

The MXR 205 courses that were held at Malaysian Nuclear Agency, Bangi on 30th January 2018 was about quality control in maintaining x-ray equipment. The first lecture was about quality control of associated facilities which includes processor and darkroom monitoring, film processing, the dark room test, sensitometry & developer temperature test, processor chart, ideal pH of the developer and fixer, cassette & intensifying screen, film screen contact test, cassette light leakage test, cassette performance, x-ray viewer luminance, safe light of the dark room and lastly the protective device.

The second lecture was about principles of radiation protection. This lecture was focussed on the radiation risk which includes stochastic and nonstochastic effects and the concepts of radiation protection. The basis of radiation are justification, dose limitation and optimization. The third lecture was about x-ray machine and associated equipment. This lecture was about understanding x-ray machine for ensuring proper operation, maintenance and its useful lifetime. Meanwhile, the fourth lecture was delivered by KKM representative and it was about the latest quality assurance program in radiology under the act 304. Under current implementation of QAP for general x-ray it includes QC and summary report by H class license, audit radiograph, training /CME for license holder and supervisor and lastly FRRA.

The fifth lecture was about QC for general radiography. This lecture includes explanation factors affecting patient dose, QC instruments, performance, and safety standard set by KKM, mechanical and electrical safety checks, radiation protection check, performance, and safety standard of the x-ray tube and generator test, and film processing. The last lecture was about quality control measurement for dental radiology. On this lecture, the speaker explained on the basic principle of the dental x-ray machine, the QC test tool, performance, and safety standard for intra oral set by KKM, performance and safety standard for OPG set by KKM. Mechanical and electrical safety checks, radiation protection check and performance and safety standard test.