

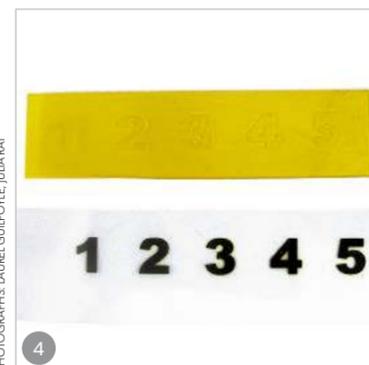
UNIQUE TEXTURES

JULIA RAI

Making your own texture plates elevates your jewellery to a whole new level. It means that all your jewellery is unique and one-of-a-kind. This project shows you how to produce photopolymer plates from your own drawings so that even beginner-level flat pendants, earrings and charms become truly unique. Couple this with cutting shapes freehand and adding some colour and you really do have jewellery with your own exclusive signature.

MATERIALS & TOOLS

- Photopolymer plates (plastic-backed)
- UV lamp
- Acetate
- Black Sharpie pen
- PPP kit (clip frame and sponge)
- Soft nailbrush
- Thick piece of black felt
- 30g Silver metal clay
- Silver clay paste
- Tissue blade
- Pin tool
- 1mm drill
- 8mm diameter drinking straw or brass tube
- Small nesting round cutters
- Firing tools
- Polishing tools
- Pebeo Fantasy Prisme paints
- Wooden stirrer
- Glass sheet
- Small paintbrush
- Jumpings
- Chain
- Earwires



PHOTOGRAPHS: LAUREL GUIFFOYE, JULIA RAI

HOW TO MAKE

1. Before you start, it is important to understand how photopolymer plates (PPPs) work. PPPs are plastic or metal backed sheets of a UV-sensitive substance in a range of depths. When the surface is exposed to UV light, it hardens. Blocking out the UV light in places by using an acetate sheet with black lines on it causes these areas to stay soft, allowing you to wash them out – creating a texture in the plate. Anywhere that is black on the acetate will be a dip in the PPP, so a raised area on your final metal clay piece. In picture 1 you can see the bird is raised from the surface of the PPP creating dips, which were enamelled in the final piece.

2. If you are working with a UV lamp for the first time, you will need to do some testing to find out the optimum exposure time to get the result you want. The wattage output of the lamp will determine whether the exposure time is seconds or minutes. You will also need a simple PPP exposure kit. Take a piece of hardboard, a piece of sponge the same size and a sheet of clean glass – a small clip photo frame and a kitchen sponge cut to size works fine. Store the PPPs in the dark until you are ready to use them. Create a dense black acetate with numbers 1–5 in a line.

3. Working in a dark area with no strong light or sunlight, cut a PPP the same size as the acetate. Remove the protective film from the PPP and lay it face-up on the sponge. Lay the

acetate on top and put the glass on top of that. Cover numbers 2–5 with a piece of felt. Turn on the UV lamp and time for 30 seconds. When the time is up, turn off the lamp and move the felt to expose number 2. Turn the lamp on and time for another 30 seconds. Repeat this for the other numbers. This will result in the number 1 being exposed for 2½ minutes through to the number 5 being exposed for 30 seconds.

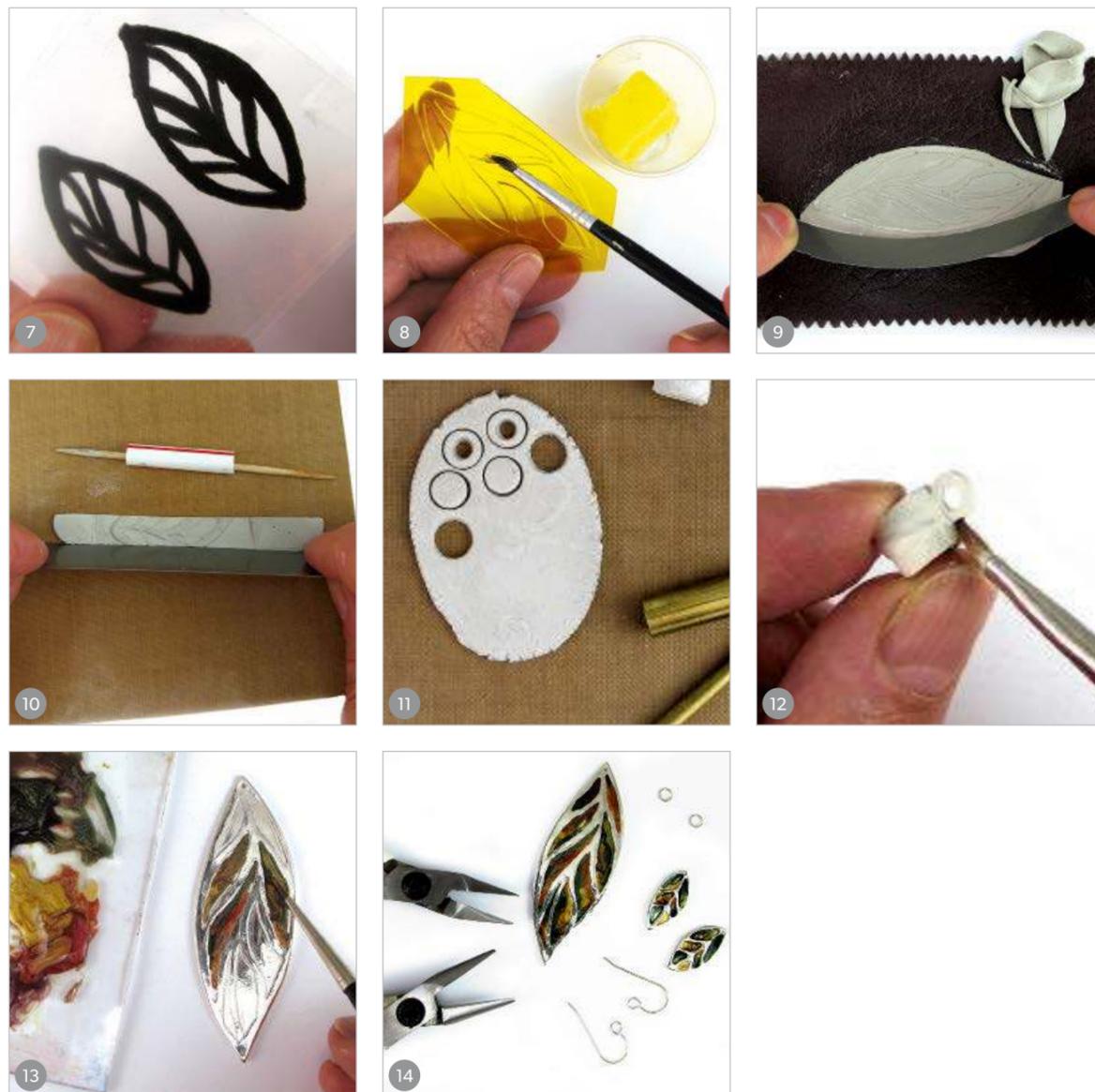
4. Wash the PPP under running warm water using a soft nailbrush and some dish soap. Wash it thoroughly but not too aggressively so you don't damage the plate. Dry the plate using warm air or let it air-dry. Don't use a paper towel as the surface of the plate is still tacky and you will spoil your design if you touch the surface. When it is dry, put it under the UV light again and expose it for about 5 minutes to harden the whole surface. Check the depth of the texture for each exposure time; this will allow you to determine which time is best for your UV lamp.

5. Draw your designs onto plain white paper with a thick pencil in the size you want to use with the clay. Think carefully about what you want raised and what you want as dips in the final piece. When you are happy with the designs, draw over the lines that will be raised in the final piece with a black Sharpie pen. Make sure the lines are really dense black with no white bits showing through. PPPs allow for

quite fine lines, but you should experiment a bit if you want to create lots of very fine lines in the final piece. This is to ensure you don't end up with lines so fine they are washed away during the process.

6. Photocopy the design onto acetate. Make sure you buy the right type of acetate for your photocopier. Ink jet acetates normally have one side that is slightly rough so the ink sticks to the acetate. Experiment with your printer so you get the ink laid down on the right side of the acetate. You may need to tweak the settings on your photocopier to get the best quality print – you need it to be dense black so when you hold it up to the light, no light comes through. You can see in the image that the lines are grey rather than dense black. Grey acetates will not work correctly.

7. Allow the ink to dry on the acetate before you use it. If you have trouble getting a dense black acetate, copy your designs twice on paper, then print the designs twice on acetate, cut them out and sandwich them together, making sure the lines match up. Stick with Sellotape on the edges. This will create a denser black acetate. Using sharp scissors, cut the PPP to the size for each design in a dark area. Remove the protective film from the surface of the first PPP and lay it face-up on the sponge. Lay the acetate on top and cover with the glass. ▶



8. Expose to the UV light for the time your initial experimentation found was best. My 9-watt lamp takes 3 minutes. Wash the plate under warm running water with dish soap and a soft nailbrush as before. Dry with warm air or air-dry and then do the final UV exposure for around 5 minutes to harden the whole plate. The plate is now ready to use. Oil the plate with olive oil on a paintbrush so you get down into all the textures. Be careful not to have oil pooling in the dips. Roll out the silver clay 5 cards thick and impress the PPP into the clay.

9. I have used a leafy kind of design for my pieces, so I am using a springy tissue blade to cut out the clay in a freeform leaf shape around each design. For the pendant, my PPP design is long and thin so I am using the edges of the

design as a guide to cutting. For the earrings, the designs are smaller but rounder so these are cut by bending the blade more around the edges of the design, likewise with the charms. Allow the pieces to dry and then refine the edges as normal. Drill a 1mm hole in each piece for the jumpring and then put aside.

10. One of the charms is going to have a Pandora-style tube so it can be added to a Pandora bracelet. Choose a large drinking straw or piece of brass tube about 8mm across. Oil the straw or wrap a piece of Teflon around the brass tube and stick with Sellotape. Roll out the silver clay four cards thick and texture using the same PPP as the charm. Cut the clay into a long rectangle with a tissue blade. The rectangle needs to be long enough to wrap around the

straw/tube and flap over itself by around 1cm. Cut it 5–8mm wide, but no wider or it may not slide onto a Pandora bracelet smoothly.

11. Wrap the clay around the straw/tube and allow it to flap over itself. Cut down through both layers of the flap over and remove the excess clay. Using paste, stick the join together and allow it to dry. Passing a cocktail stick through the straw/tube and sticking it upright in a piece of polymer clay will allow it to dry without damaging the texture. While it is drying, create a loop to hang the charm from. Roll out some clay four cards thick and use small round cutters to cut out donut shapes. Let these dry and then refine the edges and sand a small flat spot on one edge where the loop will attach to the tube.

12. When the tube is dry, slide it off and sand both ends so they are smooth. Stick the loop on over the join in the tube using paste. Let this dry. Fire everything either by torch or in the kiln. Stand the tube up on its end to fire it so you don't get a flat area on the tube. When everything is cool, polish the pieces using a tumble polisher, brass brush or polishing papers. PPP textures lend themselves to adding colour using a wide range of techniques. If you are going to solder the jumprings closed, do this now before adding your colour.

13. You can use Pebeo Prisme effect paint to add an autumnal colour theme to these pieces if you choose. The colours I've chosen are Cherry Blossom, Antique Gold and Leaf. Mix the paint well using a wooden stirrer and dispense a

small amount onto a glass sheet. Use a small paintbrush to carefully add paint into the dips. Clean off any excess paint before it dries. Make sure the dips have a good covering of paint; don't go too thin with it or you won't get the full effect. Put the pieces on a flat surface and allow 72 hours for them to completely dry. Protect them from dust while they are still tacky; normally for around 6 hours.

14. When the paint is dry, add more paint if you need to. Prisme paint is pretty robust and doesn't normally need sealing. If you are worried, you can seal it with clear resin, but I have left mine with just the paint. If you did not solder the jumprings, add these now. For the pendant add the jumpring and put it on a chain. For the earrings, add jumprings if necessary to

ensure they hang the right way. An alternative is to hang them from a short length of chain, adding a bit more swing. Attach the Pandora charm to the tube with a jumpring. Hang the final charm onto a bracelet with a jumpring.

RESOURCES

Photopolymer plates and kits: metalclay.co.uk
Fantasy Prisme paints are widely available from art suppliers
Acetate is widely available from stationers
Silver clay is widely available from metal clay suppliers

CONTACT

juliarai.co.uk
csacj.co.uk
info@csacj.co.uk

