

**International Conference on Occupational Radiation Protection:  
Strengthening Radiation Protection of Workers –Twenty Years of Progress  
and the Way Forward**

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## **Analysis of data on ionizing radiation exposure of employees at the Radiation Facility for Industrial Sterilization**

The Program of protection against ionizing radiation, as a part of the Law on Radiation and Nuclear Safety and Security of the Republic of Serbia, prescribes the obligation to establish individual monitoring of exposed workers. In the Radiation Facility for Industrial Sterilization of the Vinca Institute of Nuclear Sciences (Belgrade-Serbia), TLD dosimeters are used for this purpose. Based on them, the absorbed radiation doses received by employees are read once a month.

In the Radiation Facility, Co-60 is used as a source of ionizing radiation. The facility has seven employees: four operators, two dosimetrists, and a head of the Radiation Unit. All of them are obliged to wear personal TLD dosimeters whose values are read once a month. These values show us the exposure of individual employees to the effects of ionizing radiation. The paper analyzes the data on the exposure of employees at the radiation unit in the last 5 years. The values of radiation exposure by workplaces, present in mSv/month, are shown (Table 1). Also, in the plan of the radiation unit, the positions where individual employees mostly stay during their working hours are labeled (Figure 1). Based on these results, the level of risk of each work position can be analyzed.

### **Speakers email**

slobodan.masic@gmail.com

### **Speakers affiliation**

VINCA Institute of Nuclear Sciences

### **Name of Member State/Organization**

Serbia

**Primary authors:** VUJCIC, Ivica (Vinca Institute for Nuclear Sciences, Belgrade, Serbia); MASIC, Slobodan

**Presenter:** MASIC, Slobodan

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