Metal Leaf Tech with Jim Preston

— Review by John Ellis

Jim gave a comprehensive presentation on applying metal leaf to turned vessels and adding color and interest to the metal leaf surface using an acid treatment known as "patination."

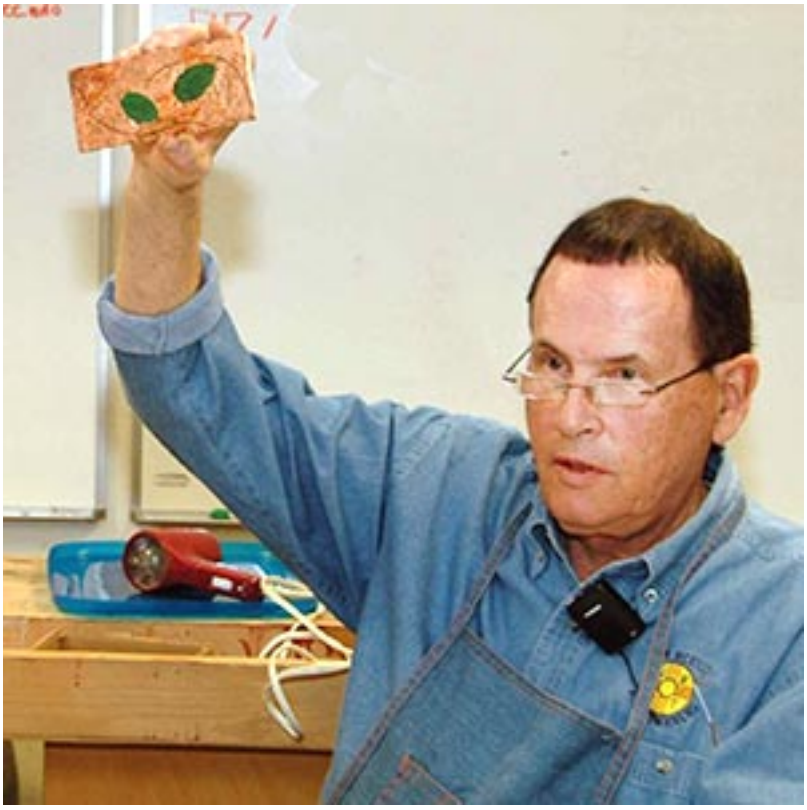
Ninety-eight percent of Jim's work is segmented turning, even if it will be 100% covered with metal or other surface treatment.

He didn't do any turning, focusing instead on detailed demonstrations of surface preparation, base coatings, adhesives, applying leaf, treatments, and final finishing. He passed around numerous samples of those processes.

Jim uses primarily copper leaf. Other metals available include silver, brass, Dutch gold and gold. Metal leaf is extremely thin (thousandths of an inch), fragile, and can be difficult to handle.

Surface Preparation: Sand to 220 grit before applying metal leaf or other texturing techniques. Frequently wipe the prepared surface with tack cloth to keep it clean. As a base coat, he uses black gesso (a form of acrylic paint). After brushing it on, go back and "stipple" surface with fairly dry brush to eliminate brushmarks. Use two coats of gesso, dry overnight, then lightly sand - essentially wipe - with 1500 grit wet/dry sandpaper. The black color provides a background to the leaf and a smooth, flexible surface for the sizing adhesive.

Use of Sizing: Sizing is an adhesive for attaching the leaf, available in oil or water base. Oil is more durable. Main concern is working time, which essentially equals tack time. Apply and wait until it comes "to tack," becoming sticky enough to hold the leaf. Sizing can be purchased in a variety of working times. Jim uses 1 – 3 hour label. It comes to tack in about 40 minutes. A heat gun can accelerate tacking but risks embedding particulates in the sizing that will show in the finished piece.



Apply Mask: Jim applied plastic leaves to the sizing as a mask prior to leafing. He had painted the areas to be masked with green acrylic over the gesso.

Apply Leaf: He laid multiple metal pieces to the tacky area, and then used a brush to "stipple" them firmly to the tack. A brush with a little sizing will pick up small pieces of metal to apply to void areas. Missed areas in the dry initial application can be covered with more sizing and leaf over the voids.

Patterns: Jim used plastic mesh from an orange bag - very open mesh - over tack and under metal leaf, stippled leaf firmly, and then pulled the mesh off leaving a pattern. Other materials that mask, i.e., frisket, are called "resist."

Remove Extra Leaf: Use soft brush to remove excess leaf. Don't rub. Let the piece completely dry and cure before finishing or patination.

Patination: Patina can be applied to copper, silver, and Dutch gold but not real gold. (Gold is a non-reactive metal.) Silver oxidizes very quickly when exposed to air, so it needs to be used rather quickly once the package is open.

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Working with Acids: Various weak acid solutions will produce colorings on metal leaf. A wide variety of colors are available depending on the metal leaf and acid used. Evaporation is a concern. Use cheesecloth to control amount of acid in areas and to create more random patterns. Cover cheesecloth with tissue paper to minimize evaporation. Apply acids to tissue paper and cheesecloth with a dropper or glass wand. Jim demonstrated using sodium sulfide to give reddish effect on copper. (He also used a second chemical for a different effect.) After getting the coloring effect desired, the tissue paper and cheesecloth were removed and the surface was blotted with a damp paper towel. Use care with acids, taking care not to get on skin, eyes, etc.

Finish: Jim uses Krylon Workable Fixative spray as a first coat. Apply sparingly and let dry overnight. Sand lightly with 1500 grit. Final coat with Krylon UV Resistant Clear Acrylic Coating. Jim uses gloss, although other finishes are available, then wet sands with 4000 grit Abralon pads to smooth and rub out surface as the final finishing step. (Krylon can be obtained at Wal-Mart, Hobby Lobby, or online.) He will often finish, sand, and polish with the piece still on the lathe. Jim also noted that the Krylon UV coatings keep some wood colors (purpleheart, padauk) from fading.

Choice of Materials: Jim uses a combination of woods and metals for contrasting effects. A handout of resources for gilding and patination was provided. According to the handout, Jim can be contacted by phone at 505 828-9647, or via his web site, http://jimswoodart.webs.com. He also passed around pricing sheets from Art Chemicals. A good basic kit containing all materials to get started is available for $99.