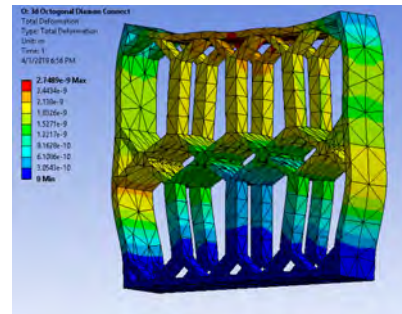
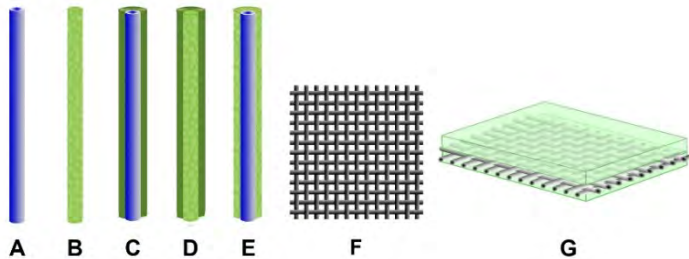
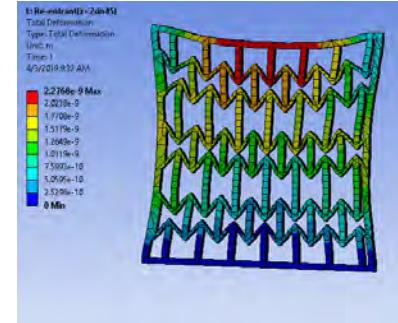
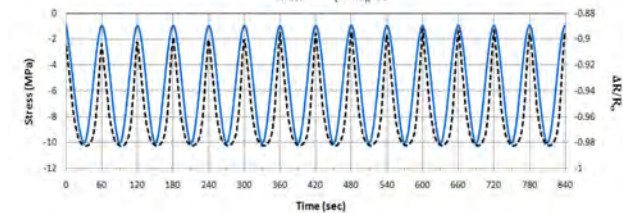


Multimaterial, multifunctional 3d printed architectures with embedded sensing, shape morphing, energy harvesting, tunable sound absorption

Fibers are designed with multimaterials having multifunctional particles enabling *simultaneous* shape morphing and embedded sensing



Self sensing



Shape morphing/Self healing using shape memory responsive to low voltage electrical triggers with energy harvesting platforms



Tunable sound absorption and reflectance

