

NEWS FROM THE ANALYTICAL INSTRUMENTATION FACILITY (AIF) - JULY 2020



AIF User Spotlight

Jacob Smith is a first year PhD student in Materials Science and Engineering working under Dr. Wenpei Gao. He is involved in several projects, ranging from 4DSTEM simulations to interface analysis. Read more about Jacob and his research here.

[Meet Jacob Smith »](#)



Virtual Short Course: Fabrication of Wide Bandgap Power Devices (August 3-5, 2020)

The NC State Nanofabrication Facility (NNF) and Analytical Instrumentation Facility (AIF) are pleased to offer a virtual three-day short course which will explore the science and technology underpinning wide bandgap (specifically, GaN and SiC) power devices. Click here to register for this free short course.

[More Details »](#)



AIF Staff Image Chosen for Popular Journal Cover Art

One of the images from the research of AIF staff members Fred Stevie, Roberto Garcia and Elaine Zhou is now the cover art for a well-known journal. The research sought to determine the amount of insecticide on fabric surfaces composed of nylon and cotton after different numbers of wash cycles using Time of Flight Secondary Ion Mass Spectrometry (ToF- SIMS). It was possible to identify the type of fiber and to monitor the depletion rate with this technique.

[Full Paper »](#)



AIF Staff Contribute to Successful Summer Camp

AIF staff members provided a virtual AIF tour to 24 high school students that participated in the Materials Science and Engineering summer camp “Building Better Blocks.” This camp has run successfully for over a decade, so despite social distancing constraints the engineering staff wanted to provide students with a memorable summer camp experience. Read more about its success [here](#).

[Virtual Summer Camp »](#)



NNCI Anti-Racism Town Hall

On June 24th, the NNCI hosted a town hall for all NNCI stakeholders including facility users, students, staff, and faculty. The event was organized by the NNCI Diversity Subcommittee and provided thoughtful insights and discussion. Click here to read more about this town hall and to sign up for future events.

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[Introduction to X-ray Tomography Video »](#)