

ADC's Equipment Making Headlines at NIST

Lansing, NY, October 5th, 2018 – In March of 2017, Advanced Design Consulting USA, Inc. delivered and installed a custom-built instrument to the National Institute of Standards and Technology (NIST).

This instrument was designed to give scientists new ability to glimpse moment-by-moment changes in materials on the crucial nanometer scale. This instrument, called the Very Small Angle Neutron Scattering (VSANS) instrument, has given U.S. researchers the ability to spot nanometer-scale changes in materials that could improve many tasks in your daily life.



Sponsored by the National Science Foundation as part of the Center for High Resolution Neutron Scattering (CHRNS), instrument has several design features to make it more versatile than the 30m instruments:

- High Resolution detector
- Converging beam collimation
- Multiple detector arrays
- Narrow or broad wavelength resolution

On September 26, NIST posted an article to their website, detailing the importance of VSANS, and how it will aide in research. As quoted in the article: NIST researcher Elizabeth Kelley said, “With other instruments, it’s like making a movie where you can only see half the picture at once. I’ve lost a lot of time trying to optimize the location we’re looking at so we don’t miss anything, but with VSANS you don’t have that problem. Seeing how these micelles interact over time can help us understand how a drug can get released, or how efficient you are at encapsulating it.”

To read the article, please visit:

<https://www.nist.gov/news-events/news/2018/09/new-nist-instrument-will-give-scientists-window-change-nanoscale>

To learn more about VSANS, please visit:

<https://www.adc9001.com/vsans.html>