

ENVIR®NEWS Waste Management Institute

UNDER THE LEADERSHIP OF THE SCHOOL OF AGRICULTURE AND ENVIRONMENTAL SCIENCES NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

National Atmospheric Deposition Program (NADP) Monitoring Station at N.C. A&T.

INTERDISCIPLINARY **ACADEMIC UNITS**

ANIMAL SCIENCES AGRICULTURAL EDUCATION AGRICULTURAL ECONOMICS ARCHITECTURAL ENGINEERING BIOLOGY **BIOLOGICAL ENGINEERING BUSINESS MANAGEMENT** CHEMICAL ENGINEERING CHEMISTRY CIVIL ENGINEERING COMPUTER SCIENCE CONSTRUCTION MANAGEMENT & SAFETY **CURRICULUM & INSTRUCTION** ECONOMICS ELECTRICAL ENGINEERING HISTORY HUMAN ENVIRONMENT & FAMILY SCIENCE INDUSTRIAL ENGINEERING JOURNALISM AND MASS COMMUNICATIONS LIBERAL STUDIES MATHEMATICS MECHANICAL ENGINEERING NATURAL RESOURCES NURSING POLITICAL SCIENCE PHYSICS PSYCHOLOGY SOCIOLOGY/SOCIAL WORK

Inside...

NADP	1
UNN Workshop	1
Certificate Recipients	2
Keynote Speakers	2
N.C. A&T Global Leader	3
Pre-college Workshop	3
Environmental Leadership	4
WMI Committee Members	4



Interdisciplinary Waste **Management Institute**

Dr. Godfrey Uzochukwu, Director Academic Deans Dr. Joe B. Whitehead Jr., Provost Dr. Harold L. Martin Sr., Chancellor



he National Atmospheric Deposition Program, nationally known as NC 17 was established with a U.S. Department of Energy grant. North Carolina A&T State University is collaborating with South Carolina State University to operate the station. A&T researchers, graduate and undergraduate students are responsible for collecting contaminant data including atmospheric mercury and atmospheric ammonia which are integrated into results from other NADP stations across the United States. Sample handling has been worked out between the University of

Illinois and A&T. The NADP station became operational in January 2015. The station provides insight into changing atmospheric chemistry, assesses sensitive ecosystems, and validates atmospheric models. Of particular interest are major physiographic, agricultural, aquatic, and forested areas within states, regions, and eco-regions. Dennis Jackson of Savannah River National Laboratory (SRNL) and Glenn McClendon of South Carolina State University in conjunction with Jeffery Pribble and Jason Karlstrom of the University of Illinois are providing technical support for the operation of the NC 17 station.

Professor Uzochukwu calls for Environmental Sustainability at the **University of Nigeria**



Dr. Godfrey Uzochukwu with UNN graduate students



Professor Godfrey Uzochukwu and Professor Godfrey Uzochukwu and Deputy Vice Chancellor Edwin Igbokwe Professor Anthonia Achike

Professor Godfrey Uzochukwu was the guest speaker at an international workshop where he called for "Environmental Sustainability" in Nigeria. The workshop was hosted by the University of Nigeria, Nsukka (UNN). The workshop highlighted climate change, water resources, waste management, renewable energy and environmental education and outreach. Professor Uzochukwu noted that the world faces unprecedented challenges such as population growth, global warming, and overexploitation of natural resources, energy, water and food shortages.

He stated that "higher education has a crucial role to play in addressing these challenges". He said that waste reduction and recycling activities are major factors in creating a sustainable environment. The vice-chancellor of UNN, Professor Benjamin C. Ozumba who was represented by the deputy vice chancellor for administration, Professor Edwin Igbokwe in his welcome address said that the workshop was apt, bearing in mind the challenges that confronts us in terms of sustaining the environment. In addition, the director, of the African Climate Change Adaptation Initiative at UNN, Professor Anthonia I. Achike said that "there was a need to raise awareness of environmental sustainability issues in order to combat the challenges of climate change". Other facilitators at the workshop include Professor I. G. Madu; Professor C. C. Mbajiorgu; Professor M. I. Uguru, Professor F. Ezema and Olanrewaju Mgboji.





REDESIGN REIMAGINE 🐔





Dr. Godfrey Uzochukwu and Stephanie Turgem



Dr. Godfrey Uzochukwu and Franklin Macha

Students Receive Waste Management Certificates

Forty-six graduating seniors (B.A./B.S.) received the Waste Management Certificates in December 2014 and May 2015 at special ceremonies. The graduating seniors completed their degree and certificate requirements. The keynote speakers were Dr. Melody Pierce, vice chancellor for Student Affairs at N.C. A&T (December 2014) and Dr. Goldie Byrd, dean of the College of Arts and Sciences at N.C. A&T (May 2015). The Waste Management Certificate highlights the training of students in environmental security and waste management issues and signals to employers that N.C. A&T students are ready to broadly advance waste management and sustainability in their fields. The certificate adds value to the undergraduate training at A&T.

Undergraduate Interdisciplinary Certificate Recipients

Celena Alford Ouinton Allison Cameron R. Anderson Jacqueline Annette Batts Marvin D. Bolden Amber Satira Brown Derek Anthony Burris Vanessa L. Cortes LaKeisha S. Crump Rachel A. Davis Delmonica Tashon Farrior Nina Fuller Marcus S. Gibson Kadija Gittens Nabonidus Sholom Greene Emmanuel Kwame Gyimah Ronald B. Hall Jr. Darriel C. Hawkins Cierra LaDorothy Haynie Liamcy Ashley Hogan-Rivera AnJanette B. Hunt Jasmine A. Jeffries

Biological Engineering Applied Engineering & Technology Atmospheric Science & Meteorology **Biological Engineering** International Studies Environmental Horticulture **Civil Engineering** Civil Engineering Liberal Studies Architectural Engineering Food Science & Env. Sciences Elementary Education Liberal Studies Civil Engineering Civil and Arch. Engineering Mechanical Engineering Animal Industry Civil Engineering Agricultural & Env. Systems Civil Engineering Elementary Education **Biological Engineering**

Amir Johnson David N. Jordan Janie G. Locklear Franklin E. Macha Christopher A. Moody Seyara Moore Temitope O. Olaniyan Christopher John Porter Yillian E. Rivera-Cruz Courtney Rouse Micah Noel Rollie Jason D. Sansbury Jasmine Layne Scott Sharon R. Scotton Teneil L. Sivells Kenny DeAndre Smith Jalen P. Speller Allahquan L. Tate Stephanie Noelle Turgeon Nicholas Devon Vitalis Marcellous Jermaine Williams Neque Nekole' Willis

Marketing **Civil Engineering Civil Engineering Civil Engineering** Civil Engineering Agricultural Education **Civil Engineering Civil Engineering Civil Engineering** Chemical Engineering Lab. Animal Science **Civil Engineering** Agricultural Education Liberal Studies **Biological Engineering** Construction Management Animal Science Civil Engr. and Arch. Engr. Civil Engineering Environmental Science Liberal Studies Supply Chain Management

Graduate Students Waste Management Certificates

Ten graduate students (M.S. and Ph.D.) received the Advanced Waste Management Certificate in December 2014 and May 2015 at special ceremonies. The advanced certificate recipients completed advanced degree and advanced certificate requirements. The keynote speakers Dr. Godfrey Uzochukwu and Emmanuel Dada were Dr. Melody Pierce, vice chancellor for Student Affairs at N.C. A&T (December 2014) and Dr. Goldie Byrd, dean of the College of Arts and Sciences at N.C. A&T (May 2015). The Waste Management Certificate highlights the training of students in environmental security and waste management issues and signals to employers that N.C. A&T advanced students are ready to broadly promote waste management and sustainability in their fields. The advanced certificate adds value to the graduate training at A&T.

Brianne N Bass Benard Chola Emmanuel Adegbenga Dada Asif Kamal Md Rezwanul Kabir **Ekwemalor Kingsley** Dawit Admasu Melaku Eric Meline Quazi Rahman Regina Rafik Anup Saha

Environmental Health & Safety Civil Engineering Environmental Health & Occ. Safety Mechanical Engineering Integrated Animal Health Systems Civil Engineering Chemistry Chemical Engineering Food and Nutritional Sciences **Civil Engineering**





Dr. Godfrey Uzochukwu and Brianne Bass

KEYNOTE SPEAKERS



Dean Goldie Byrd



Vice Chancellor Melody Pierce



N.C. A&T is a Global Leader in Environmental Sustainability

For two consecutive years 2013 and 2014, N.C. A&T was ranked in the top 7 percent in the world for University Sustainability by UI GreenMetric Ranking of World Universities. The results are drawn from infrastructure (15 percent), energy and climate change (21 percent), waste management (18 percent), water usage (10 percent), transportation (18 percent), and education (18 percent). provided by universities online. Universitas Indonesia (UI) is a state university with an enrollment of 47,000. Additionally, N.C. A&T earned Silver level recognition for student sustainability for the 2014 fall semester under the leadership of Jordan Smith-Jones, Environmental Studies junior. Recognition is awarded on four different levels: Green Level, Silver Level, Gold Level, and Platinum according to Kristine Sturgeon of myActions network. Eighty-seven schools were recognized for excellence in environmental sustainability during the Fall 2014 Semester

Environmental Security and Waste Management Workshop

Pre-College Workshop on Environmental Security and Waste Management was conducted for 77 high school students and teachers in June and July 2014. The theme of the workshop was "Environmental Security and Waste Management" highlighting 62 environmental questions.

Environmental and Waste Management Guest Speakers

O'Brien & Gere Ltd

- Asbestos Remediation (Nathan Simmons) Waste Industries USA
- Biogas Reactors and Landfill Gas Monitoring Field Trip (Bryan Wuester) Environmental Protection Agency
- Carbon Reduction Regulations (Dr. Tina Ndoh)
- Environmental Policies (Attorney Marguerite E. McLamb)
- Rule Making (Toni Jones) City of Greensboro
- Waste Reduction and Recycling (Sheldon Smith) ReCommunity
- Recycling technologies (Mary McClellan) Hackley and Associates
- Ethics, Character and Leadership (Dr. Lloyd Hackley) Peace Corps
- Global Sustainability Issues John Paul Owens)

Career Paths for Graduates Who Received the WMI Certificates

MAJOR

Animal Science Majors **Biology Majors Business Majors Chemistry Majors Communication Majors** Construction Mgmt Majors **Economics** Majors **Education Majors Engineering Majors** Journalism Maiors Landscape Architecture Majors Mathematics Majors Nursing Majors **OSHA** Majors **Other Science Majors Physics Majors Political Science Majors Psychology Majors** Sociology Majors

CAREER PATH

Environmental Health and Science Environmental Biology Environmental Business Environmental Chemistry Environmental Communication Environmental Safety Environmental Economics Environmental Education **Environmental Engineering** Environmental Journalism Environ Design/Visual Resource Specialist Environmental Mathematics/Statistics Environmental Health/Occupational Safety Environmental Safety Environmental Science/Environmental Consultants **Environmental Physics Environmental Policy/Politics Environmental Psychology Environmental Sociology**

Tour of Landfill Gas Facility





Hazmat Training



Student Round Table Discussion and Presentation of Waste Management Issues



Students are addressing the convergence of physical sciences, social sciences, engineering, technology and life sciences to accelerate environmental solutions.



Noteworthy

Environmental Leadership at A&T

North Carolina Agricultural and Technical State University has a history of providing leadership in addressing environmental sustainability issues through interdisciplinary centers, institutes and academic programs at all degree levels. These interdisciplinary collaborations have made the university a major contributor to understanding sustainability on a global scale. The university has taken advantage of the Higher Education Sustainability Bill (The Higher Education Opportunity Act-P.L. 110-315) signed by President George W. Bush in 2008. In March 2011, Chancellor Harold Martin, Sr. launched a robust recycling program and encouraged everyone to recycle. The goal of the recycling program is to improve the quality of life now and in the future.

World Class WMI Affiliated Faculty

 Best performing professors are affiliated with WMI • Best performing students are affiliated with WMI – Wayne Kimball, former SGA President. Campus wide resource for faculty and students. • Facilitated top 10 overall 2013 Green Metric – University Sustainability Ranking for N.C. A&T. • Selected #1 by the Environmental Careers Organization. • Recognized by the Greensboro Chamber of Commerce as an innovative environmental program. • Top 28 interdisciplinary institute/center in the nation (2013 NCSE report). 360 were profiled. Enhances student retention and graduation - scholarships and internships. • Forum for Big Ideas – created EES Ph.D. Program and facilitated Campus Sustainability. • Forum for exchange of ideas among students from different disciplines. • Forum for exchange of ideas among faculty members from different disciplines. • Brings environmental industry leaders to campus. • Promotes economic growth for the City of Greensboro through national conferences. • Offers best interdisciplinary support courses. • Promotes Green Campus - Recycling, energy conservation and

We welcome creative ideas that are suitable for inclusion in the EnviroNews. Send a brief summary of your ideas to: WMI, Carver Hall 261 North Carolina A&T • Greensboro, NC 27411 • PHONE: (336) 334-7030 • FAX: (336) 334-7399 • Email: uzo@ncat.edu

North Carolina A&T State University is a land-grant doctoral/research university and AA/EEO employer

From the Editorial Staff:

For more information about the Waste Management Institute call, fax or write Director, Waste Management Institute, North Carolina A&T State University, Greensboro, NC 27411

(336) 334-7030 · FAX (336) 334-7399 Email: uzo@ncat.edu

WMI Mission: Enhance awareness and understanding of waste problems and their management in our society and develop programs to improve the quality of life and protect the environment.

This newsletter is a publication of the Waste Management Institute of North Carolina Agricultural and Technical State University. It is intended to increase the awareness of teachers, students, industry, government, and community groups about environmental and Waste Management issues.

INTERDISCIPLINARY WMI PROGRAM COMMITTEE

REDESIGN REIMAGINE 🖍

Dr. Derome Dunn

Dr. Tracy Hanner

Mr. Ron Bailey

Dr. Vereda Williams

Dr. Patricia Shelton

Dr. Regina Williams

Dr. Linda Florence Callahan

Dr. Stephanie Luster Teasley

Dr. Ereka Williams

Dr. Ralph Noble

Dr. Robert Pyle

Dr. Savo Fakavode

Dr. Mary Smith

CYCLE

Dr. Fafanyo Asiseh

Dr. Godfrev Gavle

Dr. George Robinson

Dr. Godfrey Uzochukwu

College of Engineering School of Business & Economics School of Agriculture & Environmental Science School of Nursing College of Engineering College of Arts and Sciences School of Education College of Arts & Sciences School of Agriculture and Environmental Sciences School of Agriculture and Environmental Sciences College of Engineering College of Arts and Sciences Waste Management Institute School of Technology College of Arts and Sciences School of Business and Economics College of Arts and Sciences



water conservation.