

## **Impacts of Tropical Climate on Radioactivity Measurement in Particles Collected at the Recently Certified RN65, Thailand**

It has been widely known that climate factors such as ambient temperature potentially influence transportations of particles and gases in surface air and soil. This impact is even larger under circumstances of extreme climate in the tropical zone. IMS Radionuclide and Noble gas Monitoring Station is operated by sampling air particulates and gases at surface air level. This could be affected by those factors resulting in fluctuation of background radioactivity measured from gamma-emitting radionuclides and Minimum Detectable Concentration (MDC). This study aims to reveal impacts of tropical climate factors including ambient temperature and humidity on background radioactivity levels of interested radionuclides. The results to be obtained from this work would be used for more accurate analysis and more reliable interpretation of gamma spectrum gain from the newly certified RN65 and other stations located in the tropical area. In addition, these high-quality scientific data would help strengthen the environmental radioactivity databases at the national and international levels.

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