



## NanoMech Recognized for Excellence in Innovation

### Local company receives national acclaim

**Fayetteville, Arkansas** - U.S. Under Secretary of Commerce for Technology, Robert Cresanti, presented NanoMech, LLC with a Recognition of Excellence in Innovation certificate as part of a roundtable discussion on "Overcoming Barriers to Nanotechnology Commercialization." NanoMech is a company developing innovative nanomanufactured materials and related products. For example, NanoMech has pioneered and successfully developed an extremely flexible and effective production process for a formation of coatings onto two-dimensional and three-dimensional objects. The coatings are made up of particles in the nanometer to micrometer size range and have properties, such as extreme wear resistance, corrosion resistance and biocompatibility, which are customized to specific applications.



The Recognition of Excellence in Innovation certificate recognized the significant strides that NanoMech has made in the development and commercialization of this innovative nanotechnology. The award presentation and roundtable discussion were hosted by Under Secretary Cresanti, U.S. Senator Mark Pryor, the University of Arkansas and the University of Illinois-Springfield. The development of nanotechnology-based companies has been of particular interest to Senator Pryor because of the potential to boost and diversify the economy of the State of Arkansas. "NanoMech is putting Arkansas on the map for the progressive technological development going on in the state. Their groundbreaking work is a prime example of how investments in nanotechnology can result in real-world applications," said U.S. Senator Mark Pryor.

NanoMech's innovations are currently in four application sectors, machining and manufacturing, biomedical, military, and specialty packaging. In the machining and manufacturing area, NanoMech's patented industrial coating process is extremely versatile and can be adapted for a wide range of strategic applications. For example, the company's TuffTek™ coating for cutting tools will increase the productivity of U.S. manufacturers that use cutting tools by increasing the life span of the tools and reducing the down time required to replace worn tools. The use of TuffTek™ will allow these manufacturers to produce parts that are stronger, lighter and last longer and meet the additional demands of producing parts more quickly and at lower cost.

NanoMech is also commercializing a lubricant called NanoGlide® that will reduce wear and increase energy efficiency of machinery and vehicles and is environmentally friendly, thus helping companies achieve greater sustainability in their operations. A third promising application of NanoMech's technology in the biomedical arena is a coating for dental and orthopedic implants that fights infection and promotes healing.

The versatility of NanoMech's technology is simultaneously promising and difficult to commercialize because each application requires the formulation and testing of specific coatings. The challenges surrounding the commercialization of nanotech-based products were part of the focus of the roundtable discussion, held August 7, 2007 at the University of Arkansas at Little Rock. This roundtable, convened by the U.S. Department of Commerce's Technology Administration ([www.technology.gov](http://www.technology.gov)), is the second of three meetings nationwide and allows for the collaboration of the founders of nanotechnology companies, venture capitalists, state and local development agencies and other experts in promoting the development of nanotechnology-based companies.

Dr. Ajay P. Malshe, co-founder and Chief Technology Officer of NanoMech, said that the fact that a wide range of experts have been meeting to discuss the barriers to nanotechnology commercialization is extremely timely and benefits from the leadership provided by the Department of Commerce and Senator Pryor, "I am very honored that the NanoMech team was chosen to receive this distinguished Recognition of Excellence in Innovation. Organization of this key event in Arkansas and recognition that NanoMech is founded in this state is a clear sign of increasing federal and private support for commercialization of such world class nanotech innovations. Investment in nanotech and its successful fruition will result in an important economic engine for the state and the country at large."

This is the third year in which NanoMech has received national or international recognition. NanoMech received the 2005 Excellence in Technology award from Frost & Sullivan and the 2006 Micro/Nano Competition award from R&D Magazine. NanoMech's technological innovations have been developed, in part, using grants from the National Science Foundation (NSF), the Environmental Protection Agency (EPA) and the National Institutes of Health (NIH).