hi-Fire kiln just a little larger than Sandra's. It runs on 3 phase power and is fitted with a computerised temperature control and a digital readout. Mary's kiln also has a door that raises up easily which protects her from intense heat and also, when raised to put work in or out, does the extra job of bathing anything that's on top of the kiln with warmth and aids drying.

HI-FIRE KILNS (Eric Cauvin) can be contacted at:
60 Garden St
Narrabeen NSW 2101
Ph 02 9913 2328



KILNS



From Roy Fettke of Mitchell Park, South Australia.

I started enamelling in 1967 and soon had my own little Ward hotplate, an excellent little unit. Several years on I had Wards make me a larger unit 9"x9"x9". It had two elements each with its own switch - one in the walls, one under the floor. It was rather slow in heating up, but worked efficiently when it got to the required temperature. Great for high bowls, goblets etc.

By 1974 because of growing sales of my enamels and increased "itch" or desire on my part to go bigger in enamel sizes, I again ordered a larger kiln for flat sheets, plates and shallow bowls. Size: 6"high, 16"deep and 15" wide. It had two elements. One around the walls and one under the floor. Of course none of these kilns had thermometer or thermostats, temperature being gauged entirely by eye. It gave excellent results after some experience.

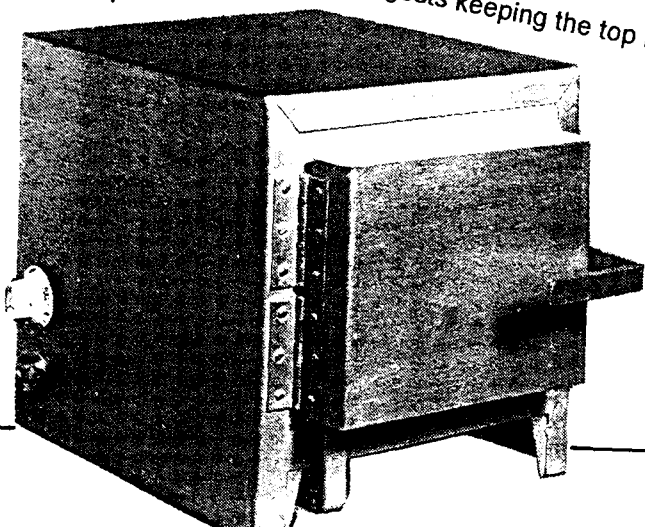
Knowing little of electricity I had relied entirely on the manufacturers. I figured what worked well on a little size would follow through on a larger scale. It worked much as I hoped, with the kiln coming up to temperature within half an hour. The time from putting in a piece for firing to taking it out was usually less than 10 minutes depending on the effect I wanted. I could fire a 14 1/2" diameter plate with a 1/4" to spare either side - no room for an unsteady hand! With this size kiln the "cold" area was across the wide front. A bit of a problem but manageable. If I had another kiln made I would it would be 2" or 3" higher. Also higher trivets and meshes could be used, giving more space to manoeuvre the shovel or firing fork.

From Betty Wilson, Alice Springs, Northern Territory.

Betty Wilson also advises keeping the ceramic kiln for the glass slumping and buy something suitable for enamelling. Betty's first kiln was a Neycraft. It has a muffle element (set in what looks like white polystyrene foam) I didn't like the door catch as it gave a bump each time it closed. When I burnt the element out, I made enquiries, and it looked like costing nearly \$600 to replace the element so I bought a Wards kiln - we have a local electrician who is familiar with them and a new element costs under \$40 and is not too difficult to fit. I bought an E2, which is front opening (north/south), has a fire brick interior which is 11 x 11 x 4&1/2 inches high. I have it for about 3 years now and the only problem I have had is that we recently fitted a new on/off switch which my husband was able to fit. My pyrometer fits both kilns. I also have a small HP1 Wards kiln (which I don't think are made now, although the elements are available). The top lifts off, the element is at the bottom covered by wire mesh. The door is operated by a lever handle and slides upwards (like a guillotine). I find this quite good for doing small pieces (interior is 18 x 18x 10cm high).

From Heather Calnan, Lindfield NSW.

Heather Calnan suggests keeping the top loading kiln for glass working and buy the new kiln just for enamel.



From Barbara Ryman, Thirroul NSW.

I have a Neycraft kiln and it suits me very well. It is 23cm wide x 17cm high x 23cm deep and is suitable for jewellery and moderate size objects. The door does bump when you close it so I make sure when I'm about to fire that I have my work held up off the kiln on the firing fork before I open the door, and then I just hold the door closed with the fork without clicking the catch while the piece is firing. I pull the enamel out and before putting it to cool on top of the kiln, I give the door a shove to close, then put my piece to rest. This saves things falling off the trivets.

The kiln has a pyrometer and a temperature gauge and the temperature is adjusted with a calibrated dial. I find the kiln comes to temperature in about 20 mins and after firing returns to heat quickly. I often turn the dial down after each firing if I'm taking a while to pack a cloisonne piece, as the kiln can get too hot quite quickly. I have had to replace the muffle, I think three times, over 15 years and I can pretty easily change them over myself. They are pricey but the last one I got from Anna Margot's for \$400 to \$450.

I also use a couple of Jeko kilns for teaching. I think of them as old workhorses and these are the ones often used by schools in the past. No thermostat or temperature gauge and opens N/S which means a warm forearm when going in or out of the kiln. You need to keep an eye on them to see they don't overheat. If they're very hot your enamel fires very rapidly indeed! Just open the door and let the temperature drop a bit. I believe Hi-Fire Kilns can rewire them but I haven't had to do that yet.

Neycraft kilns are available from Anna-Margot Originals - Brisbane.

SUMMER 1997 VOLUME NO.1
\$4.95

AUSTRALIAN

METAL
FOR THE JEWELLER AND METALSMITH

STONE &
STONES MINERALS AND FOSSILS

GLASS
FOR THE ENAMELIST

Beads
Cabbing
Clubs
Competitions
Dealers
Enamelling
Equipment
Faceting
Field Trips
Fossils
Gemstones
Gemology



Stephen and Joan Millton of Anna-Margot Originals will be releasing the first issue of "Metal, Stone and Glass" in November. The magazine hopes to "encourage the professional and amateur and would be craftsperson to put heart into their craft and get involved, urge persons to do what they enjoy and further promote as much as possible, the clubs they belong to and to support the dealers who bring the supplies in for their use."

"Metal includes anything to do with jewellery making and smithing, Stone is all aspects of gem fossicking and cutting, minerals and fossil collecting and Glass is enamels and glass forming and decorations. This should cover all aspects of the crafts to be touched on in the articles in this magazine. And not surprising there are many of you who are proficient at all three, and then again many who are well experienced in any one of the three crafts and would like to know more about the other crafts.

The opportunity to share your experiences and knowledge with others is eagerly looked forward to by the editors and don't worry if you haven't written before, that's what the editors are there for, to correct grammar and spelling mistakes (if any) and to see your articles are part of the sharing.

Send in your want ads so that others can use your unwanted equipment and extra (overburden) stones etc and please send any questions in you have; the magazine has some of the most knowledgeable associate editors to write articles and "field" your questions. If you want Your magazine to succeed like no other has, Contribute, write for us, to us and us. And remember it is only on sales at shows, in dealer and allied shops and by subscription and will also be advertised overseas, so if you are looking for a pen pal in South Africa, England, America or New Zealand etc, let the pens write."

Joan and Stephen Millton
Publishers

You can buy advertising space in the magazine.
For the rates, write to the Publishers, PO Box 748, Hamilton Qld 4077. Ph (07) 3216 4058.