

# Protection Factor Test Facility for performance evaluation of respirators

The Protection Factor Test Facility (PFTF) is used to study air purifying respirators such as Powered Air Purifying Respirators (PAPR), full face mask respirators and half face mask respirators used in nuclear facilities. The set up is tested using standard test aerosol having particle size distribution in desired range. Measurements were carried out for evaluating PF of a Powered Air Purifying Respirator (PAPR), full face and half face (tight fitting) mask particulate cartridge respirators. The Protection Factor Test Facility (PFTF) setup and the procedure established is found to yield consistent and accurate results of protection factors for various kinds of particulate respirators used in nuclear facilities



A test facility has also been established to test various filter media for their filtration efficiency and pressure drop against airborne radioactive contaminants in nuclear facilities. The filter media such as micro glass fiber filter media for HEPA filter, HEPA plus carbon granules filter media, HEPA cartridge filter media, electrostatic filter media, microdot filter media and disposable masks can be tested using this facility for their filtration efficiency and pressure drop.

