

ARGENTIUM GUILD NEWSLETTER

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ARGENTIUMGUILD.COM

SPECIAL EDITION FOR THE SOCIETY OF AMERICAN SILVERSMITHS



DEAR ARGENTIUM GUILD MEMBER

This Argentium Silver Guild Newsletter is distributed to our Members quarterly - keeping you up-to-date with all things Argentium. We would love to hear from you, so if you have an Argentium related story to tell, article to feature or photos to share, please contact info@argentiumguild.com.

IN THIS EDITION



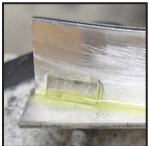
WHAT'S NEW
Shining Wave's new Argentium mokume gane design



FEATURED MEMBERS
Catherine Witherell, Rena Wells, SATORI, Annabel Alleyne



ARGENTIUM EDUCATION
Become a Certified Argentium Instructor with JSI.



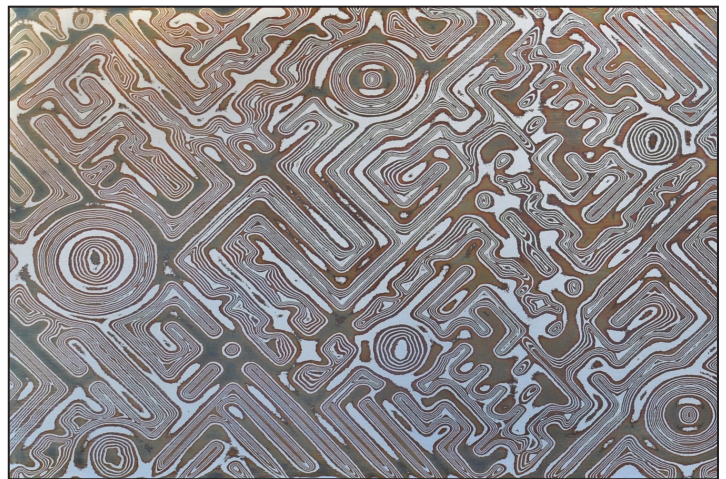
TECH TALK
Argentium looks at different fluxes and what's best to use with Argentium silver.



'INSPIRATIONS'
By Charles Allenden

WHAT'S NEW!

SHINING WAVE METALS PRESENTS NEW ARGENTIUM MOKUME GANE DESIGN



Shining wave have added this beautiful new pattern to their vast range of mokume gane. The name of the new pattern is 'Civitas' and it has been created using 21 layers, alternating Argentium 935 silver and copper, with a heavy backing of Argentium.

Civitas is being distributed by Rio Grande, Albuquerque (riogrande.com) - initially available in the following sizes:

- 24 ga & 22 ga (0.51 mm & 0.64 mm) thickness
- 3" (7.62 cm) wide sheets
- Length up to 20" (50 cm)

KEEP IN TOUCH

You can keep in touch with us through Email, Facebook, Twitter and our Blog.



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FEATURED MEMBERS



Catherine Witherell happydayart.typepad.com

"I'm a mixed media artist and I've been making things for as long as I can remember. I have always been attracted to surfaces, what's on them and in them, the colors, pattern and texture most of all. My art has matured, side by side, with the advent of the internet - as I explored, my skills as a metal clay sculptor and silversmith improved and I became really excited when I discovered Argentium silver. My joy in making objects and mixed media jewelry grew with the addition of this wonderful, versatile metal - its strength and brilliance complements my work very well."



Rena Wells 2dezineart.com

"I specialize in custom design work. Fashioning jewelry pieces intertwined with the personal and emotional feelings of my customers is very rewarding. I enjoy pushing the creative envelope with the attitude of 'dare to be different'. Because I demand the best for my customers, Argentium is the only silver I now use."

I believe in giving back to the creative community through my online Jewelry Making TV videos, which can be found on YouTube: youtube.com/user/JewelryMakingTV/videos and my jewelry making DVDs."



SATORI satorijoyas.com

"Since ancient times, jewelry has been considered to be more than just an ornament. It has been given mystical attributes, usually connected to symbolism and/or a divine sense. In SATORI, the goal of the design of every jewelry piece is to connect the wearer - with the meaning of the stones, the crystals, the metals and the forms used and taking into account that they carry a sense of divinity, healing and wellness. We have found Argentium silver to be flexible, pure, noble, bright, and friendly to the planet. All of these are properties that we, as humans, can have and must pursue."



Annabel Alleyne annabelalleyne.com

"I am a jewellery designer from Quebec, Canada. My one-of-a-kind handmade jewellery reflects a mix of both contemporary and traditional filigree. The design process starts with rolls of wire and gemstones that somehow take on a life of their own. I personally manipulate, form and solder the wire to bring to life what I see in my minds eye. Each finished piece is like a snapshot in time and a glimpse into another world, where anything is possible."

I like the work-ability, tarnish and firescale resistance of Argentium sterling silver."

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BECOME A CERTIFIED ARGENTIUM SILVER INSTRUCTOR WITH JSI



Jewelry Studies International (situated in Austin, Texas), is unique in that it specialises in Argentium silver. Founded by Ronda Coryell and Vasken Tanielian, JSI offers professional instruction to jewellers and silversmiths of all abilities - from novice to master jeweller.

This world-class jewellery school teaches a vast range of specialist, creative and fun techniques. JSI provides an extensive curriculum to national and international students, offering Basic and Advanced Jewelry Arts Diploma Programs. Students can choose to enroll on the full programs or take individual classes.

We are delighted to announce that Jewelry Studies International has launched the Argentium Instructor Certification Program, headed by Ronda Coryell and proudly endorsed by the Argentium Silver Guild.

The Argentium Instructor Certification Program has been established to:

- Test the skill level, competency and proficiency in working with Argentium silver.
- Establish international standards.
- Ensure the level of knowledge of an instructor.

The Program is directed to those wanting to become an internationally recognised instructor of Argentium silver. Certification gives an instantly recognised standing in the profession and communicates a sense of professionalism. It importantly demonstrates to students and schools that instructors have demonstrated their skills and expertise.

Certification requires quality performance in the areas of fabrication, soldering, fusing, finishing and working with Argentium silver.



Ring with bezel



JSI workshop

There are two levels of certification, which have been carefully tailored to show progressive proficiency of skill and knowledge in working with Argentium. Each level includes practical tests and a written exam.

There is no need to worry if you are not able to take the tests at the JSI site, as applicants are permitted to use their own facilities, with a proctor present.

The Argentium Silver Guild will be delighted to promote Certified Instructors, showing a personal profile and advertising classes on the argentiumguild.com website.

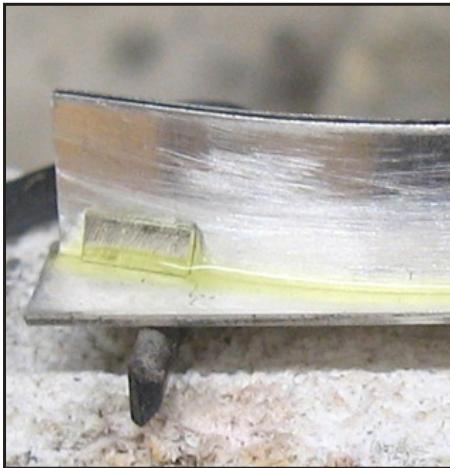
If you are interested in becoming an Argentium Certified Instructor, please contact JSI:
info@jewelrystudiesintl.com



THE ROLE OF FLUXES



by Clare Felgate



What is a flux?

For any 'Back To The Future' fan, the word flux will primarily mean the infamous flux capacitor, but for a silversmith, flux is the liquid, powder, paste or the endless grinding of Borax to enable successful soldering and fusing.

Did you know that the word flux is derived from the Latin word 'fluxus', which means 'to flow'? According to thefreedictionary.com, flux is described as...

1. A substance applied to a surface to be joined by welding, soldering, or brazing to facilitate the flowing of solder and prevent formation of oxides.
2. A mineral added to the metals in a furnace to promote fusing or to prevent the formation of oxides.

Why do we need fluxes for soldering/brazing/fusing?

When metals/alloys are heated in air, a chemical reaction takes place, which causes the elements in the metal/alloy to combine with oxygen to form oxides. E.g. The copper in traditional sterling silver reacts with oxygen to create a dark coloured oxide known as 'firescale' or 'firestain'. As silver is permeable

A recent conversation on the Argentium Guild Forum discussed the use of fluxes with Argentium silver. This has prompted me to look at the roll of fluxes a little closer, to better understand their working properties and applications. This is what I have found and I hope that the following information will be helpful to you...

to oxygen, this cuprous oxide can penetrate deep into the surface, especially where multiple soldering/heating operations are required. Apart from the discolouration problem of firestain, the formation of the oxide is detrimental to soldering applications - solder is not able to 'wet' the surface and flow along a seam. NB. Solders will also form unwanted oxides when heated in air.

The role of a flux when soldering is therefore to absorb oxygen and create a 'barrier' to prevent oxide formation, to enable a good, clean solder flow and a strong solder bond. For metals and alloys that are fusible, a flux will enable atoms to intermingle and fuse cleanly, without any oxides forming.

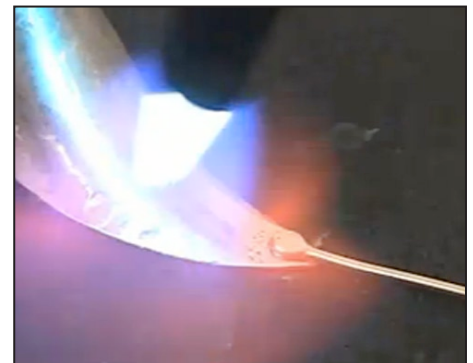
Choosing a flux

Different fluxes are designed to have different 'working' properties. When choosing a flux it is important to consider...

- The material being soldered/ fused.
- The melting temperature range of the solder - you want it to start working at least 50°C (122°F) before your solder starts to flow and to remain active at least 50°C above the highest temperature that you will reach when heating your piece, to carry out the joining process.
- The heating temperature and time required for the soldering/ fusing operation.

- The active working properties (temperature and time) of the flux.

The underlying question to answer is... will the flux be able to actively work throughout the heating temperature and time required to complete the soldering/fusing process? (You don't want it to start to burn away or leach oxygen before you have finished.)



Fluxes for use with Argentium

My-T-Flux™ (Rio Grande, USA) - Self pickling liquid flux with a working range of 1100-1700°F (593-927°C). Highly recommended and a popular choice for all Argentium soldering and fusing operations.

Gel Flux (Rio Grande USA) - Self pickling flux, gel-like consistency with a working range 1100-1700°F (593-927°C). Recommended for Argentium soldering and fusing operations and a perfect choice for those with some silversmithing experience. The thickness of the gel can also help to keep solder pallions in place.

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Batterns Flux (Allcraft, Otto Frei) - Self pickling liquid flux. Working range 1100-1700°F (593-927°C).

Prips Flux (Contenti) - Can be made using boric acid, borax and trisodium phosphate (3:2:2 ratio) in water (instructions can be found online).

Auroflux (Sutton Tools, UK) - Liquid flux suitable for use with Argentium silver.

(NB. 'Handy' or 'Easy Flo' type fluxes can cause staining with Argentium silver if over heated.)

Helpful tips

I was taught to make sure that liquid flux is well mixed (shake the bottle) before use.

Some liquid fluxes are saturated solutions and ingredients can separate at lower temperatures - simply warm the flux slightly to get them back into solution. Another tip is to degrease the surface of the piece before applying flux, either by warming the piece with a soft flame or using emery paper, pumice or Scotchbrite to abrade the surface.

Cynthia Eid recommends the following when using yellow liquid flux...

- It is best to apply it, heat it, and then re-apply until you have a white coating.
- Use a natural bristle brush, rather than plastic bristles (which can melt).
- When adding flux to bare metal areas, the brush should be

damp, but not dripping wet - if too much flux is applied, it can 'undo' the areas that have already got dried white flux on them.

- As one gains practice, you learn to heat to a point where the metal is at the temperature that the flux dries immediately as it is applied.
- It is important to keep the re-heating with the torch brief, so that the metal does not overheat, causing oxidation.

With Argentium silver you only need to flux the seam to be soldered and when fusing or granulating, you can coat the whole piece, as demonstrated by Ronda Coryell in the following video: www.youtube.com/watch?v=Wx4sVKD8tQo



EXHIBITION

Ndidi Ekubia will be exhibiting her work at The New Craftsmen - Craftsmanship from the British Isles:

3-15 December 2012
Open Monday to Saturday 10am - 6pm
5 Carlos Place, Mayfair, London W1K 3AP
Information at: www.thenewcraftsmen.com

WORKSHOP

The Florida Society of Goldsmiths is pleased to announce that Ronda Coryell will be teaching Argentium Techniques at its 17th Annual Winter Workshop in New Smyrna Beach, Florida.

14-18 January 2013

Information at: www.fsgne.com

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INSPIRATIONS



by Charles Allenden

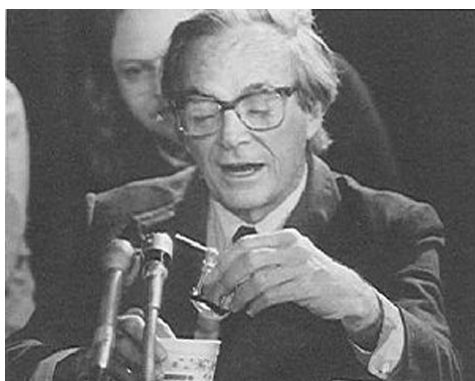
As we approach the holiday season, I thought I would write about some of the things that have caught my imagination and inspired me over the years and maybe get you all to reflect on what has influenced you in your own choices.

Sunday 12th April 1981 - I remember being sat at home waiting for the space shuttle Columbia to take off. Like most boys, I was fascinated by space and the stars and this was meant to be man's return to space.

Tuesday 28th January 1986, the space shuttle Challenger explodes 73 seconds into its flight, killing all its seven crew members - effectively the dream of returning to the Moon or beyond was ended.



In 1986 I was of an age where I wanted to understand how such an event could be allowed to occur, so I followed the Rogers Commission investigation to try to understand how such an engineering triumph had ended in such disaster. One simple demonstration during this investigation showed to me how important good communication is to helping people understand science.



Richard Feynman (pictured left) was on the board of the panel, at the time I did not know how distinguished a scientist he was, but he gave a very simple demonstration of how the 'O' ring seals had become brittle in the cold weather, resulting in an incomplete seal in the fuel system. He compressed a sample of the 'O' ring material in a clamp, immersed it in ice-cold water for several minutes and then simply pulled at it to show how it could no longer retain its shape.

This simple demonstration was so easy to understand that it made news headlines around the world. It achieved in 30 seconds what pages of investigative work would struggle to make clear.

One key aspect of Feynman's teaching at CalTech was that he believed that if he could not explain something to a freshman (first year university student), then it was not completely understood. This principal is something I have tried to adopt for my own musings, as I believe that so often a subject becomes inaccessible because we use a terminology that only those 'in the know' can understand (I number lawyers amongst the worst at this).

For me, the easiest way to understand something is to visualise it, so this is why I try to use everyday analogies to explain metallurgical theories - be it the sugar in hot tea as a comparison for precipitation hardening, or the brown and black shoe polishing brushes to explain how cross-contamination can occur when polishing different metals.

So while I partake of my favourite form of stress-relief over the holiday season (see the previous newsletter), I shall also be thinking of the way in which the a flaming Christmas pudding is best viewed when the lights are dimmed, similar to the best way to judge the colour change in Argentium silver when it is being annealed.

From all of us at Argentium International, have a good holiday and a successful and peaceful New Year.

