## Seminarium Zakładu Energetyki Jądrowej i Analiz Środowiska (UZ3) Departament Badań Układów Złożonych (DUZ) Wtorek: 16.04.2019, 11:30 CYFRONET (bud. 39), sala 172 (III piętro)

## Zuzanna Krajewska

## <u>Why HTGRs failed in '60s and why we expect renesans</u> <u>now?</u>

## Abstract:

High Temperature Gas-cooled Reactor (HTGR) is a Generation IV concept of graphite-moderated nuclear reactor with a once-through uranium fuel cycle. The HTRs currently represent about three percent of the total number of reactors in commercial operation worldwide. The aim of the presentation is to briefly describe the history of this type of reactors, starting from the development of early designs until the newest technological concepts. In this context, the consideration will be given especially to the titled questions - why the implementation of HTGRs was not succeeded in the 1960s and why the concept of their construction returns after years and is currently being intensively discussed in the terms of so many applications. The presentation is to be the starting point for further considerations of the HTGR fuel degradation process.

Serdecznie zapraszamy, M. Dąbrowski, T. Kwiatkowski