

Dear Madam/Sir,

You are cordially invited to attend new complimentary Webinar series from *the Institute of Nuclear Chemistry and Technology*

### **Application of Ionising Radiation for Sterilization of Medical Equipment, Personal Protection Equipment and the other Microbiologically Infected Objects**

You will get the opportunity to hear our panel of experts in this live, online educational seminar. For more information (the detailed program and schedule, lecturers presentation) You can visit our Webpage connected to the Webpage of the Institute of Nuclear Chemistry and Technology (<http://www.ichtj.waw.pl>), or see the attached documents.

**Date:** Thursday Jan 21<sup>th</sup> 2021

**Time:** 10.00 am (time Central Europe)

**Duration:** 3 h

**THE WEBINAIRS WILL BE CONDUCTED IN POLISH**

**PARTICIPATION IN WEBINARS IS FREE**

**The following issues will be discussed during the webinars:**

- Nature of ionising radiation, the principles of operation of sources emitting ionizing radiation, basic mechanisms of the interaction with matter and comparison of the influence of various radiation types (gamma rays, fast electrons, X-rays);
- Biological effects of ionising radiation in relation to changes in microorganisms' DNA and RNA. Microbiological aspects of the process of radiation sterilization;
- Radiation sterilization, including the levels of sterility described in terms of SAL (Sterility Assurance Level) accompanied by comparison of different sterilization methods of healthcare products (gamma, e-beam, X-ray, Ethylene Oxide Technologies, etc.);
- The possible desirable and undesirable changes of the functional properties of particular materials that might occur under sterilization processing and the methodology applied for preservation or favourable modification of the materials under irradiation;
- Practical use of radiation technologies for sterilization and for production of sterile materials with new or improved functionalities. The examples of medical equipment, PPE and the other microbiologically infected objects subjected to decontamination with a use of ionising radiation will be shown.

**During the webinars**, the speakers will answer your questions live during the broadcast!

#### **Who should attend**

This webinar will provide insights to students, academic teachers and researchers who want to learn how sterilization with a use of ionizing radiation can be applied for diverse types of applications, to doctors, to producers of medical equipment or personal protection equipment, to health operators in hospitals, as well as for the others who are interested in sterilization of different microbiologically infected objects.

#### **Certificate of attendance**

All webinar participants can request a certificate of attendance, and a learning outcomes summary document for continuing education purposes.

#### **Registration:**

For registration please complete the attached Application Form and send it back to:

E-mail: [radiation.sterilization@ichtj.waw.pl](mailto:radiation.sterilization@ichtj.waw.pl)

**Questions?** E-mail: [k.ciesla@ichtj.waw.pl](mailto:k.ciesla@ichtj.waw.pl), [m.walo@ichtj.waw.pl](mailto:m.walo@ichtj.waw.pl)

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