***Workshop Time Schedule***

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***Some aspects of nuclear emergency preparedness and response,***
***parallel computation in modelling of radionuclides dispersion,***
***application of remote sensing techniques.***

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organized by ABmerit, Trnava,

and

Institute of Landscape Ecology Slovak Academy of Sciences

Hotel Patria, **Štrbské Pleso, High Tatras,** Slovakia

Date: **April 01 - 03, 2014.**

**Tuesday, April 01**

**13:00** **Welcome and short introduction** of all participants
*(Peter Čarný, ABmerit, Andrej Halabuk, Slovak Academy of Sciences)*

**13:15** Introduction to **the topics** of the workshop
*(Peter Čarný, ABmerit)*

**13:30** **Remote sensing:** Earth observation, satellite data and applications
*(Andrej Halabuk, Slovak Academy of Sciences)*

**14:30** **Using of remote sensing** in radiological impacts assessment and monitoring
*(Juraj Lieskovský, Slovak Academy of Sciences)*

**15:00** Coffee break

**15:30** **Case Study** – Real application of remote sensing methods: Course from satellite data to classified areas with agricultural crops/land cover distribution up to the final application in ESTE systems
*(Eva Smejkalova et al, ABmerit)*

**16:30** Discussion of **GMES/Copernicus** (European Earth Observation Programme) and its possible use during emergency
*(Andrej Halabuk, Slovak Academy of Sciences)*

**16:45** Information about **Horizon 2020 Programme** (Space, Research & Innovation)
*(Jakub Birka,* Slovak Centre of Scientific and Technical Information, *Centrum vedecko-technických informácií SR)*

**17:00** End of the day

**Wednesday, April 02**

**08:30** Discussion of **source terms categorization on the base of radiation impacts**: urgent protective measures beyond the EPZ / urgent protective measures inside the EPZ / rare or none need of urgent protective measures
*(Peter Carny, ABmerit)*

**09:30** Prediction of time of radioactive cloud arrival to particular location = **prediction of time available for urgent measures**
*(Peter Carny, ABmerit)*

**10:00** Coffee break

**10:30** **Dispersion modelling** on the basis of diagnostic and prognostic meteorological data in the scope of the nuclear power plant monitoring system of Baden-Württemberg
*(Walter Scheuermann, Inst. of Nuclear Technology and Energy Systems, University Stuttgart, Germany)*

**11:30** Comparison of radiological impacts of nuclear accidents using the **PTM (Puff Trajectory model) and the LPM (Lagrangean particle model)**, including discussion of METEO data need for the models
*(Dusan Suchon, ABmerit)*

**12:15** Lunch break

**13:45** Analyses of meteorological data for the vicinity of NPP: **comparison of locally (on-site) measured data and numerical weather prediction data,** impact on urgent protective measures assessment
*(Peter Carny, ABmerit)*

**14:00** Upgrading of algorithms for **real release estimation on the base of response of tele-dosimetric system** "on the fence" in the area of NPP
*(Ludovit Liptak, ABmerit)*

**15:00** Coffee break

**15:30** Calculations of volume **activity in pastures, leafy/non-leafy vegetables,** cow/sheep/goat milk as a result of accidental release of radioactivity
*(Peter Carny, ABmerit)*

**15:45** **Operational effluents** impacts calculation – characteristics of SW tool ESTE AI, **comparison with** SW tool **NRC Dose**
*(Dusan Suchon, Monika Krpelanova, ABmerit)*

**16:15** **Annual Impacts:** Upgrade from **sectors to square grid, u**pgrade from sectors **to local terriers (cadastres)**
*(Dusan Suchon, ABmerit)*

**16:30** **Implementation of probabilistic approach to calculation** of radiological impacts in case of normal operational effluents (approach of IAEA/MODARIA)
*(Ludovit Liptak, ABmerit)*

**17:30** End of the day

**19:00** **Dinner** at the chalet "Koliba Patria" for workshop participants

**Thursday, April 03**

**09:00** **Simulator for severe accidents** - simulation of **radiation situation** in containment and in rooms of NPP (main control room, ...) and in area of NPP during severe accidents (application of the system ESTE SIM)
*(Peter Carny, Ludovit Liptak, ABmerit)*

**10:00** **ESTE Analyst** – its role for the members of crisis staff, description and utilization of ESTE Analyst for off-line analyses of radiological impacts
*(Monika Krpelanova, ABmerit)*

**10:30** **GIS module and Map server** – discussion of tools for presentation and visualization of radiological monitoring results across the country in GIS environment in normal radiological situation and in case of nuclear / radiation accident.
Discussion of the **Web/Mobile** client of **ESTE.**
*(Eva Smejkalova, Dusan Suchon, ABmerit)*

**11:30** End of the workshop

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