

INTERNATIONAL MEASUREMENT CONFEDERATION IMEKO BULLETIN

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Nyomás:



Metrology for Green Growth will be the main headline of the forthcoming, 20th World Congress of the International Measurement Confederation. The scientific program will deal, as always, with the subject matters of the 24 Technical Committees, i.e. the measurement of force, mass, torque, density, hardness, flow, temperature, pressure, vacuum, energy, vibration, as well as the measurement of electrical, geometrical quantities, measurements in biology, medicine and robotics, measurement of human functions, chemical measurements, metrology in food and nutrition, environmental measurements, technical diagnostics, mathematical tools for measurements, metrological infrastructures, traceability, technical diagnostics, theoretical aspects, education and training in measurement and instrumentation. There will be oral and poster presentations.

Deadline for the submission of abstracts: November 30, 2011

The Call for Papers with all further details are available at the Website <http://imeko2012.kriss.re.kr/>

The event will be organized by our South Korean Member Organization, the Korea Research Institute of Standards and Science at the Exhibition and Convention Center BEXCO in the city of Busan, with an accompanying exhibition, as a tradition.

WELCOME!



EVENT CALENDAR

We call your kind attention herewith to some of our events. As a rule, there are no TC conferences in a Congress year, in order to concentrate all forces on the organization of a highly successful World Congress.

2011

TC1 – Education and Training in Measurement and Instrumentation

TC7 – Measurement Science

TC13 – Measurements in Biology and Medicine

14th Symposium on Measurement Science and Education

Jena, Germany

August 31 – September 2

Contact: Prof. G. Linss

Ilmenau University of Technology

Mechanical Engineering Faculty

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98693 Ilmenau, GERMANY

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E-mail: gerhard.linss@tu-ilmenau.de www.imeko-jena2011.de

TC11 – Metrological Infrastructures

TC19 – Environmental Measurements

TC20 – Energy Measurement

2nd Symposium on Infrastructures Metrological Infrastructures

Dubrovnik/Cavtat, Croatia

June 15-17

Contact: Prof. M. Borsic

Croatian Metrology Society

Berislaviceva 8

10000 Zagreb, CROATIA

Phone: +385 91 523 10 47 Fax: +385 1 464 8262

E-mail: mladen.borsic@fer.hr www.imeko-mi2011.org

TC14 – Measurement of Geometrical Quantities

10th Symposium on Laser Metrology for Precision Measurement and Inspection in Industry

Braunschweig, Germany

September 12-14

Contact: Mrs. A. Ringelmann

VDI/VDE-Gesellschaft Mess- und Automatisierungstechnik

PO Box 101139

40002 Düsseldorf, GERMANY

Phone: +49 211 6214-228

Fax: +49 211 6214-161

E-mail: ringelmann@vdi.de

www.lasermetrology2011.com

TC4 – Measurement of Electrical Quantities

18th Symposium on Measurement of Electrical Quantities

Natal, Brasil

September 27-30

Contact: Sociedade Brasileira de Metrologia

Av. Nilo Peçanha, 50 sala 2512

20020-906 Rio de Janeiro, BRASIL

Phone: +55 21 25327373

Fax: +55 21 25327373

E-mail: gmrocha@inmetro.gov.br

www.metrologia.org.br/metrologia 2011

16th Workshop on ADC Modeling and Testing – Data Converter Design, Modeling and Testing

Orvieto, Italy

June 30-July 1

Contact: Prof. Paolo Carbone

DIEI

University of Perugia

Via G. Duranti, 93

06125 Perugia, ITALY

Phone: +39 075 5853629

Fax: +39 075 57 38 252

E-mail: carbone@diei.unipg.it

TC17 – Measurement and Control in Robotics

18th Symposium on Measurement and Control in Robotics

Prague, Czech Republic

December 7-9

Contact: Dr. J. Volf

Czech Technical University
Faculty of Mechanical Engineering
Technická 4
16607 Prague 6, CZECH Republic
Phone: +420 2 2435 2737
Fax: +420 2 2431 0292
E-mail: jaromir.volf@fs.cvut.cz

TC21 – Mathematical Tools for Measurements

Advanced Mathematical and Computational Tools in Metrology and Testing IX

AMCTM 2011

Göteborg, Sweden

June 20-23

Contact: Dr. Leslie Pendrill

Head of Research, Measurement Division
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Co-sponsorships:

19th Annual International Conference on Composites or Nano Engineering

Shanghai, China

July 24-30

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New Orleans, LA 70148-2220, USA
Phone: +1 504 280 6652
Fax: +1 504 280 6192
E-mail: DHui@uno.edu
www.icce-nano.org

APMF2011 – Asia-Pacific Symposium on Measurement of Force, Mass and Torque (TC3)

Xi'an, China

September 19-22

Contact: Mrs. Cai Changqing

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E-mail: caichq@nim.ac.cn

<http://en.nim.ac.cn/APMF2011/Index.html>

28th Danubia-Adria Symposium on Advances in Experimental Mechanics (TC15)

Siofok, Hungary

September 28 – October 1

Contact: Scientific Society of Mechanical Engineering – GTE

Fő u. 68

1027 Budapest, HUNGARY

Phone: +36 1 202 0582

Fax: +36 1 202 0252

E-mail: das2011@gteportal.eu

www.gteportal.eu/das2011

10th Conference on Environmental, Food and Nutrition Measurements and Technologies (TC19)

Sümege, Hungary

October 5-7

Contact: Hungarian Chemical Society / Association for Environmental Measurements and Technologies

Dr. P. Princz

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Szivárvány u. 10

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2012

20th IMEKO World Congress

Metrology for Green Growth

Busan, Republic of Korea

September 9-12

Contact: Dr. Sam-Yong Woo

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E-mail: sywoo@kriss.re.kr

<http://imeko2012.kriss.re.kr>

2013

TC1 – Education and Training in Measurement and Instrumentation

TC7 – Measurement Science

TC13 – Measurements in Biology and Medicine

15th Symposium on Measurement across Physical and Behavioural Sciences

Genova, Italy

September 4-6

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TC2 – Photonics

21st Symposium on Photonics in Measurement

Gdansk, Poland

Contact: Prof. T. Pfeifer

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TC9 – Flow Measurement

16th Conference, FLOMEKO XVI

Paris, France

September 24-26

Contact: Mr. J.P. Vallet

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New e-journal ACTA IMEKO

Delegates of the 53rd IMEKO General Council Session held at the beautiful Adriatic sea-shore of Slovenia, in Portorož on May 30, 2010 gave final approval to the launching of an e-journal, called ACTA IMEKO. Plans have been worked out by Prof. Leo Van Biesen, Belgian delegate and President of the Confederation from 2003 to 2006 and thoroughly discussed by the Advisory Board. Prof. Van Biesen was appointed Vice President for Scientific Publications in 2009. The Physikalisch-Technische Bundesanstalt (PTB) in Braunschweig, Germany generously offered to host the e-journal on their servers – the URL will be <http://acta.imeko.org/index.php/index> provisionally registered with the following ISSN: 22210870X

Further details have been elaborated by Prof. Paul P.L. Regtien, Dutch GC delegate, as Vice President for Scientific Publications from 2011 on. It is very important that the e-journal be visible through the ISI Web of Knowledge, Web of Science and we will do everything to ensure that it will be among the over 10000 journals with the highest impact factor worldwide. The Technical Committees will be responsible to collect proper quality material, papers from their events for publication under the guidance of a competent Editorial Board and with the help of expert reviewers. An obligatory template based on MS Word has already been developed for the authors, the final version on-line will be pdf. We will use the most professional layout, i.e. two columns. The first issue should appear as soon as possible, preferably still in 2011

New Technical Committee

The German Member Organization and the PTB proposed the establishment of a Technical Committee on Energy Measurement, chaired by Prof. Klaus-Dieter Sommer, Head of Division 3 „Chemical Physics and Explosion Protection at the PTB in Braunschweig. Reasoning: The sustainable energy supply, efficient transmission and utilization are enormous challenges in our world of today and the next decades. The research and development of new and renewable energy sources, large-scale energy storage, as well as energy saving solutions require appropriate measurement techniques, future strategies, standards and traceability schemes, still lacking and the subject is not covered by any of the existing TCs. Hence the scope of this TC would be to deal with novel measurement procedures, strategies and complex measuring systems for both, field/in-line measurements and research projects and to make the results public. Prospective main fields: 1/ Energy generation - Measurements and standards for up-to-date and improved power plant technologies, biofuel properties and amounts, solar cells and solar-thermal energy conversion, for next generation nuclear power plants, measurement and traceability in wind-energy conversion, in distributed energy harvesting, hydrogen and fuel cell related measurements, measurement for geothermal energy conversion 2/ Energy transmission and storage - Distributed measuring systems for smart electrical and gas grids, properties of energy gases and fuels, including LNG, measurement and standards for batteries and E-mobility 3/ Energy savings, metering and billing - Measurement of energy efficiency of buildings and industrial plants, measurement and standards for solid-state lighting, measurement for energy savings in electronic devices and electrical machines, smart metering and billing. This Technical Committee will bear the number of TC20 (the earlier TC20 on Measurement Techniques for the Construction Industry set up in 1999 was dissolved due to lack of interest).

Inquiries: klaus-dieter.sommer@ptb.de

News from the TCs

TC23 (Metrology in Food and Nutrition) is chaired by Dr. Isabel Castanheira (Portugal) upon the retirement of Prof. V. Iyengar (USA). New Vice Chair for TC2 (Photonic Measurements): Prof. B. Zagar (Austria), following Prof. R. Tutsch (Germany) who became Vice Chair of TC14 (Measurement of Geometrical Quantities. New Chair of TC1 (Education and Training in Measurement): Dr. Jan Holub from the Czech Republic, with Prof. G. Linss as Vice Chair and Dr. Susanne Töpfer, as Scientific Secretary (both from Germany).

IMEKO Conference Newsletters will be published from time to time advertising forthcoming events, as decided by the Technical Board.

It was with great sympathy that the IMEKO community noted the sudden death of Dr. Philippe Charlet (France), founder and first Chair of TC24 (Chemical Measurements) right before Christmas 2010.

The IMEKO journal **MEASUREMENT** is showing satisfactory developments. The number of regular issues per year as well as the number of special issues are increasing, so are the downloads <http://www.elsevier.com/locate/measurement>
MEASUREMENT online submission site: <http://ees.elsevier.com/meas/>

The **Website** of IMEKO is regularly updated: <http://www.imeko.org>
The IMEKO database contains at present 226 events, 345 persons and 2611 papers. 551 papers from the 19th IMEKO World Congress (2009, Lisbon, Portugal) are available for download. Technical Committees have their own special Websites.

IMEKO World Congress 2015

The GC, after having properly examined three bids, determined the venue of the 21st IMEKO World Congress: Prague, Czech Republic, probably in June or September, under the headline “Measurement and Research in Industry”. (Also the 10th IMEKO World Congress took place in Prague in 1985)

IMEKO, as a traditional, highly respected partner had a booth again at **SENSOR+TEST 2011** – International Exhibition and Congress for Sensor Technology from 7 to 9 June in Nürnberg, Germany. 577 exhibitors were there on an area of more than 19.000 squaremeters and around 8000 visitors – the numbers are by 13 and 10 % higher in comparison to 2010.

The next Measurement Fair will be from 22 to 24 May, 2012.

WELCOME to our stand, as always!

NEWS from the MEMBER ORGANIZATIONS

KoREMA, the Croatian Society for Communications, Computing, Electronics, Measurement and Control has decided to transfer membership in IMEKO to the Croatian Metrology Society. Succeeding JUREMA, the former Yugoslav MO, KoREMA has been with us since 1992.

We are continuously doing every effort to solicit further Member Organizations first of all in the USA, in South America and the Far East.

The **54th IMEKO General Council Session** will be on September 16, 2001 in Braunschweig, Germany, upon the invitation of the German MO and the Physikalisch-Technische Bundesanstalt. The Confederation has an excellent, long-standing relationship with the PTB. The GC-Session will be preceded, as usual, by the meetings of the Advisory Board and the Technical Board on September 15

New **Italian delegate** to the IMEKO General Council: Dr. Alessandro Germak from INRIM – Istituto Nazionale di Ricerca Metrologica, representing the National Research Council. Alternate delegate: Prof. Giovanni Battista Rossi. New **Slovak delegate**: Dr. Milan Tysler from the Institute of Measurement of the Slovak Academy of Sciences, representing the Slovak Metrological Society. New **Croatian delegate**: Dr. Mladen Jakovčić, representing the Croatian Metrology Society, HMD.

NEWS in brief

Prof. Dr. Klaus von Klitzing, **Nobel Prize winner** in physics (Quantum Hall Effect) will be invited speaker at METROLOGY 2011 in Brazil at the end of September (see Conference Calendar – page 3).

APMF2011 – Asia-Pacific Symposium on Measurement of Mass, Force and Torque
Xi'an, China, September 19-22

The first such symposium took place in 1992. In the almost 20 years since then APMF has developed in the most active forum devoted to the problems and achievements in mass, force and torque measurement and to promote regional cooperation among scientists and engineers of these fields. Later, the scope expanded to include density, as well. IMEKO has been proud to be a co-sponsoring partner in several cases. APMF2011 is organized by the National Institute of Metrology, Beijing together with the Shanghai Marine Equipment Research Institute and Mettler-Toledo China.

<http://en.nim.ac.cn/APMF2011/Index.html>

CAFMET, the African Committee of Metrology is organizing the 3rd Metrology Forum from 24 to 27 October, 2011 in Accra, Ghana

<http://www.ac-metrology.com/METROLOGYFORUM2011>

The **4th International Metrology Conference** will be in Marrakech, Morocco, from 23 to 27 April, 2012

<http://www.ac-metrology.com/CAFMET2012>

As a reminder: The African Committee of Metrology is celebrating its 5th anniversary. It was founded to help spreading metrological culture on the black continent and it is successfully realizing the aim by having had three conferences (in Casablanca, 2006, Tunis, 2008 and Cairo, 2010), two regional forums (in Dakar, 2007 and Cotonou, Benin, 2009) and several technical workshops with a steadily increasing number of participants also from Europe. The Committee's Secretariat is in Angers, France – President: Dr. A. Charki from the University of Angers. IMEKO is regularly invited to CAFMET events, as an endorsing partner.

<http://www.ac-metrology.com>

Contact address: secretariat@ac-metrology.com

Lately, the establishment of a new interdisciplinary journal has been announced: the **International Journal of Metrology and Quality Engineering** with two issues per year. Further details are available on the Website www.metrology-journal.org

The Society for Experimental Mechanics, Inc. (USA) calls the attention to the IMAC-XXX Conference & Exposition on Structural Dynamics
30 years of Modal Analysis – from the Laboratory to the Real World
at the Hyatt Regency Jacksonville Riverfront, Jacksonville, Florida
January 30 – February 2, 2012
<http://sem.org/CONF-IMAC-TOP.asp>

ACHEMA 2012

The 30th World Exhibition and Congress on Chemical Engineering, Environmental Protection and Biotechnology in Frankfurt am Main, Germany, June 18-22, 2012
<http://www.achema.de>

The Superior School of Metrology (Ecole Supérieure de Métrology, Ecole des Mines de Douai) – an engineer's school specialized in training in metrology, quality and instrumentation.

www.esm.fr

Interested prospective students contact the Manager, Jean-Paul Senelaer:
senelaer@ensm-douai.fr

International Organization for Standardization

ISO Annual Report 2010 is available online only: www.annualreport.iso.org

The 2011 Measurement Science Conference, Symposium and Workshops were held at the Pasadena Convention Center (California, USA) on March 14-18 dealing with the theme Metrology and Quality through Education with three-day NIST Seminars (National Institute of Standards and Technology). IMEKO maintains a friendly mutual information contact with MSC; the Secretary General, Prof. Mladen Boršić has been invited to attend and to continue discussions about MSC joining IMEKO in a most effective way. These events have been taking place for 41 years already. As a professional organization, Measurement Science Conference is part of a larger, well established, domestic and global measurement system, starting with the customer, continuing with the equipment manufacturers and calibration laboratories and finishing with national Metrology institutes and international bodies, such as BIPM, the Bureau International des Poids et Mesures. The measurement infrastructure and superstructure are aimed

at providing uniformity, accuracy and fairness in commercial transactions, through legal metrology and global interchangeability in manufacturing through scientific metrology. Technological challenges, such as new unconventional sources of energy and environmental obstacles are overcome only with the help of measurements, from the simplest to the state-of-the-art. To facilitate the education in metrology and quality can be the common goals of MSC and IMEKO.

<http://www.msc-conf.com/msc/index.html>

Measurement Science Fall Tutorials, October 27, 2011; Irvine, California

This Seminar will allow hands on as well as guided measurement techniques to measure low levels of power and exploit the errors generally encountered in and out of the lab environment.

<http://www.msc-conf.com/fall-registration/>

SEM 2011 Annual Conference & Exposition „Experimental Mechanics in the Age of Modeling and Simulation”

organized by the Society for Experimental Mechanics, Inc.

Mohegan Sun, Uncasvill, CT, USA, June 13-15

<http://sem.org/CONF-AC-TOP.asp>

55th Congress of the European Organization for Quality (EOQ) „Navigating Global Quality in a New Era”

Budapest, Hungary, June 21-13, 2011

www.eoq.hu/2011

5th European Conference of the International Federation for Medical and Biological Engineering

Budapest, Hungary, September 14-18, 2011

www.embec2011.com

The **15th International Metrology Congress** of our French Member Organization, the Collège Français de Métrologie will be in Paris from 3 to 6 October, this fall under the headline „Added value through better measurement”. The International Metrology Congress is the place for an exchange of ideas and views for all active in the field: researchers, manufacturers and industrial users. The aim is to demonstrate that measurement is a tool for improving industrial processes, an essential step in increasing quality, an essential decision-making factor, means of performance, control of risks and proof for credibility. 800 to 1000 participants are expected from all industrial areas. The scientific program will include approx. 180 presentations at oral and poster

sessions, 6 round tables, an exhibition showing the latest technical achievements and visits to major firms.

www.metrologie2011.com

2nd ICIAS – International Congress on Instrumentation and Applied Sciences incorporating the 26th Congress of SOMI, our Mexican Member Organization, the Mexican Society of Instrumentation

in Puebla City, Mexico, October 5-8, 2011

Subjects will contain electronics, mechanics, computer science and scientific instrumentation.

<http://somi.ccadet.unam.mx/icias2011/>

IEEE International Workshop M&N 2011 (Measurement and Networking)

on the beautiful Italian island, Capri, October 10-11

a forum for researchers and practitioners from industry, academia and government representatives to speak about recent results and trends

<http://mn2011.ieee-ims.org/>

It is with great difficulty for the Editor of the Bulletin to find words to express the deep sorrow the IMEKO community feels about the passing away of **Professor Ludwik Finkelstein** at the end of August, aged 82 years. Ludwik has been with us since 1973, a highly valuable asset to and great enrichment of the Confederation's activities. His contribution was manifold: speaker at lots of Congresses, Conferences and other events, delegate of the UK Member Organization to the General Council of the Confederation, Chairman of the Drafting Committee, Chairman and esteemed member of the Technical Committee on Education and Training in Measurement and Instrumentation, as well as the TC on Measurement Science, organizer of several TC symposia and round tables himself, IMEKO Distinguished Service Award Holder and a good friend to many of us. His fantastic intelligence in – we can truly say – all areas of life, completed by his wide-spread language knowledge made him an extremely enjoyable company at all times. The undersigned is happy to have met him a year ago in London for the last occasion and proud to have been among those he especially liked to talk to.

REST in PEACE, Ludwik, you will always be remembered by your life's work and will live on in our hearts.

Karolina Havrilla
Secretary of IMEKO

Member Organizations of IMEKO and their delegates to the General Council

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Vice President for Scientific Publications:

Prof. P.P.L. Regtien, The Netherlands

Information Officer:

Dr. Dirk Röske, Germany

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