



EINLADUNG  
zum  
VERA - SEMINAR  
von

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**The study of radioactive iodine from the  
Fukushima accident**

A large amount of the radioactive iodine isotopes  $^{131}\text{I}$  ( $t_{1/2} = 8.01$  d) and  $^{129}\text{I}$  ( $t_{1/2} = 1.57 \times 10^7$  y) were released into the environment during the Fukushima Dai-ichi nuclear power plant (FDNPP) accident on March 2011. Radioactive iodine is one of the key fission products to be monitored due to the tendency of accumulation in the thyroid gland. There is an ethical obligation of science to serve society, and to help Japanese to better understand what happened, how it happened and why, even though public trust in science was lost in the aftermath of the accident. The study of radioactive iodine from the accident can fulfill this obligation.

Information of environmental radiation monitoring was required in the initial phase of the FDNPP accident in making rational assessment of the radiological consequences to the public. However, in reality, it was not available at that time since monitoring system did not function due to the loss of power supply. Part of the on-site release characteristics and transportation mechanisms have been estimated via long-lived  $^{129}\text{I}$  in environmental samples. Two key questions of the macroscopic and microscopic dynamics of  $^{129}\text{I}$  have been investigated with large-scale soil and terrestrial water sampling. The results from these studies will be presented in the seminar.

**Donnerstag, 10. Januar 2019, 16:30 Uhr**  
**1090 Wien, Währinger Str. 17, "Kavalierstrakt",**  
**1. Stock, Victor-Franz-Hess Hörsaal**