



Applying Needlepoint Cold Plasma in Commercial Applications to Reduce Ventilation Air, Construction/Renovation Costs, Energy and Maintenance

Tuesday, April 3rd, 2018

Charles “Charlie” Waddell, is the president, CEO and founding member of global plasma solutions, a Savannah, Georgia, based air purification engineering and manufacturing company that specializes in government, education and healthcare air quality and energy saving solutions. Charlie’s experience includes designing HVAC systems in the residential, commercial, and industrial markets as well as for the aviation and hand dryer industries. Charlie holds a BSEE and BSEM from Old Dominion University, Norfolk, VA. Charlie’s prior experience to starting global plasma solutions includes being the general manager of North America for desiccant rotors international, the executive vice president of MeadWestvaco air systems, a division of MeadWestvaco, a sales manager for Des Champs/Munters and a field engineer for siemens medical.

Charlie is an active member of ASHRAE and currently a participant of ASHRAE TC 2.3, SSPC 62.1 and formerly the secretary of TC 8.12. Charlie is also a member of the newly formed USGBC indoor air quality assessment committee, which intends to set the guidelines for “acceptable air quality” within LEED certified buildings. Charlie has over 16 years of HVAC design experience and has presented at over 50 different ASHRAE meetings. Charlie’s latest accomplishments include thirteen patents granted, multiple patents pending, having an article published in engineered systems magazine on desiccant dehumidification, winning the 2016 IAQ product of the year award by ACHR news magazine for the new self-cleaning, no maintenance, universal voltage input, GPS-iClean and having global plasma solutions be a top 40 most innovative technology company in Georgia in 2017 by the Technology Association of Georgia.

Presentation Abstract:

The presentation provides a brief review of ASHRAE 62.1 and how to apply cold plasma technology to reduce ventilation requirements, by up to 75%, in commercial applications. The method in which cold plasma reduces particles, kills pathogens and reduces odors will be discussed.

Learning Objectives:

- To understand both methods in ASHRAE 62 for determining ventilation rates
- To become familiar with cold plasma technology
- Understand how cold plasma technology reduces first cost and annual energy consumption in commercial applications when combined with the ASHRAE 62 IAQ Procedure
- Understand how the technology reduces maintenance and improves IAQ

Earn 1 hour of Professional Development Hours at this meeting.

Lunch will be provided

Time: Meet and Greet/Lunch at 11:45am and Tech Session begins at 12:00 pm

Payment: Members = \$20.00, Non-Members = \$25.00, Students = \$10.00

Reservations: <http://hamptonroads.ashraechapters.org/>

Lunch Location: [Hobbs & Associates 4850 Brookside Ct Ste 100, Norfolk, VA 23502](#)

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