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Identifying the Level of Ionizing Radiation Using a Device Implemented on the Arduino Development Board

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This article discusses how to build an inexpensive radiation identification device. The device can be used in the X-ray environment and can be a real-time indicator of large variations in ionizing radiation. The device is made of two compatible data acquisition boards, the main sensor involved is SBM-20-Geiger Muller. Current devices, such as photographic dosimeters or Geiger-Muller sensors, are not digital and do not alert quickly if there is significant radiation exposure. The device developed and presented in this article makes it possible to quickly identify and prevent ionising radiation. The device was calibrated using a Gamarad DL7 device, with a radiation source: Americium 241, by identifying the radiation level, the presented study was performed.