INSTITUT FÜR ISOTOPENFORSCHUNG UND KERNPHYSIK
DER UNIVERSITÄT WIEN

E I N L A D U N G

zum

I N S T I T U T S S E M I N A R

von

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^{137}Cs, ^{60}Co and ^{40}K Transfers from soil to agricultural plants: Measurements and modelling

The decommissioning of Italian Nuclear Power Plants involves the calculation of radiological doses due to the planned and accidental releases during this phase. The most dangerous kind of radiological exposure is the internal exposure. We focused our attention on the first step of the radionuclide input into human food chain: the radionuclide transfer from contaminated soil to agricultural plants. Between the radionuclides under study, the ^{137}Cs and ^{60}Co are signatures of radiological contamination of liquid and airborne effluents by Nuclear Power Pants. We have performed a field experiment that allows:

- The comparison between the anthropogenic radionuclides uptake by lettuce plants tilled in two distribution of soil contamination.
- The comparison between the ^{40}K uptake by lettuce and maize plants.

Donnerstag, 30. März 2006, 16:30 Uhr

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Seminarraum von VERA**

R. Golser W. Kutschera