

☒ Nanoparticles ☐ Combustion aerosol particles ☐ Air Cleaning & contamination control ☐ IAQ
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Distribution of Nano Particle of Airborne in S area

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The exposure to the Nano particle is increasing because of the sudden growth in Engineered Nano material production. However, there are few study in Nano particle's physical and chemical characteristics (Lee, 2009). In case of Nano particle, it belongs to Nucleatron Range, the diameter is under 100nm, and it occurs from volcano, fire, or diesel exhaust through natural or artificial reason (EPA, 2004).

The study measurement detects Nano particle's mass concentration in S area through multiple impactor(Moudi,Bae,1999) and using basic data in controlling Nano particle. Total mass that measurements in Moudi during study period presents in Table1. The otudoor/indoor ratio of Nano particle's mass concentration(particle 3.2~1.8 μm size) in S area presents 27, and of course it detects in outdoor and also in indoor, so the discussion is needed about their engineering movements and the influence to our society.

Table 1. Total gravity level of Nano Particles (Unit : $\mu\text{g}/\text{m}^3$)

Stage	Nominal Cut Size (μm)	N	Indoor	N	Outdoor
			Mean \pm S.D. ^a		Mean \pm S.D. ^a
Stage 2	18-10 (μm)	3	0.29 \pm 0.11	3	0.15 \pm 0.08
Stage 5	3.2-1.8 (μm)	3	6.18 \pm 10.31	3	0.22 \pm 0.14
Stage 10	0.18-0.1 (μm)	3	0.21 \pm 0.11	3	0.12 \pm 0.10
Stage 11	0.1-0.056 (μm)	3	0.11 \pm 0.13	3	0.18 \pm 0.17
Total		12	1.69 \pm 2.67	12	0.16 \pm 0.12

참고문헌

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