

# INTERNATIONAL MEASUREMENT CONFEDERATION

## IMEKO BULLETIN

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# I M E K O XVIII

18<sup>th</sup> World Congress of the International Measurement Confederation

Rio de Janeiro, RJ, BRAZIL  
(Convention Center of the Hotel Intercontinental)  
September 17-22, 2006

## **METROLOGY for a SUSTAINABLE DEVELOPMENT**

More than 600 abstracts have been submitted from 43 countries – a NEW RECORD IS SET!

Technical Sessions, Poster Presentations and Round Table Discussions will deal with the following main subjects:

- measurement science / education and training in measurement and instrumentation
- measurement of force, mass, pressure, vacuum, density, torque and hardness
- measurement of electrical and geometrical quantities
- flow measurement
- temperature and thermal measurements
- measurements in biology and medicine
- measurement of human functions
- measurement in robotics
- environmental measurements
- technical diagnostics
- traceability in metrology
- metrological infrastructures
- experimental mechanics
- vibration measurement
- measurement techniques for the construction industry
- mathematical tools in measurement

Each day begins with a plenary paper by an invited, outstanding expert. Representatives of regional metrology and testing organizations are welcome to speak about their efforts, achievements and problems within the framework of a Special Session (APMP, COOMET, SADC MET, SIM, CAMET, EUROMET, EUROLAB) led by the Chairman of TC11, Professor Mladen Borsic (Croatia).

There will also be an exhibition of relevant instruments to complete the scientific program.

The Congress is organized by the Brazilian Member Organization of IMEKO, the Brazilian Metrology Society (SBM – Sociedade Brasileira de Metrologia) under the guidance of Professor Humberto Siqueira Brandi, Director of Scientific and Industrial Metrology at INMETRO.

Traditional (non-financial) co-sponsors include other well-known international bodies, like BIPM, OIML, IFAC, IFIP, IFORS, IMACS and the IEEE Instrumentation and Measurement Society.

All interested colleagues are heartily **WELCOME!**

The participation fee amounts to EUR 590.- and contains the access to all events, plus full Congress material, lunch, coffee breaks, the opening cocktail and a tour to one of the famous sites of Rio. (EUR 350.- for students and EUR 250.- for accompanying persons.)

For REGISTRATION please contact the Websites

[www.imeko.org](http://www.imeko.org)

[www.metrologia2006.org.br](http://www.metrologia2006.org.br)

The IV Brazilian Congress of Metrology will take place in conjunction with the Congress.

As a rule, in order to assure and promote the success of a World Congress, IMEKO Technical Committees refrain from staging any conferences of their own in the same year. According to plans, the TC4 Workshop on ADC Modelling and Testing (11<sup>th</sup>) will be incorporated in the Congress program.

# Event Calendar

**2007**

**TC3 – Measurement of Force, Mass and Torque**

**TC16 – Pressure Measurement**

20<sup>th</sup> Conference on Measurement of Force, Mass and Torque / 3<sup>rd</sup> Conference on Pressure Measurement

Merida, Mexico

*October 22-26*

Contact: Mr. J.C. Torres-Guzmán

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**TC4 – Measurement of Electrical Quantities**

15<sup>th</sup> Symposium on Novelties in Electrical Measurements and Instrumentation  
Iasi, Romania

*September 18-20*

Contact: Prof. A. Salceanu

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<http://iota.ee.tuiasi.ro/~demm/salceanu.html>

**TC12 – Temperature and Thermal Measurements**

10<sup>th</sup> Symposium on Temperature and Thermal Measurements in Industry and Science  
Lake Louise, Canada

*May*

Contact: Dr. A.G. Steele

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Ottawa K1A 0R6, CANADA

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E-mail: alan.steele@nrc-cnrc.gc.ca

**TC14 – Measurement of Geometrical Quantities**

9<sup>th</sup> Symposium on Measurement and Quality Control  
Chennai/Madras, India

*November 21-24*

Contact: Prof. B. Ramamoorthy

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Fax: +91 44 22570509

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## **TC19 – Environmental Measurements**

1<sup>st</sup> Symposium on Environmental Measurements

Iasi, Romania

*September 18-20*

Contact: Prof. A. Salceanu

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# 48<sup>th</sup> General Council Session and related meetings

The 48<sup>th</sup> annual Session of the IMEKO General Council was held from 7 to 9 November, 2005 in Brussels, Belgium, as usual, preceded by the meetings of the Advisory Board and the Technical Board, as well as the MEASUREMENT Editorial Board. Upon the recommendation of the Credentials and Membership Committee, the GC, by unanimous special decision, admitted the Union of Metrologists in Bulgaria, as Member Organization of IMEKO.

Proposed necessary changes to the Constitution and By-Laws were considered and approved for assuring efficiency in future activities, with special regard to finances. The Advisory Board suggested to appoint Professor Antonio M. Da Cruz Serra (Portugal), President Elect to continue serving as President of IMEKO 2006-2009. Professor Mladen Borsic (Croatia) became Vice President for External Affairs.

There is a new, updated contract under preparation with Elsevier Ltd (Oxford) concerning the publishing of the official IMEKO Journal MEASUREMENT which will hopefully result in a series of actions to improve the process e.g. reducing the backlog of unpublished papers, introducing an electronic system to decrease review time, etc. 2007, 4-5 special issues are foreseen on the theme of the 2006 World Congress. The Technical Board approved the establishment of a Technical Committee on Vibration Measurement (TC22), as proposed by the German MO. The scope of the new TC will cover measurement and metrology of the dynamic quantities' displacement, velocity and acceleration, with the corresponding dynamic angular units. Although these topics are very important for industrial production, modal testing, preventive maintenance, quality control and safety systems and are parts of the traceability system of several countries worldwide, there is a demand for an international forum to enable joint international activities for mutual benefits.

In TC4 – Measurement of Electrical Quantities, Professor Antonio M. Da Cruz Serra (Portugal) took over chairmanship from Mr. Milos Sedlacek (Czech Republic), until September 2006. Professor Pasquale Daponte (Italy) was elected Deputy Chairman and Professor Linus Michaeli (Slovakia), Scientific Secretary.

The next GC-Session, AB, TB and EB meetings will be in conjunction with the World Congress in Rio, September 2006.



It should, by all means, be mentioned here, that the contribution of TC17 – Measurement in Robotics was highly appreciated to making the stay of delegates so pleasant in Belgium, since they had their 15<sup>th</sup> Symposium on Measurement and Control in Robotics during the same days at the Royal Military Academy, hosted by Professor Yvan Baudoin.

# NEWS in brief

The Royal Dutch Institute of Engineers (KIVI), Member Organization of IMEKO in the Netherlands since 1967 transferred membership to the Dutch Metrologic Institute as of January 1, 2006.

New President and IMEKO Delegate of the Mexican Member Organization, the Mexican Society of Instrumentation (SOMI – Sociedad Mexicana de Instrumentacion): Dr. José Manuel Sániger Blesa; Secretary and second Delegate: Dr. José Sánchez Vizcaino. IMEKO expresses its thanks for the cooperation of the former President and long-time IMEKO Delegate, Dr. Felipe Lara Rosano.

The Institute for National Measurement Standards of the National Research Council, Canada applied for membership in the International Measurement Confederation. The admission will be formally approved at the 49<sup>th</sup> General Council Session in September.

NCSLI, the National Conference of Standards Laboratories International, headquartered in the US, by letter of April 26, 2006 to the President of IMEKO, Professor Leo Van Biesen (Belgium) confirmed its interest in continuing the liaison arrangement with IMEKO, which has already been existing for several years.

The President of IMEKO, the Secretary General, Assoc. Prof. Dr. Tamás Kemény (Hungary), the Secretary, Ms. Karolina Havrilla (Hungary) and the Vice President in Charge of IMEKO XVIII, Professor Mauricio N. Frota (Brazil) attended on behalf of the Confederation the extremely successful International Conference of Metrology from 4 to 6 April 2006 in Casablanca, Morocco, organized by the African Metrology Committee.

The President of the Union of Metrologists in Bulgaria, Professor Hristo Radev invited the Secretary General to attend their Conference at the end of May 2006 in Burgas and to hold a detailed presentation on the aims, structure and activities of IMEKO. The

paper was written and is being continuously updated, together with the President and the Information Officer, Dr. Dirk Röske (Germany).

Dr. Kemény was also invited to attend the 3<sup>rd</sup> International Conference on Metrology – Trends and Applications in Calibration and Testing Laboratories in Tel Aviv, Israel, November 14-16, 2006, as guest of The Israeli Metrological Society, Member Organization of IMEKO and one of the local organizers.

# From foreign sources...

SENSOR+TEST 2006 Exhibition and Congress in Nuremberg, Germany, organized biannually until now and traditionally co-sponsored by IMEKO will – from now on – be held annually. (This year's date was May 30 – June 1)

[www.sensor-test.com](http://www.sensor-test.com)

ACHEMA 2006 – the 28<sup>th</sup> International Exhibition and Congress on Chemical Engineering, Environmental Protection and Biotechnology was in Frankfurt am Main, Germany, May 15-19

[www.achema.de](http://www.achema.de)

Sensors Expo & Conference 2006 by IFSA was organized at the Donald E. Stephens Convention Center in Rosemont, Illinois (USA), June 5-7

<http://www.sensorsexpo.com>

INTERKAMA, leading Trade Fair for Process Automation, at the Hannover Fair of Industrial Automation (Germany) took place from 24 to 28 April, 2006

INTERKAMA Asia will be at the new International Expo Centre of Shanghai in China, October 10-13

[www.interkama-asia.com](http://www.interkama-asia.com)

The 2006 SEM Annual Conference & Exposition on Experimental and Applied Mechanics was scheduled for June 4-7 at Saint Louis, Missouri (USA); IMAC-XXV Conference & Exposition on Structural Dynamics will be from 19 to 22 February 2007 in Orlando, Florida – both organized by the Society for Experimental Mechanics, Inc.

[www.sem.org](http://www.sem.org)

ICCE-14 – the 14<sup>th</sup> International Conference on Composites or Nano Engineering will be in Boulder, Colorado (USA), July 2-8

[www.uno.edu/~enrg/composite](http://www.uno.edu/~enrg/composite)

Date and place for RETBE'06 – the 6<sup>th</sup> International Conference on the Role of Engineering Towards a Better Environment: Alexandria, Egypt, December 16-18 with the subtitle: Nature Inspired Innovations Towards a Sustainable Environment  
<http://retbe.alexeng.edu.eg>

The forthcoming MEASUREMENT SCIENCE CONFERENCE AND EXHIBITION will be held under the headline “Apply Metrology ... Rule the World” at a new location, the Long Beach Convention Center in California, USA, January 22-26, 2007  
MSC was founded in 1970 to promote education and professionalism in measurement science and related disciplines. It features topics of interest to the test, metrology and calibration, and precision measurement communities.  
[www.msc-conf.com](http://www.msc-conf.com)

# Member Organizations of IMEKO and their delegates to the General Council

## **Albania**

General Directorate of Metrology and  
Calibration  
The General Director  
RR. "Sami frasheri", No. 33  
Tirana

## **Austria**

ÖVE Österreichische Gesellschaft für  
Mess- und Automatisierungstechnik  
Prof. P. H. Osanna  
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Eschenbachgasse 9

## **Belgium**

Belgian Measurement Confederation  
BEMEKO c/o IBRA/BIRA  
Prof. Ch. Eugene  
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1000 Brussels

## **Brazil**

Brazilian Society of Metrology  
Prof. H.S. Brandi  
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Centro  
20020-906 Rio de Janeiro, RJ

## **Bulgaria**

Union of Metrologists in Bulgaria  
Prof. H. Radev  
108, ul. G.S. Rakovski  
1000 Sofia

## **People's Republic of China**

Chinese Society for Measurement  
Mrs. Zhao Roujiang  
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## **Croatia**

KoREMA – Croatian Society for  
Communication, Computing,  
Electronics, Measurement and Control  
Prof. M. Borsic  
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Berislaviceva 8  
10000 Zagreb

## **Czech Republic**

Association of Scientific-Technical  
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IMEKO Committee  
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c/o Czech Technical University  
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16627 Prague 6

## **Egypt**

Egyptian Organization for  
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## **Finland**

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## **France**

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**Germany**

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**Greece**

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**Hungary**

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**Israel**

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**Italy**

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**Japan**

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**Kenya**

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**Mexico**

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Standards Organisation of Nigeria  
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**Poland**

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Automatic Control and Robotics  
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**Portugal**

RELACRE – Portuguese Association of  
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Prof. A.M. da Cruz Serra  
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**Romania**

Romanian Measurement Society  
Prof. Dr. R. Munteanu  
Technical University Cluj-Napoca  
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**Russia**

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**Slovenia**

Slovenian Society for Process Control  
and Measurements  
Prof. J. Drnovsek  
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**South Africa**

The Society for Advancement  
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The Chairman  
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**Spain**

Committee for Metrology  
Spanish Association for Quality  
Control  
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**Sweden**

Instrument Society of Sweden  
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**Switzerland**

Schweizerische Gesellschaft für  
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Mr. K. Ruhm  
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**Turkey**

National Metrology Institute  
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**United Kingdom**

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Prof. M. Borsic, Croatia

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Dr. Dirk Röske, Germany

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