

# Minutes of the Fourth Workshop of the Thematic Network for Ultraviolet Measurements

**Time and place:** Borås, Sweden, September 6-8, 2000

## **Attendants:**

List of attendants is enclosed in Annex 1

## **1. General**

The Thematic Network for Ultraviolet Measurements arranged its fourth workshop in Borås, Sweden, on September 6-8, 2000.

The morning of the first day, was allocated for a satellite workshop “3rd international workshop on detector-based UV radiometry” (EUROMET project 437) chaired and organised by Hans Rabus of PTB-Berlin. In the afternoon, excursions to various laboratories of SP were arranged.

The last two days were dedicated for working group meetings and scientific presentations. The number of participants of the workshop was 47.

## **2. Presentations**

Friday morning was dedicated for presenting the progress of the EU-project “Improving the accuracy of ultraviolet radiation measurement.” The session was chaired by the co-ordinator of the project, Neil Harrison of NPL. The following oral presentation were given in this session:

1. WP1: Filter radiometers (Petri Kärhä)
2. WP 2: Comparison of techniques to establish high accuracy ultraviolet radiometric scales (Hans Rabus)
3. WP 3: Improving industrial measurements (Charles Schrama)
4. WP 4: Development of a portable lamp calibrator for field calibration (Lasse Ylianttila)

In addition, 4 oral scientific presentations were given in the workshop. The topics were selected by the steering group from the list of topics of interest that had been collected based on the feedback of earlier Workshops. In addition, 8 posters were presented. The titles and authors of the presentations are listed in Annex 2.

## **3. Working group meetings**

The four working groups had their meetings on September 7. Later the same day, the leaders of the working groups presented the final reports of their groups. The last annual reports of the working groups will be published in the Final Report of the

Network. The WG documents will be published in a special issue of the *UVNews* by mid November.

#### **4. Decisions**

- ✓ The Thematic Network decided to continue its operation in 2001 without the financial support of the Commission.
- ✓ A 5<sup>th</sup> workshop will be arranged in Greece in 2002. Possible sources for financing the workshop will be studied.
- ✓ The co-ordinator will form a scientific committee for the 5<sup>th</sup> workshop.
- ✓ HUT will continue maintaining the web pages of the Network.
- ✓ All working groups will continue their operation in 2001.
- ✓ Training course notes will be made available from NPL for a reasonable fee to cover printing costs.
- ✓ Working group documents will be published in *UVNews* 6. 400 copies will be printed.

Espoo, November 3, 2000

Petri Kärhä

## Annex 1: List of participants of the second Workshop

Czech	Czech Metrological Institute	Dr. Marek Smid
Denmark	Danish Institute of Fundamental Metrology	Dr. Jan C. Petersen
Egypt	SP/NIS	Mrs. Manal Haridi
Finland	Finnish Meteorological Institute Helsinki University of Technology Helsinki University of Technology Helsinki University of Technology STUK, Radiation and Nuclear Safety Authority	Mr. Tapani Koskela Prof. Erkki Ikonen Dr. Petri Kärhä Dr. Toomas Kübarsepp Mr. Lasse Ylianttila
France	Bureau International des Poids et Mesures INM-BNM / CNAM Laboratoire National D'Essais	Dr. Rainer Köhler Dr. Issam Abu-Kassem Dr. Jean Gaudemer
Germany	Alfred-Wegener-Institut für Polar- und Meeresforschung BioSense, Laboratory for Biosensory Systems GbR Bundesamt für Strahlenschutz Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. Fraunhofer Institute Gigahertz-Optik Vertriebsgesellschaft für Technische Optik mbH GSF-Forschungszentrum für Umwelt und Gesundheit GmbH Ingenieurbüro iSiTEC Hanken & Hoops GbR Multichannel Physikalisch-Technische Bundesanstalt Physikalisch-Technische Bundesanstalt	Dr. Christian Gross Dr. Hans Holtschmidt Dr. Manfred Steinmetz Dr. Stephan Thiel Dr. S. Thiel Director Anton Gugg-Helminger Dr. Andreas Krins Mr. Thomas Hanken Mr. Mikael Gehlen Prof. Dr. Jürgen Metzendorf Dr. Hans Rabus
Ireland	Dublin Institute of Technology	Dr. Tom Cantwell
Norway	Agricultural University of Norway Agricultural University of Norway National Institute of Public Health	Dr. Cecilia Futsæther Prof. Arne Auen Grimnes Dr. Gunnar Brunborg

	Norwegian Metrology and Accreditation Service Norwegian Radiation Protection Authority	Mr. Jarle Gran Mrs. Merete Hannevik
Poland	Central Office of Measures	Mr. Jerzy Pietrzykowski
Russia	All-Russian Institute for Optical and Physical Measurements (GOSSTANDART) All-Russian Institute for Optical and Physical Measurements (GOSSTANDART)	Dr. Sergey I. Anevsky Dr. Olga A. Minaeva
Singapore	Singapore Productivity and Standards Board	Dr. Gan Xu
Spain	Instituto De Fisica Aplicada (C.S.I.C.)	Dr. Antonio Corrons Rodríguez
Sweden	Swedish National Testing and Research Institute LTD Swedish National Testing and Research Institute LTD Swedish National Testing and Research Institute LTD Swedish Radiation Protection Institute (Statens strålskyddsinstitut)	Mr. Leif Liedquist Mrs. Anne Andersson-Fäldt Mr. Mattias Viktorsson Mr. Ulf Wester
The Netherlands	National Institute of Public Health and the Environmental protection Nederlands Meetinstituut B.V. Philips Lighting B.V.	Mr. Rick Tax Dr. Charles A. Schrama Drs. Anton Bouman
United Kingdom	Bentham Instruments ltd. Cathodeon ltd. NPL Management LTD NPL Management LTD NPL Management LTD University of Dundee	Mr. Mike Clark Mr. Andrew Page Dr. Bill Hartree Dr. Nigel Fox Dr. Neil J. Harrison Dr. Harry Moseley
USA	NIST	Dr. Ping-Shine Shaw

## **Annex 2: List of scientific presentations and their authors**

### **1. Oral presentations**

1. Intercomparisons and equivalence (Rainer Köhler, BIPM)
2. The use of photometric and UV transfer standards in lighting industry (Anton Bouman, Philips)
3. The solar UV-instrument Intercomparison NOGIC2000 and preliminary results (Ulf Wester, SSI)
4. State of art in technologies (Nigel Fox, NPL)

### **2. Poster presentations**

1. Test-Burn of DXW-Lamps (Lasse Ylianttila, STUK, Finland)
2. Problems with the Classification of UV-Detectors (Anton Gugg-Helminger, Gigahertz-Optik, Germany)
3. The Development of National Standards on UV-radiometry (S.I. Anevsky, V.S. Ivanov, O.A. Minaeva, O.Yu. Morozov, V.I. Sapritsky, Yu.M. Zolotarevsky, and A.E. Vernyi, All-Russian Research Institute for Optical and Physical Measurements (VNIIOFI), National Technical Committee on Ultraviolet Measurements (TK 386) of Gosstandard, Russia)
4. International Instrument Intercomparison of The Viospor<sup>®</sup> - UV-Detection Film System Versus High Soffisticated Spectroradiometers (S. Kazadzis<sup>1</sup>, A. Bais<sup>1</sup>, L. Quintern<sup>2</sup>, H. Holtschmidt<sup>2</sup>, <sup>1</sup>Aristotle University of Thessaloniki, Laboratory of Atmospheric Physics, Greece, <sup>2</sup>BioSense, Laboratory for Biosensory Systems, Germany)
5. A Multichannel UV-A/B Spectroradiometer with High Time Resolution (Ch. Groß, T. Hanken<sup>1</sup>, H. Tüg, and O. Schrems, Alfred-Wegener-Institut Bremerhaven, <sup>1</sup>iSiTEC Ingenieurbüro Bremerhaven)
6. Survey Of Tanning Studios in Norway (Eva G. Bjørklund, Bjørn Johnsen, Merete Hannevik and Lill Tove Norvang, Norwegian Radiation Protection Authority, Norway)
7. Preliminary Results of a Comparison of Silicon Quantum Yield Values in the Near Ultraviolet (T. Kūbarsepp<sup>1</sup>, H. Rabus<sup>2</sup> and C. A. Schrama<sup>3</sup>, <sup>1</sup>Metrology Research Institute, Helsinki University of Technology (HUT), Finland, <sup>2</sup>Physikalisch-Technische Bundesanstalt (PTB), Germany, <sup>3</sup>Nederlands Meetinstituut/Van Swinden Laboratorium B. V. (NMI-VSL), Netherlands)
8. First Results of Long Term Measurements of Solar UV Radiation in Germany (M.Steinmetz, R.Matthes, and P.Hofmann, BfS, Germany)