

1145-D1-2336 **Edmund Harriss*** (eharriss@uark.edu). *Curvahedra, Making Manifolds.*

Curvahedra is a simple system, pieces with several branches connect together so the connections remain flat. Each piece is itself flat so this gives a manifold condition, locally the surface produced is smooth. Controlling the angle turned (or holonomy) around a loop introduces curvature. A huge variety of surfaces from spheres to hyperbolic planes, toruses to triply periodic minimal surfaces can then be generated. In this talk I will explore the artistic possibilities of this free-form but mathematically curious system. (Received September 25, 2018)