



NEWSLETTER

July 2024

Chemistry and Physics Department, Oxendine Science Building – Room 3101, Pembroke, NC 28372
chem_phy@uncp.edu 910/521-6247

New Department Chair



Effective July 1, 2024, Dr. Rachel Smith has been appointed as the new chair for the Department of Chemistry and Physics. We have confidence in her leadership as she brings a wealth of experience to this role. She has administrative and grant expertise, as well as strong support of the department faculty and staff. Congratulations, Dr. Smith, and thank you for your willingness to serve!

Dr. Siva Mandjiny

On June 30th, Dr. Siva Mandjiny stepped down as the Department Chair. We want to “thank you” for your many years of service as chair. We know you will continue to be a strong advocate for the department as well as a champion of student learning. Thank you, Dr. Mandjiny, for your leadership, dedication, and advocacy on behalf of your faculty, staff, and students!



Summer Bridge Program

UNC Pembroke Summer Bridge is a six-week academic success program that engages incoming first year scholars and prepares them to discover, belong and thrive as they transition to a university environment.

On July 3rd, Dr. Rachel Smith spoke with various underrepresented incoming students that plan to study in the fields of science, business, or mathematics to ease their transition to the university. Enrolled students will take college-level courses and engage in academic success and career exploration workshops while developing leadership skills and becoming an active and engaged citizen.

The students will *discover* their passions through transformative educational experiences and self-exploration that fosters personal and academic growth. They will have the feeling to *belong* at UNCP through active participation and commitment to their discipline, career, and campus community. They will *thrive* academically and socially through shared campus experiences cultivated by UNCP's unique history and resources to meet the changing needs of our diverse and inclusive community. Summer Bridge fosters inclusive excellence with welcoming and supportive environments by recognizing our diverse backgrounds and experiences through:

- Inclusive transformative educational opportunities.
- Equitable resources and connections with faculty, staff, and students.
- Facilitated development of a more inclusive campus culture through programs and initiatives.
- Adapting to the needs of our campus community to ensure a holistic development of our students socially and academically.

Thank you, Dr. Smith and Saleiya Lowery (Center for Student Success), for the opportunity to meet with the students.

Biomanufacturing Training

The second-in-a-series of regional bioprocessing training programs in North Carolina will help students and residents prepare for entry level positions in the biopharmaceutical manufacturing.

The two-week, hands-on short course was offered for free from June 17 - 28, 2024, for up to 12 participants. Training was held at UNCP's Biotechnology Research and Training Center, (COMtech).

This new training is part of the [Accelerate NC – Life Sciences Manufacturing initiative](#), funded by the U.S. Economic Development Administration's Build Back Better Regional Challenge (BBBRC), which aims to build strong regional economies and support community-led economic development nationwide.

NCCU, home to the Biomanufacturing Research Institute and Technology Enterprise (BRITE) and leader of the HBCU/HAIU Coalition, worked closely with UNCP for it to be the first university in the coalition to offer bioprocessing training. The coalition also includes Elizabeth City State University, Fayetteville State University, Livingstone College, Saint Augustine's University and Winston-Salem State University. Other coalition members are expected to launch similar trainings in 2024.

"Accelerate NC is all about helping underserved populations develop new skills to prepare for job opportunities in life sciences manufacturing that may have seemed unobtainable," said William Smith, NCCU-BRITE director of development. "UNC Pembroke is taking a critical first step for the HBCU/HAIU coalition in building an equitable talent pipeline, with many more training opportunities to come." BBBRC funding helped purchase equipment needed to teach upstream and downstream bioprocessing as well as provided the funding to conduct "train the trainer" events where faculty could become trainers.

UNCP training applicants must be 18 years of age or older and must have a high school diploma or GED. Before starting the short course, students must complete five online modules.

Upon completion of the two-week free course, students will earn several certifications in biomanufacturing, including an advanced certificate in biopharmaceutical manufacturing.





Special “Thank You” Dr. Siva Mandjiny and Mrs. Emily Hunt working with this group for entry level positions in the biopharmaceutical manufacturing.

7th International ANPA Conference in Physics - 2024

<https://anpaglobal.org/conferences-and-events/conference-2024/>



Dr. Tikaram Neupane and Dr. Uma Poudyal served as the local organizers for the 7th Association of Nepali Physicists in America (ANPA) International Conference, held from July 19 - 21, 2024, at Fayetteville State University in Fayetteville, NC. The conference, conducted in a hybrid format, presented 140 research projects. ANPA has been at the forefront of fostering collaboration among Nepali and international physicists and scientists from around the globe, providing a platform for presenting cutting-edge scientific discoveries and facilitating connections and collaborations across academia, research institutions, and industries. Additionally, Drs. Neupane and Poudyal presented their two research works at the conference. Thank you, Drs. Neupane and Poudyal, for the opportunity to meet with this group.

Summer 2024 NSO Transfer Orientation



Dr. Rachel Smith, Ph.D.
Professor of Chemistry

On Friday, July 26, Dr. Rachel Smith participated in the NSO Transfer Orientation. The orientation went well. “Thank you” for your commitment and dedication to connect directly with incoming students, sharing information about the department, and engaging them in meaningful ways.

Acceptance Letter from the Department of Defense



Dr. Steven Singletary, Clinical Assistant Professor – Chemistry and Physics Department, submitted a proposal to DoD last year. He has received an acceptance letter stating his proposal has been selected for funding. The total amount of \$398k is to purchase a scanning electron microscope with integrated EDS and a research grade metal 3D printer. The printer has three parts and can produce finish parts in copper, high speed steel, tungsten, etc. In addition to the research project in the proposal, both pieces of equipment will become important for our engineering students. ***Congratulations, Dr. Singletary!***