

Application of Microwave Communication in Individual Dose Monitoring and Collective Dose Optimization

occupational radiation exposure occurs in many nuclear-related applications. The daily operation and maintenance of nuclear facilities is the main contribution of plant workers, including the use and maintenance of nuclear medicine equipment, the monitoring and inspection of the environment and working conditions inside and outside the factory, Maintenance and replacement of equipment and fuel on the island during the overhaul, status monitoring of dose hot spots, etc. However, since most of the current dose rate meters and detectors in the factory do not have microwave communication functions, the staff can only record manually or use the localized storage function of the instruments And the radio walkie-talkie will transfer and save the collected data. Using meters with microwave communication modules to remotely transmit the information collected by these devices (including the current serial number of the device, placement location, time information and dose information), it can effectively replace many manual data recording and transmission functions, and realize personal dose monitoring At the same time, it can effectively reduce the collective dose.

Name of Member State/Organization

CHINA

Speakers affiliation

China Institute for Radiation Protection

Speakers email

445325196@qq.com

Author: Mr DONG, Jiajie

Co-authors: Mr LIU, Liye; Mr CAO, Qinjian; Mr ZHAO, Yuan; Mr XIA, Sanqiang; Mr LI, Yan

Presenter: Mr DONG, Jiajie

Session Classification: Session 2. Monitoring and dose assessment of occupational radiation exposures

Track Classification: 3. Monitoring and dose assessment of occupational radiation exposures