



## **Measurement of personal UV exposure on different parts of the body during various activities**

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The present study deals with the determination of the UV exposure on different body parts during three different activities. For this purpose the exposure on test persons at eight different positions of the body was measured using Gigahertz optoelectronic devices. These UV dosimeters were fixed on the chest, on the shoulders, on the arm and forearms, on the abdomen, on both legs and on the shin. Measurements were performed with 10 seconds intervals during the following activities: walking in different sky directions, sitting and lying.

Altogether the measurements were performed on seven days at noon during one hour.

The measured exposure is compared to the ambient UV in order to remove the effect of the atmospheric fluctuations on the measured UV exposure. First results show the strong dependence of the measured exposure on the activity and on the orientation of the test person in respect to the sun. The highest exposure is obtained for most of the body parts when the test subject is lying on the ground. We also compare the exposure of the different body parts and identify the parts of the body that are especially at risk. Using these results an eventual need for protection and the appropriate sun protection measure for the different body parts may be determined.