

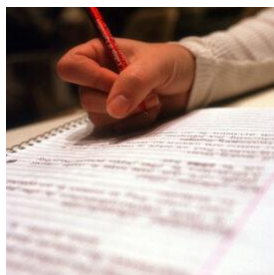
NEWS FROM THE ANALYTICAL INSTRUMENTATION FACILITY (AIF) - OCTOBER 2021



Introducing AIF's New Director, Dr. Nina Balke

We are excited to announce that Dr. Nina Balke is AIF's new director! Nina received her PhD in Materials Sciences from the Technical University of Darmstadt in Germany. She has 12 years' of experience as a senior staff member at the Center for Nanophase Materials Science at Oak Ridge National Lab. Join us in welcoming Nina and learn more about her by clicking here.

[Contact Nina »](#)



“Best Papers” Wanted - Nominations Due October 27, 2021!

We are pleased to announce the competition for the ninth annual Best Paper Award for work performed, in part, at the AIF. Please nominate excellent papers by October 27 (midnight) to aif-publications@ncsu.edu.

[Full Instructions Here »](#)



Researchers Solve a Mystery From 3,600 Years Ago

In 2014, the AIF assisted with several SEM and FIB analyses, which included elemental analysis, that led to a Nature, Scientific Reports publication titled, "A Tunguska sized airburst destroyed Tall el-Hammam a Middle Bronze Age city in the Jordan Valley near the Dead Sea." The primary purpose of this research was to determine what happened near the Dead Sea in Jordan millennia ago. The research for this publication spanned nearly 15 years and has 21 co-authors listed, including AIF's SEM lab manager, Chuck Mooney. Click here to read more.

[A City Destroyed in Seconds »](#)



Meet AIF's Newest Staff Member, Dr. Jin Nakashima

Dr. Nakashima is a Senior Research Scholar at the Analytical Instrumentation Facility. He is a Plant Physiology Scientist who focuses on cell wall remodeling when higher plants grow under microgravity, modification of lignin in bioenergy crops, and improvement of forage quality and digestibility in alfalfa by manipulating lignin biosynthesis.

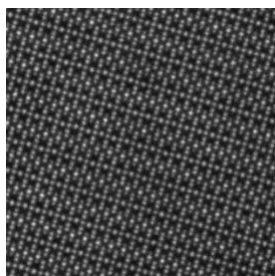
[Contact Jin »](#)



AIF User Spotlight

Lydia Skolrood is a second-year Ph.D. student under the supervision of Dr. Qingshan Wei in the Department of Chemical and Biomolecular Engineering. Her research is about building affordable and convenient point-of-care diagnostics that will lead to better disease treatment and prevention and reduce crop loss and its impact on global food security. Read more about Lydia here.

[Meet Lydia »](#)



AIF User Awarded Microscopy and Microanalysis Student Award

Stephen Funni was recently awarded the M&M Student award for his paper, "Quantifying the local structure of incommensurately moderated tetragonal tungsten bronze from STEM images." In the paper, he presents a new method, the vector pair correlation function (vPCF), for studying deviations from the perfect crystalline structure of materials. At the AIF, he used the Titan to obtain this image.

[Link to APL Materials Publication »](#)

[Click Here to View New Job Opportunities! »](#)