



Programme

8th Workshop on

ULTRAVIOLET RADIATION MEASUREMENTS

**Davos, Switzerland,
15 – 16 July 2014**



Programme

Tuesday, July 15, 2014

- 8:00 - 8:45 Registration, preparations of the poster exhibition
- 8:45 - 8:50 Welcome words by Prof. Werner Schmutz Director of PMOD/WRC
- 8:50 - 9:00 Outline of the programme by Petri Kärhä
- 9:00 - 9:30 Julian Gröbner, EMRP ENV03 Traceability for surface spectral solar ultraviolet radiation – summary at the end of the project
- 9:30 - 10:30 **Session 1 Calibrations / Characterizations** (Chairman Peter Blattner)
- Peter Sperfeld, Source-Based and Detector-Based Calibration of Qasume QASUME at PTB
 - Petri Kärhä, Characterisation of nonlinearities of array spectroradiometers
 - Saulius Nevas, Stray light correction of array spectroradiometers for solar UV measurements
- 10:30 - 11:00 Coffee break
- 11:00 - 12:00 **Session 1 Calibrations / Characterizations, Cont.** (Chairman Marek Smid)
- Peter Blattner, Wavelength calibration devices
 - Omar El Gawhary, A Laser-Driven Light Source (LDLS) as a portable spectral irradiance calibration source in the UV range and other radiometric applications
 - Gregor Hülsen, QASUME II as new portable solar UV reference
- 12:00 - 14:00 Lunch
- 14:00 - 16:00 **Session 2 Array Spectroradiometers** (Chairman Saulius Nevas)
- Ari Feldman, Novel micromirror device based diode array UV solar spectroradiometer
 - Jimmy Dubard, Development of an array spectroradiometer with improved stray light rejection using band-pass filters
 - Marina Kahazova, Characterisation of TE-cooled array spectroradiometers for solar UV measurements
 - Luca Egli, Post processing of data from array spectroradiometer, 30 min.

- Natalia Kouremeti, Julian Gröbner, A precision solar spectroradiometer for spectral aerosol optical depth and solar irradiance measurements, 30 min.

16:00 - 16:30 Coffee break

16:30 - 18.00 Poster Session

- Richard Kift, Overview of observations made as part of the EMRP ENV03 Solar UV project.
- Jimmy Dubard, Monte Carlo technique applied to the uncertainty evaluation of spectral irradiance measurement using array spectroradiometer
- J.A. Bogeat, Improvements implemented and preliminary characterisation of Avantes CCD spectrometer at INTA - “El Arenosillo” in Huelva, Spain
- Peter Knuschke, Essential minimum textile and dermal protection factors for outdoor workers - a safety concept for solar exposed workplaces in the mid-latitudes
- A. Serrano, Comparison of 400 nm and 450 nm filters for reducing the stray-light in UV measurements with an Avantes CCD Array Spectrometer at INTA - “El Arenosillo” in Huelva, Spain
- Luciano Bachmann, Radiometry of UV LED arrays for cell culture irradiation
- Becky Hooke, Intercomparison of CCD Array and Scanning Spectroradiometers for Solar UV Measurements in Australia
- M. Sierra, Up-conversion photonics in rare-earth doped materials for enhancing incoming UV solar irradiation

18:00 End of day 1

20:00 Workshop Dinner at Hotel Grischa Davos

Wednesday, July 16, 2014

9:00 - 10:20 **Session 1 Novel Detectors and Devices** (Chairman Petri Kärhä)

- Peter Meindl, Suitability of a Fourier Transform Spectroradiometer as a reference instrument for Solar UV Irradiance Measurements
- Tomi Pulli, Realization of Improved Solar UV Diffusers
- Marco Pisani, Multi-spectral fisheye camera for UV sky radiance measurement
- Joop Mes, An improved diffusor for global UV measurements with the Brewer spectrometer

10:20 - 10:40 Coffee break

10:40 - 12:00 **Session 4 Applications** (Chairman Julian Gröbner)

- Gunther Seckmeyer, UV research by simultaneous spectral radiance measurements
- Peter Knuschke, Solar exposure and influencing parameters on the endogenous vitamin D production
- Andrew Smedley, Application of a dual-channel solid state spectrometer to measure spectral surface radiation and atmospheric constituents
- Mario Blumthaler, Measurements of spectral sky radiance and its polarisation

12:00 - 12:45 Up-coming activities

- Julian Gröbner, ENV59
- Discussion

12:45 - 14:00 Lunch

14:00 - 16:00 Visit of the Intercomparison during packing.

Or – if wanted from some participants - guided excursion to SLF facilities at Weissfluhjoch-Davos (depending on weather conditions).

Good footwear and a warm jacket are required for the walk from Weissfluhjoch to the SLF experimental site.

Oral presentations

The length of the oral presentations is 15 minutes plus approximately 4 minutes for discussion unless otherwise stated.

Posters

Posters should have a maximum size of 120 cm (height) x 90 cm (width).

Workshop Dinner

Workshop dinner takes place at a restaurant in Hotel Grischa near Trainstation Davos-Platz on the evening of 15 July. We will meet at the lobby of the hotel.