



Single-wall Nanotubes: The Miracle Material

Southwest NanoTechnologies Inc. is in the business of revolutionizing existing industries and spawning new ones with its incredible product: single-wall nanotubes.

The company, a spin-off from technology developed at OU by chemical engineering professor and SWeNT lead scientist Daniel Resasco, produces high-quality single-wall carbon nanotubes and has pioneered a catalytic method called CoMoCAT™ that should dramatically lower the price of mass producing them.

The electrical, thermal and mechanical properties of single-wall nanotubes are astonishing: They conduct heat better than any other known material, can carry electrical currents 100 times greater than copper and are 200 times stronger than steel.

The trick to achieving these fantastic properties, Resasco says, is to control the tubes' structure, diameter, length and purity. At SWeNT, Resasco and his colleagues are doing just that.

Applications envisioned for the single-wall nanotubes include molecular interconnects for next generation computer chips; invisible wires for flexible, low cost information displays; biological and chemical sensors for enhanced homeland security; nanoscale drug delivery vehicles enabling personalized cancer treatment; and ultra-tough nanocomposite fibers for airframes, spacecraft and body armor.

For more information about SWeNT, visit <http://www.swnano.com/>