Project: Systems-Based Integrated Program for Enhancing The Sustainability of Antibiotic-Restricted Poultry Production, USDA, Univ. of Connecticut, - Prairie View A&M (Sub-award), Kommalapati, 09/20-09/24, $450,000.

The description of the entire project can be found at the link:

https://cris.nifa.usda.gov/cgi-bin/starfinder/0?path=fastlink1.txt&id=anon&pass=&search=R=88710&format=WEBLINK

Scope of the Work in the Center for Energy and Environmental Sustain Prairie View A&M University as follows

1. The scope of the work will cover two objectives: Bird Welfare, and Sustainable Poultry Litter Recycling and Management
2. An on-farm instrument shelter (OFIS) or mobile laboratory will be set up to monitor air pollutants in/outside a poultry house by using air pollutant analyzers NH3, NOx, H2S, CO, CO2, volatile organic carbons (VOCs), PM10 and PM2.5. Besides air pollutants, indoor temperature, humidity, airflow circulating rate and air exchange with house ventilation system will also be monitored continuously;
3. Environmental impacts of supercapacitor (SC) electrodes produced from poultry litter will be investigated by using life cycle assessment;
4. Life cycle assessment of meat/egg production from cradle to retailer in different geographical regions in the U.S.

The air quality monitoring work will be conducted in a poultry house in Arkansas, and the participating faculty from the University of Arkansas will assign Dr. Kommalapati to conduct air quality monitoring in the poultry house that they find. During air quality monitoring, we will NOT touch the poultry in the houses, just detect air pollutant levels of the poultry houses by using gas analyzers. We DO need to set up the gas analyzer shelter in the poultry house by entering the house. The life cycle assessment (LCA) work only needs a computer installed LCA software to complete the simulation work, and there no poultry house access needed.