

Al-Mustaqbal University College  
Department of Medical Physics  
The Fourth Stage  
First Course



# Radiation Protection

## LECTURE NINE Nuclear power plants



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## LECTURE NINE : Nuclear power plants

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- ❖ Introduction
- ❖ Places of Exposure to Radiation
- ❖ Consumer products that are exposed to ionizing radiation
- ❖ Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM)
- ❖ The major industrial sectors that generate TENORM

### **Some places of work that may expose a person to radiation, as follows: -**

- People who work in nuclear power plants may be exposed to higher levels of radiation than the general public, although their exposure levels are monitored carefully.
- People who work in uranium mines are monitored because of their exposure to radiation in the form of radon.
- People who work in health or dental care, especially those who work with x-ray (or other imaging test) equipment or who work with radioactive isotopes, may also be exposed to radiation at work. Radiation exposure may also occur at some research labs.

### ❖ **Consumer products that are exposed to ionizing radiation**

- Tobacco products contain low levels of radiation, which may come from the soil it's grown in or the fertilizer used to help it grow. Tobacco may account for a significant portion of the yearly radiation that smokers are exposed to.