## Wiener Physikalischen Kolloquium

## ENGAGING WITH LOCAL STAKEHOLDERS: SOME LESSONS FROM FUKUSHIMA FOR RECOVERY

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The Fukushima Dai-ichi NPP accident contaminated the soil of densely-populated regions in Fukushima Prefecture with radioactive cesium, which poses significant risks of internal and external exposure to the residents. If we apply the knowledge of postChernobyl accident studies, internal exposures in excess of a few $\mathrm{mSv} / \mathrm{y}$ would be expected to be frequent in Fukushima. Our extensive whole-body-counter surveys however showed that the internal exposure levels of residents are much lower than estimated ${ }^{1)}$; in 2012-2013, the ${ }^{137} \mathrm{Cs}$ detection percentages (the detection limit being $\sim 300 \mathrm{~Bq} / \mathrm{body}$ ) are about $1 \%$ for adults, and practically $0 \%$ for children. These results are consistent with those of many other measurements/studies conducted so far in Fukushima, e.g., rice inspection, foodstuff screening and duplicate-portion studies.
As such, the risk of external exposure is in general higher for the majority of residents in Fukushima. We have therefore started to deploy a new type of personal dosimeters, which can record integrated dose every hour with timestamps, in order to evaluate the risks of residents who wish to return to the 20-km evacuation zone.
In these efforts, the most crucial and time consuming is to re-establish communication at all levels; between residents and local medical staff, between experts and local staff, between the central government and municipalities, and so on.

1) Hayano RS, Tsubokura M, Miyazaki M, Satou H, Sato K, Masaki S, Sakuma Y., Proc Jpn Acad Ser B 2013; 89:157-63.

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