



Covering Environments—The CEAC Monthly Seminars

ENGINEERING THE INDOOR CROP PRODUCTION FACILITY TO INCREASE PRODUCTIVITY AND PROFITABILITY

January 20, 2017 @ 4:15pm

Controlled Environment Agriculture Center, 1951 E Roger Rd

Nadia Sabeh, PhD, PE, LEED AP
Founder and President of Dr. Greenhouse*

Dr Sabeh is a greenhouse engineer who specializes in Heating, Ventilation and Air Conditioning (HVAC) who earned her PhD in the Department of Agriculture & Biosystems Engineering at the CEAC of University of Arizona. True to her roots at the UofA, Sabeh has focused in applying her HVAC expertise to controlled environment agriculture, an area in which she has been Nationally recognized as a leader for nearly two decades.

Professional (including small scale) CEA growers often take for granted the design and application of engineering concepts that can help make an indoor plant production facility operate more efficiently and more productively. This is where Dr Sabeh's expertise comes into play. Regardless of the crops to be grown, Sabeh designs HVAC systems to optimize crop growth by taking into account environmental, agricultural, and plant needs.

To accomplish these tasks, Sabeh researches and designs climate control systems for greenhouses, rooftop gardens, and so-called plant factories. Her scientifically based designs have been applied to vegetable crop production, mushroom cultivation systems, and cannabis growing for medicinal purposes.

In this seminar, Dr Sabeh will share her experiences in engineering for CEA, discuss the opportunities for optimizing the controlled environment, challenge us to think about efficiency and conservation, and take a look forward into the industry's future and technology trends.

* <http://www.doctorgreenhouse.com/about.html>