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ABSTRACT

General Discussion of UV Measurement in the Disinfection Range 220nm to 310nm

Accurate and stable ultraviolet energy measurements are difficult to make. Absolute energy measurements for wavelengths ranging from 310nm to 405nm now can be made reliably. However, measurements at wavelengths from about 220nm to 310nm remain difficult to make.

There are a variety of reasons why this is so and include solarization, optical response curves of materials in the measurement path and limitation of semiconductor optical elements.

Technology and techniques for dealing with these issues and others, such as ozone generation by the sources and increased solarization due to higher energy photons at these wavelengths have slowly evolved.

This presentation will provide a more detailed discussion of these issues and will suggest that a workable measurement system can be developed.