

**PS
LA**
Spring 2024

SEMINAR SERIES



Dr. Christian Dimkpa

A unique blend of regulatory and research efforts towards food and environmental safety

To feed the ever-growing human population requires substantial increase in food production. However, large scale food production to meet the global need is unachievable without the use of agrochemicals, including mineral fertilizers, pesticides, and herbicides to boost soil fertility, maintain crop growth and yield in the face of pests and diseases, and to fend off competition from weeds. Millions of tons of pesticides and fertilizers are applied in farmlands annually. Upon application, pesticide and heavy metal residues are deposited in food or in soil, and fertilizer nutrients are leached, run-off, emitted, or volatilized into the environment, causing eutrophication, algal bloom, ammonia pollution, and greenhouse gas. Together, the use of agrochemicals has resulted in grave concerns regarding the safety of our food system and the health of our environment. At the Department of Analytical Chemistry of the Connecticut Agricultural Experiment Station, a unique blend of regulatory and research activities are conducted to provide both information and answers to the concerns regarding food safety and environmental health. Heavy metals and pesticides analyses are conducted on human food, raw agricultural produce, and animal feed; nutrient-based pesticides are evaluated on crops, including hemp; and enhanced efficiency fertilizers are conceived and designed to reduce the footprint of mineral fertilizers on the environment. This presentation provides an overview of these regulatory and research efforts.

Dr. Christian Dimkpa is the Chief Scientist and Head of the Department of Analytical Chemistry of the Connecticut Agricultural Experiment Station (CAES). Christian directs regulatory-support programs on mycotoxins, heavy metals, pesticides, organic compounds, nutrient, and fertilizers. Christian obtained his PhD in Natural Sciences (Bio-Environmental Science) from the Friedrich Schiller University Jena in Germany, and MS in plant molecular biology from the Katholieke University Leuven, Belgium.

Friday
February 16, 2024
12:15-1:15pm

YNG 132

Lunch with the speaker
to follow

Host: Haiying Tao

WebEx
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COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

Plant Science and Landscape Architecture