

Please join my meeting on your computer, tablet or smartphone: https://www.gotomeet.me/NCBJmeetings/uz3-and-phd4gen-seminars

## Seminarium Zakładu Energetyki Jądrowej i Analiz Środowiska (UZ3) Departament Badań Układów Złożonych (DUZ)

Wtorek: 05.04.2022 11:30

## Ewa Kowalik-Pilarska

Analysis of consequences of radiological exploitation releases of HTGR nuclear reactors, during normal operation, performed for needs of GOSPOSTRATEG-HTR project

## **Abstract**:

The work covered calculations of radiation individual doses as a consequence of radiological exploitation releases for considered HTGR reactor TeResa as well as analysis of the results. The calculations included effective radiation doses, from external and internal exposure for considered inhabited areas. It was performed with the PC-CREAM package, which is software for performing radiological impact assessments of routine, continuous discharges of radionuclides to the environment. The application includes a series of mathematical models that predict the transfer of radionuclides through the environment and estimates activity concentrations in various environmental media following a continuous release. The output of mentioned models is then used as input to the dose assessment part of the program. Then mentioned input data are combined with actual discharge rates, site-specific data, habit data and dose coefficients to calculate effective doses for various exposure pathways. Calculations performed also considered the meteorological data.

Serdecznie zapraszamy M. Dąbrowski, T. Kwiatkowski http://www.phd4gen.pl