

Study on measurements of air quality in museums

by

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Abstract

Passive samplings are required for monitoring indoor air quality in museums because long-term exposure should be investigated for historical heritages and quiet atmosphere should be kept for visitors. In this paper, test measurements conducted in a museum was presented where the concentrations of ammonia, formaldehyde, nitrogen dioxide, acetic acid/formic acid, TVOC, ozone, salt and acidic/alkalinity, temperature and humidity were measured by a trial sampling kit. The results of pH paper showed that not only acidic but also alkaline pollutants other than ammonia possibly existed. The concentrations of NO₂ in the display cases were lower than that in the room, while the concentrations of HCHO in the display cases were higher. The validity of the trial sampling kit was shown to measure IAQ in museums without preventing visitors from appreciating art.

Keywaords: *Indoor air quality, Museum and Passive sampling*

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