

## An update on recent events and accomplishments at SWeNT:

### An Honor for SWeNT's CEO

Our CEO Dave Arthur was named as one of the most influential nanotechnology leaders of 2010 by the Washington, DC- based NanoBusiness Commercialization Association (NanoBCA), formerly the Nanobusiness Alliance. The NanoBCA is the premier nanotechnology leadership group, whose members are leaders in the field and have made significant contributions in the nanotechnology community.

"Dave Arthur is a nanotechnology evangelist," explained Vince Caprio, president of NanoBCA. "He is outspoken on the need for the U.S. to have a thriving nanotechnology industry and is working to develop applications in lighting, energy, armor and printed electronics using specialized nanotubes available in commercial quantities." Sounds like Dave to us.



"It is an honor to be recognized among this prestigious group of major technology firms and others as we share a similar vision for the U.S. to be a leader in nanotechnology, and are working tirelessly to advance that," replied Dave. "We continue to see great success for the industry and for SWeNT and appreciate the recognition from the NanoBCA, the industry's strongest advocate."

Thanks from the rest us at SWeNT to the NanoBCA and congratulations to Dave.

### Materials Advancements

With funding from NIST TIP, Ricardo Prada's R&D team has been working hard on improvements in properties of our Single-wall CNT products, both semiconducting and conductive varieties. For example:

- Our standard SG65 contains 90-92% semiconducting species (already the highest concentration of any commercially available material not subjected to expensive and un-scalable secondary processing). However, we have recently demonstrated >95%, and are confident of achieving our stated goal of 99%. These improvements will be key to developing Carbon Electronics applications such as printed TFTs, and will enable technology for developing carbon alternatives to silicon as the basic semiconductor building blocks in the years to come.
- We are developing new SWCNT with much better optoelectronic performance in transparent conductive coatings. We have some new 'tools in our toolbox' for continued improvements in performance and a more fundamental understanding of the factors effecting transparency and conductivity. Our current 'Champion' performance is shown here, with continual significant improvement expected in the coming months.



### SWeNT on TV



We had some unique visitors to the Norman facility on April 6: A film crew. The leading Japanese Television Network NHK is developing a documentary on the growing importance of nanotechnology in our lives. For the US, they are filming and reporting on just two companies: IBM for graphene and SWeNT® for carbon nanotubes. We're in pretty good company! The program will air late this year or early in 2012 – delayed somewhat by the recent crisis in Japan.

### The EPA and SWeNT

We are proud to announce we have received an Environmental Protection Agency (EPA) Consent Order which permits us to manufacture and distribute Single-Wall Carbon Nanotubes (SWCNT) for commercial applications. Previously the Company distributed its SWCNT via a Low Release, Low Exposure (LOREX) PMN exemption from the EPA, but for commercial-scale long term production, a Consent Order is required. **SWeNT is currently the only U.S. manufacturer permitted to make and distribute commercial quantities of SWCNTs.**



### SWeNT CNT for Cancer Treatment

Another exciting application is developing: According to an article published in Biophotonics and Immune Responses, researchers in China and the U.S. showed that SWeNT SWCN "possessed superior Nanoscale interactions and physical properties that make them useful in various biological systems."

"The SWCNTs appear to enter the cytoplasm without cytotoxic effects in cells, and can be used as effective and selective nanomaterials for cancer photo thermal therapy," explains Wei R. Chen, a researcher at the University of Central Oklahoma. "The distinct architecture of the SWCNT can shuttle various molecular cargoes, including anticancer drugs and proteins, crossing through cellular membrane without cell disruption."

*For more information : <<SouthWest NanoTechnologies/BioMedical>>*

### Upcoming Events

SWeNT will be exhibiting at SID (Society for Information Displays) 2011 conference May 17-19, 2011 at the Los Angeles Convention Center, Los Angeles, CA, USA. SWeNT will be located at booth #1536. This is the premier annual display industry event and attracts thousands of display professionals. We will, of course, be featuring our conductive and semiconducting inks for touch screens, flexible displays and printed electronics applications.



We will also exhibit at the Nanotech Conference and Expo sponsored by the Nano Science and Technology Institute June 14-15, 2011 at the Hynes Convention Center, Boston, MA, USA. SWeNT will be located at booth #1822. This is the largest conference and exhibition in the U.S. focused on all aspects of Nanotechnology.

Come visit us if you're attending either of these conferences.



2501 Technology Place, Norman, OK 73071-1102 Phone: (405) 217-8388 Fax: (405) 217-8389  
info@swentnano.com http://swentnano.com