

Maintain a Healthier Environment and Save Energy with Aircuity's Vivarium Solutions

VIVARIUM FACILITIES ARE TIGHTLY CONTROLLED CRITICAL environments that often represent the most energy intensive areas of a research building. Aircuity's enhanced vivarium solution delivers exactly what facility managers need to address the challenges of these spaces: better information about vivaria indoor environmental quality (IEQ) and the ability to optimize air change rates (ACH) based on actual room conditions.

Aircuity's OptiNet® system continuously monitors and adjusts ventilation rates in holding rooms, procedure areas and other lab or support spaces to minimize airborne contaminants. When contaminants such as ammonia or particulates are detected, ventilation rates increase to minimize odors or reduce allergen exposure. As the levels of contaminants decrease, ventilation flows are reduced to maximize energy savings. In constant volume facilities, Aircuity's information and reporting capability allows for "informed turndown" of high ACH holding rooms to safely lower energy consumption while continuously verifying a safe and comfortable environment. Aircuity's solution for vivaria can be deployed in a variety of lab designs, including those with open cage racks and those cages directly connected to building ventilation.

Aircuity Advisor™ Services delivers critical information to animal care facilities and EH&S personnel to improve vivaria operations. Temperature, humidity, particles, volatile organics and even an "as ammonia" figure can be displayed and analyzed. The data can also be easily exported for AAALAC/ILAR reporting requirements.

Aircuity IEQ analytics display average and peak values as absolute and differential measurements, providing insight about exposure levels and the source of the contaminants. Lab managers can track the severity and duration of incidents or compare spaces over time to identify anomalies within individual spaces.

Aircuity's ability to monitor, control and report on critical indoor environmental parameters gives facility managers the ability to improve facility conditions while achieving significant energy savings. Implementing an Aircuity solution results in the best possible environment for human and animal occupants, energy savings and critical information about the space.



Photo Courtesy of Tecniplast Group

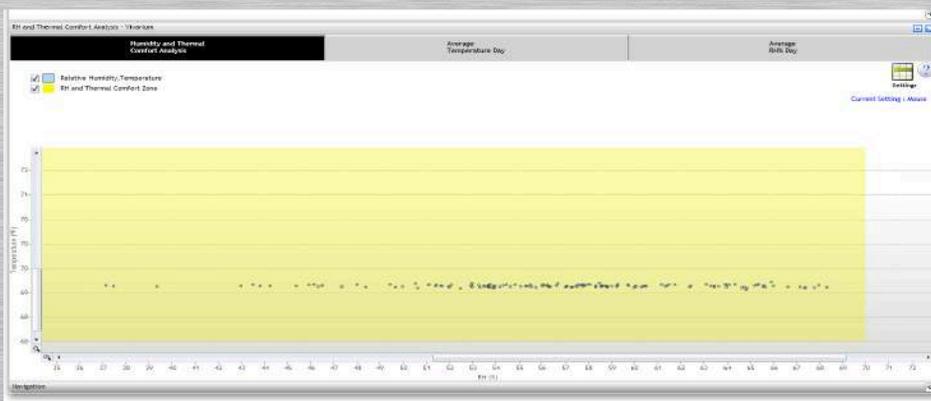
Aircuity Advisor™ Services

Advisor Services offers analytics that are beneficial to a variety of personnel working in a vivarium. The examples below highlight several analytics that deliver critical insight about the environment.

COMFORT ANALYTIC

The comfort analytic displays recorded temperature (Y axis) and humidity (X axis) readings in a scatter plot.

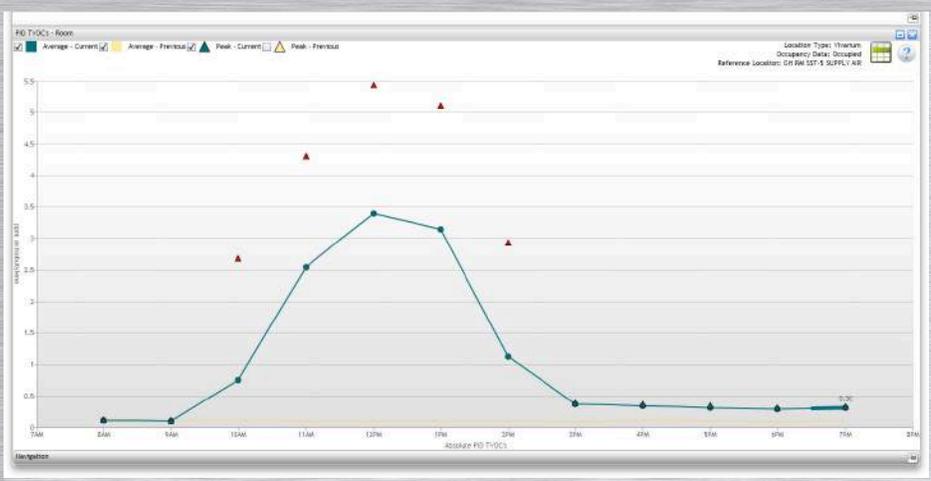
- › The yellow background frames the acceptable limits as recommended by the ILAR “Guide”.
- › Users can quickly see if the environment is being maintained within an acceptable range over a user selectable time (day, week, month or year)



IEQ ANALYTIC

IEQ analytics present peak and average values for each measured parameter (CO, CO2, TVOCs, 2.5µm Particles, Temperature and Humidity).

- › Measurements may be displayed as Absolute and Differential.
- › Users may select daily, weekly, monthly and annual time frames over which the data is analyzed.
- › The analytic depicts the severity and duration of an event and helps identify the contaminant source.



You are receiving this alert as a result of an event, which has activated a Data Trigger that has been configured for your account.

Client: University of Somewhere
Building: Life Science Center
Notification: Excess VOC as Ammonia
Frequency: This notification activates as needed on a daily basis.

Room: LSC AHR 442 has a parameter, which was outside its prescribed limits.
The offending value: 5.59 ppm, occurred on: 6/22/2014 12:00 AM.
The high threshold value is 3.00 ppm.
[To Dashboard Viewer](#)

Room: LSC AHR 444 has a parameter, which was outside its prescribed limits.
The offending value: 10.96 ppm, occurred on: 6/22/2014 12:00 AM.
The high threshold value is 3.00 ppm.
[To Dashboard Viewer](#)

SMART NOTIFICATIONS™

Smart Notifications, proactively notify users of the date and time, the location, the severity, as well as the duration of IEQ or ventilation related events.

- › Related events grouped into one email.
- › Generated on an hourly or daily basis, based on user-defined thresholds.
- › Hyperlink to the dashboard depicting day and location of the event.
- › Serves as the “Call-to-action” to notify users of events that might otherwise go undetected and/or unreported.

For more information on Aircuity’s vivarium solutions visit <http://www.aircuity.com/technology/optinet-applications/vivarium-demand-control-ventilation/> or contact your local Aircuity representative.