



## IAQ RADIO

Episode 653 | January 28th, 2022, | 12:00 PM EST

The Z-man Live from:  
“THE Florida Mold Conference!”  
“Odor Hunters”

This week the Z-man was in Florida at the AEML Winter Break aka “THE Florida Mold Conference!” The Z-man has been hunting for odors for going on five decades. He has developed processes for finding the source of odors and for correcting the issue once its discovered. This presentation will go over what odors are, how they are perceived, how material porosity affects odor, fire related odors, odor events. Microbial odors, the odor patch test, and an odor hunter device.

### History of the AEML Winter Break

The AEML Winter Break Conference is rooted in the prior efforts of Richard Alexis, a Florida licensed Mold Assessor and Florida Approved-Continuing Education Unit Training Provider. Richard previously held two successful Technical Mold Conferences, filled meeting rooms, with the second event held in 2016.

In February 2020, the event was rebranded as Winter Break and hosted by Ron Mazur and his AEML team. The theme of the event was “Solving the Mold Puzzle” and was facilitated by IESF founder Richard Alexis. The 2022 Winter Break event builds off the themes of prior events. The theme of the 2022 Winter Break was the 4M’s: Moisture, Materials, Mold & Methodologies, featured 13 presentations by subject matter experts and each “M Module” facilitated by a moderator knowledgeable in the subject matter.

Winter Break was very well organized and executed, sessions started and ended on time. The Continental breakfasts, lunches, breaks, and happy hours were well stocked with an abundance of quality food and beverages. Speakers, moderators, VIPs, and special guests were well looked after.

Big shout out to the “M” behind the scenes the; Maestro Pete Consigli who organized, orchestrated, and coordinated behind the scenes. And to the “BIG M” behind the scenes, Ron Mazur who along with his staff made every attendee feel welcome and comfortable.

Highlights of the event included numerous drawings for valuable door prizes supplied by generous vendors. Culminating in MEGA Door Prizes of: Tramex’s latest Moisture Meter Kits and Particles Plus’ new particle counter.

An audible is a last second change to an offensive football play. Rather than provide coverage limited to only the first 3 hours of the Winter Break, the Z-Man called an audible and decided to present to the IAQradio audience, presentation he would giving on Day Two of Winter Break because he felt it would provide greater value to the IAQradio audience:

#### **Nuggets mined from today’s episode:**

“Odor Hunting: A New Methodology for Determining Where Odors Reside”

- An odor is the result of one or more volatilized chemical compounds that are found in low concentrations that humans and animals can perceive through their sense of smell. An odor is also called a "smell" or a "scent", which can refer to either a pleasant or an unpleasant odor.
- While "odor" can refer to pleasant and unpleasant odors, the terms "scent", "aroma", and "fragrance" are usually reserved for pleasant-smelling odors and are frequently used in the food and cosmetic industry to describe floral scents or to refer to perfumes.
- In the United Kingdom and other Commonwealth, English-speaking nations, "odour" refers to scents in general—without positive or negative connotations; however, in the United States, and for many non-native English speakers around the world, "odor" has a negative connotation as a synonym for "stink". An unpleasant odor can also be described as “reeking” or “smelly” and can also be called a "malodor" or "stench".
- UFO- unidentified foreign odor. A “solo-odor” is when only 1 person smells it. Universal odor is when everyone smells it. the investigator cannot detect the odor he needs cooperation of someone who can, a “canary.”

- Odor Detection Threshold - is the lowest level at which a human can detect an odor.
- Odor Recognition Threshold - is the lowest level at which someone can identify the odor. At a given concentration one person may smell and recognize an odor while another may not detect it.
- Building materials and personal property are not created equal. Porosity is the primary differentiator between them. The more porous, the greater the odor pickup potential.
- In a fire materials scorch, char, burn and melt. Fire related odors do not deposit uniformly. Residual smoke odor resides within burnt materials, on fire related particulate and gaseous smoke odor sorbed by materials. Smoke odor is emitted by these odor sources.
- During fires location, orientation and distance from the fire are determining factors for odor retention.
- During odor event: Odorous residue may not be deposited uniformly.
- Odor diffusion, odor moving from area of net high level of odor concentration to areas of lower concentration.
- Air is a transport mechanism for odor.
- Odors do not deposit uniformly.
- Most important to determine the location of odor emission. Because there will always be a remedy, sometimes the ultimate remedy removal.
- I attribute odor patch test to Jeff May; author of *My House is Killing Me*. Aluminum foil placed over paper towel and taped to surface; creates a microenvironment to trap and retain odor emission.
- Accelerated odor patch test with heat (hair dryer) and moisture (distilled water): It is low cost, Can be used in situ, Broad range approach, Not intended to speculate, and so long as odor is present on a surface there is always a solution.
- Odor cleansing between sniff sampling can be done using coffee beans.

Some improvements over the Accelerated Patch Test method are under development:

- Uniform distance.
- Consistent, uniform temperature
- Confirmable temperature

- Repeatable
- Observable, window
- Damp or dry sampling
- Damp + volatile solvent, metals, ductwork

Some uses for method in development:

- Odor mapping.
- Quality control.
- Sampling horizontal or vertical
- Sample hard surface and porous surfaces.
- Odor barrier materials: glass, aluminum, heat resistant plastic, etc.

*Z-Man signing off*

Trivia question: What is the medical definition of growing or thriving best in an intermediate environment (as in one of moderate temperature)?

Answer: mesophilic

No correct answers