## USA 2016 by Robin Goodman

n July I made use of the new cheap WOW flights from Bristol to Washington via Iceland, where I stopped off for 3 nights. I was heading to Gatlinburg in Tennessee, where the Arrowmont School of Arts and Crafts is

situated, on the edge of the beautiful Great Smoky Mountains Nation-

al Park.



The school has been running since 1945 and offers courses in numerous crafts, including woodturning and woodworking, for which there are very

which there are very well equipped workshops.. Nick Agar had been tutoring in woodturning there for 3 weeks in the previous month, but I had chosen a 5 day

woodworking course titled of 'Sinuous Sculpture, shaping wood into fluid

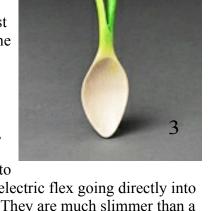


**curving forms'** tutored by the American **Kristen LeVier**, whose work I like. See **photos 1, 2 & 3.** She draws on nature for many of her ideas and her sculptural works, although sometimes started on the lathe, nearly always involve subsequent shaping and carving, usually using a micro motor carver.

Kristin, see **photo 4** with Harvey Mayer, was a molecular biologist for two decades before switching full time to wood and creating all sorts of artistic and aesthetic pieces; more recently she has started doing teaching and this was the first time she had run a week's course. There were 11 of us on the

course, all the others were from the USA, with 3 of us being woodturners. Instruction was mainly about power carving and wood bending.

There are many kinds of rotary power carvers available. Some of us have flexshaft tools such as those made by Foredom, Axminster or Dremel that are OK for coarse shaping and removing substantial amounts of material since they are quite powerful, but the shafts can give problems and make the tool awkward to use and more tiring over a longer period. Where less material has to be removed, Kirstin much prefers to



use small micro carvers that have micro motors in the handpiece. These have a thin electric flex going directly into the 'pen', so less restrictive and much easier to manipulate, speeds are also greater. They are much slimmer than a Dremel, but more expensive. Apart from cost, aspects to consider when buying are: slimness and comfort of the hand piece, maximum speed, reverse rotation option, collets available and how easy they are to change, foot pedal.. There is less choice in the UK, but models include Foredom K1070, Mastercarver Micro-pro Champion and an unbranded micro-drill from Woodart Products.

There are so many types and shapes of <u>burr</u> on the market as to be confusing to most of us, She provided useful information on the different types and shapes of carving burrs. Burrs come in different shank sizes and most micro motors can accept 1/8" (2.3mm) and 3/32" (2.4mm), usually also 1/4". Numerous head shapes are available, but wood carvers tend to use ball, cylinder and tapered bits.

Saburr and Kutzen carbide point bits are durable and aggressive, but leave a rough finish and they can be difficult to clean, whereas carbide cutters are cheaper and leave a smoother finish. High speed steel bits are less expensive and durable and come in a vast range of shapes and sizes. Diamond burrs are used to texture and carve fine details. We had the opportunity to try out various different micro motors and bits or burrs.

For most of Kristin's pieces with bendy parts or tentacles, she uses a special type of wood that has been processed. It starts off as normal hardwood, but then undergoes a thermo mechanical process using steam and extreme pressure that results in a much more bendable wood at room temperature.







One product that the Americans call 'compressed wood' was supplied for the course, but I have not seen it before and it is not currently available in the UK, although a similar product used to be available for curved hand railings







etc. We had the opportunity to experiment with it, although we seemed to run out of time to make anything substantial. Some items are shown in **photo 5**. **Photo 6** shows Kirstin demonstrating to the class. In another part of the wood studio **Harvey Mayer** was running and nieces with the basket

woodturning course on decorating turned pieces with the basket weave illusion and similar patterns. This involves forming a contin-

uous series of beads along the surface in one direction and then using a pencil to mark out lines at right angles – radial



lines for a bowl - that are subsequently burned in using a special pyrography tip. These lines taken with the valley lines between the beads form tiny squares or rectangles that are then coloured in to form either an imitation basket weave pattern or whatever other pattern you choose or design. The whole decoration process is repetitive and time consuming. Even Harvey, who has a lot of experience, can take several days to complete the decoration on a single piece. Several of his pieces are shown in **photo 7.** He can be seen demonstrating the method in videos on line and he will be one of the overseas demonstrators at next year's AWGB Symposium in Staffordshire. My recent first attempt is shown in **photo 8**; this has only 60 segments and 22 rings, but that still makes around 1,260 individual rectangles to colour in.

The following week I drove to Richmond in West Virginia for 3 days training with **Barbara Dill,** the multi-axis specialist, see **photo 9**, in her delightful studio, **photo 10**, in the woods close to her house. Her effective offset piece

called Harmony is shown in **photo 11**. All her work is done simply between centres and she does not use any of the expensive eccentric chucks that are available. **Photo 12** shows a few of my trial pieces using 3 different centres. Barbara has tried to make some sense of multi-axis work by breaking the op-



tions down to only 4 cases – parallel axis and non-parallel axis and with either case resulting in a solid circular section or an arc type section, where the cut is still partly in air. We carried out various exercises to illustrate this, as well as some split turnings, where 2 or 4 pieces are strapped together for turning and this enables turning on centres that lie outside the periphery of the individual pieces, see **photo 13** for my incomplete piece.



