

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

wtorek 16.10.2018

godz. 11:30

PNT-NCBJ, sala 251 (PROTON)

dr inż. Karol Kowal

Integrated Risk Assessment for HTR-based nuclear- chemical facilities

Abstract:

Author will present the most demanding problems on risk assessment of chemical installations coupled with High Temperature Reactors (HTR) optimized to the process heat production. Probabilistic Risk Assessment for HTRs is by itself a great challenge due to the novel technological concepts for which neither the damage states, safety goals nor risk measures are clearly defined. The concept for replacement of the coal or gas boilers by HTRs within the chemical plants requires additional issues to be considered within the risk analysis resulting from the interactions between nuclear and non-nuclear installations combined together in one complex system. For these reasons the traditional approach to the Probabilistic Risk Assessment aiming at calculation of the core melt is no longer applicable and needs to be redefined. It implies also the more efficient methods for uncertainty and sensitivity analysis to be applied. These and related issues will be discussed during the seminar in the context of the Polish HTR program.

Serdecznie zapraszamy,
M. Dąbrowski, T. Kwiatkowski