

NATIONAL INSTITUTE OF AEROSPACE TECHNOLOGY TRANSFER & COMMERCIALIZATION HUB



NIA is a non-profit research and graduate education institute created to conduct leading-edge research, develop new technologies for the nation and help inspire the next generation of scientists and engineers through the use of basic and applied research. NIA's tech transfer and commercialization vision and mission is to incubate and stimulate the commercialization of new intellectual property developed through NIA research and educational activities at the NASA Langley Research Center, including the fostering of radical ideas and disruptive technologies.

Featured Technology: 17267-1

Status: Open for Licensing

NOVEL METHOD OF DEPOSITING METALS ONTO CARBON ALLOTROPES AND COMPOSITIONS THAT IS READILY SCALABLE

A simple method to deposit metal clusters of nanometer dimensions onto carbon allotropes. A variety of metals can be used, such as silver, platinum, palladium, gold, and possibly others. The method can deposit metal onto a variety of carbon allotropes such as carbon nanotubes, carbon nanofiber, and graphite.

This method is superior to the current state-of-the-art techniques in that it does not require vapor deposition, high vacuums, or harsh acidic conditions. Standard laboratory equipment, commercially available materials, and nonflammable gas are all this is required. The technique is scalable, allowing for large quantities of material to be easily produced.

Potential applications for this technology include catalysts for polymerization reactions, organic transformations, and fuel cells and well as for components in sensors.

Meet the Inventor



Dr. Kent Watson
NIA Senior
Research Scientist

A valued member of NIA since 2003, Dr. Watson received his Ph.D. in Organic and Polymer Chemistry from Virginia Commonwealth University. His dissertation advisor was Dr. Robert G. Bass.

After completing his Ph.D., he continued his research as a National Research Council Research Associate at NASA Langley research Center and as a research scientist with ICASE, located in Hampton, VA. He received his B.S. degree in Chemistry (American Chemical Society approved curriculum) in 1992.

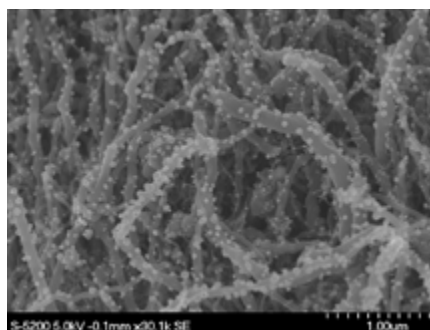
Dr. Watson has significant experience in the design, synthesis, and evaluation of monomers and high performance polymers for aerospace applications.

Contact Us

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*Silver particles on multi-wall carbon
nanotubes*

