

Announcement and Call for Papers

2nd CIE Expert Symposium on **MEASUREMENT UNCERTAINTY**

Methods and models for analysis of uncertainties in optical radiation measurement



12 - 13 June 2006

Physikalisch-Technische Bundesanstalt
Braunschweig, Germany

Background

Since the "Guide to the expression of uncertainty in measurement" - often referred to as "GUM" - was published, the view on the uncertainty associated to the result of a measurement changed. Meanwhile, the metrology community recognised that a meaningful uncertainty budget following GUM will lead to much more outcome for interpretation and comparison of measurement results than former error propagation ever did. Taking this into account, the CIE Division 2 Technical Committee TC 2-43 worked out a guideline for uncertainty evaluation for selected quantities in photometry (valid also in radiometry), which will be introduced during this symposium. In 2001 the CIE already organised in Vienna a very successful Symposia on Measurement Uncertainty. But there are still some questions unsolved regarding the determination of measurement uncertainties, e.g. in nonlinear models or functions like spectrally resolved measurements.

The meeting will be held June 2006 in Braunschweig, Germany, at the Physikalisch-Technische Bundesanstalt, supported by the German National Committee of the CIE.

It is anticipated that the CIE Division 2 and their TCs will use the opportunity to have their annual meeting after the Symposium from 14 - 16 June 2006.

The goals of the meeting are to:

- Provide guidance on techniques for the evaluation of uncertainties associated to values of photometric and radiometric quantities;
- Present the latest developments relating to methods for assessment of uncertainties for values of quantities which are derived from spectral measurements;
- Provide a forum for discussion of related effects such as correlation of data.

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2nd Expert Symposium on Measurement Uncertainty

Who should attend

This meeting is open to everyone with an interest in any aspect of measurement uncertainty but prior registration is required. The following individuals are specifically encouraged to attend:

- Scientists, engineers and technicians whose work involves optical radiation measurements, particularly photometric or colorimetric measurements;
- Those, working on optical radiation metrology at laboratories for research or accredited for calibration/testing and at National Measurement Institutes.

Call for papers

The meeting is split into 2 parts; participants can attend either one or both parts. The first part includes tutorial presentations with Invited Papers, while the second part is a Workshop with Contributed Papers. Ample time will be secured for round-table discussions. As with the last Symposium on Measurement Uncertainty it is anticipated, that this Workshop will aid towards the future development of best practice guidelines in this area.

The Tutorial Sessions will cover fundamentals for uncertainty evaluation, particularly for photometry and radiometry:

- Fundamentals of uncertainty analysis, including evaluation of standard uncertainty for both repeated measurements and other knowledge, degrees of freedom and expanded uncertainty
- Modelling of measurements especially the development of measurement equations under the consideration of correlations and their use in uncertainty evaluation
- Introduction to the work of CIE TC 2-43

The Workshop Sessions will cover recent work related to uncertainty evaluation for optical radiation

measurements. Contributed Papers should deal with one of the following subjects:

- Correlations and interdependencies between data
- Uncertainties associated to values of spectrally integrated quantities determined from spectrally resolved measurements including correlation
- Uncertainties determined in industrial environments sufficient for accepted tolerances
- Key comparisons and database for the international guide to the Calibration Measurement Capabilities

Authors are invited to submit two pages extended abstracts of their proposed contributions in English. A Link to the Submission Paper Form will be found at the WEB site of the PTB:

http://www.ptb.de/en/org/4/41/_index.htm

Extended abstract should be sent **by e-mail** to the Chair of the Symposium **no later than 15 January 2006:**

Dr. Georg Sauter: Georg.Sauter@ptb.de

(Please do not fax, as the extended abstract, if accepted, will be used to print the Abstract Booklet)

Registration

The Symposium will start on Monday morning 12th June 2006 in Braunschweig, Germany. Welcome and registration will be on Sunday evening.

Registrations are accepted for

- Uncertainty tutorial, 12. June 2006.
- Uncertainty workshop, 13. June 2006.

For participants of both parts a reduced registration fee will hold.

The registration fee will be announced in the 2nd circular

Deadline for early registration will be 1st March 2006.

Preliminary registration

Direct registration at the local organisers is highly recommended. Please return this registration card to receive more information by e-mail to CIE2006@PTB.de

I wish to attend the

CIE Uncertainty Tutorial 2006

CIE Uncertainty Workshop 2006

CIE Division 2 meeting 2006

Name:

(please print)

Occupation / Title:

Mailing address:

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City: Code:

Country:

Telephone: (.....)

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