

# Seminar „Between physics, biology and medicine”

Organized by Department of Medical Physics  
and Department of Experimental Particle Physics and Applications, Institute of Physics JU

**Prof. Aleksander Bilewicz**

Institute of Nuclear Chemistry and Technology, Warsaw

**„Short range particles emitters in radionuclide therapy”**

## Abstract

Currently, the most important problem in oncology is the effective treatment of tiny clusters of tumor cells, micrometastases or even single cancer cells. In the first part of the lecture new radiopharmaceuticals based on  $\alpha$  emitters will be presented. Particular attention will be paid to various concepts of radionuclides binding to biologically active molecules, properties of obtained radiopharmaceuticals and the first results of their application in clinical trials. In the second part of the lecture, the studies on radiopharmaceuticals labelled with Auger emitters, which are currently being carried out at the Institute of Nuclear Chemistry and Technology in Warsaw will be discussed. At the end the concept of application  $^{195m}\text{Pt}$  labelled platinum nanoparticles in hepatocellular carcinoma (HepG2) treatment will be presented.

when: 21th January 2020, 4:15 p.m.

where: A 1-08 (Aula), FAIS, Łojasiewicza 11

