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Respiratory protective equipment fit tests for researchers at the National Synchrotron Radiation Research Center

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Researchers at the National Synchrotron Radiation Research Center should use respiratory protective equipment to prevent respiratory damage caused by gases, steam, solvents, chemicals, materials containing toxic substances, and oxygen-deficient environments. Those working with organic matter and certain chemical substances and those exposed to occupational dust should use respiratory protective gear to ensure their health. This study conducted qualitative and quantitative fit tests for various mask brands and sizes, namely 3M-9042, N95-9211, P95-8576, and 3M-6200 masks. The gear worn by all 18 participants in the qualitative fit test passed. By contrast, the gear worn by 12 of the 15 participants in the quantitative test passed; the failure of the remaining gear was due to differences in face shape. The N95-9211 mask can be used in three-piece protective gear because it exhibited a tight fit. Additionally, the 3M-6200 negative-pressure half-face mask exhibited the most satisfactory fit and can be used in protective gear.

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Footnotes

I have read and accept the Privacy Policy Statement

Yes

Primary author: WEN, Po-Jiun (National Synchrotron Radiation Research Center)

Co-authors: KAO, Sheau-Ping (National Synchrotron Radiation Research Center); LIN, Yu-Chi (National Synchrotron Radiation Research Center); LIN, Sy-Yu (National Synchrotron Radiation Research Center); CHANG, Miao-Hua (National Synchrotron Radiation Research Center)

Presenter: WEN, Po-Jiun (National Synchrotron Radiation Research Center)

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