

CAFMET 2010

18 - 23 Avril 2010 / Le Caire, EGYPTE

April 18-23, 2010 / Cairo, EGYPT

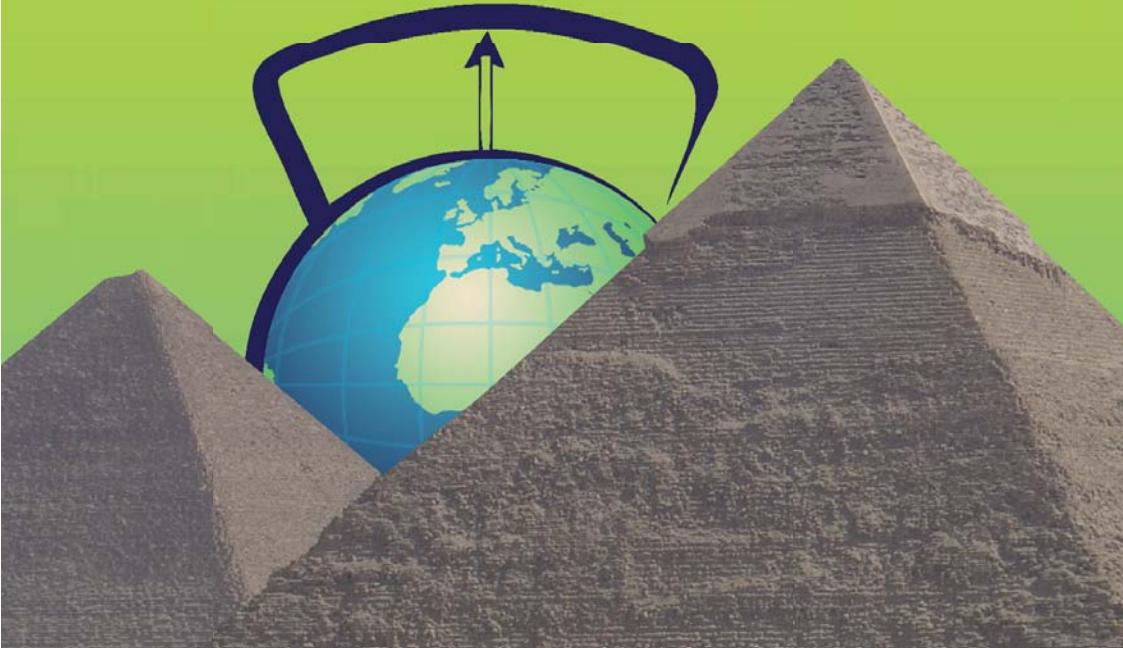
3ème

3rd

Conférence Internationale de Métrologie

International Metrology Conference

Avec une Exposition Internationale sur la Qualité, la Mesure et l'Instrumentation
Including International Exhibition on Quality, Measurement and Instrumentation



PROGRAMME / PROGRAM



Exposition / Exhibition
Conférences / Conferences
Visites techniques / Technical visits



3^{ème} Conférence Internationale de Métrologie / 3rd International Metrology Conference

CAFMET 2010



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EISSA M. - EOS, Egypt	RENAOT E. - LNE/INM/CNAM, France
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HAMIHAM N. - ONML, Algeria	TIPLICA T. - LASQUO/ISTIA, France
HASSANI E.A. - CERPHOS/OCP, Morocco	VIRIEUX J-P. - IP, Switzerland
HERMIER Y. - CNAM/INM, France	WALLARD A. - NPL, U-K
HIMBERT M. - CNAM/INM, France	WYNAND L. - NMISA, South Africa
JEANNOT R. - Montgomery Conseil, France	



PROGRAMME GENERAL

PROGRAMME GENERAL

Dimanche 18 /
Sunday 18

8:30
a.m.
/
12:30
a.m.

Sessions de
formation /
Training Courses

2:00
p.m.
/
7:00
p.m.

Sessions de
formation /
Training Courses

Lundi 19 /
Monday 19

S0 Session
d'ouverture /
Opening Session

S1 Organisation de la
Métrieologie dans le
Monde et en Afrique ;
Développement
économique et
industriel
*Metrology Organization
in the World and in
Africa; Industrial and
Economic Development*

REPAS / LUNCH

Mardi 20 /
Tuesday 20

S3 Evaluation des incertitudes
et comparaisons
inter-laboratoires /
*Uncertainties Evaluation
and Interlaboratory
comparisons*

S4 Qualité, Fiabilité et Sécurité
*Quality, Reliability
and Safety*

S5 Mesures en agro-
alimentaire, dans
l'environnement,
dans la santé
*Measurement in food,
environment and health*

REPAS / LUNCH

GENERAL PROGRAM

Mercredi 21 /
Wednesday 21

S7 Mesures optique
et dimensionnelle
*Dimensional and
Optical measurement*

S8 Pression
Pressure Measurement

S9 Mesures électriques et
électromagnétiques
*Electrical and
Electromagnetical
Measurement*

S10 Température et autres
grandeur thermiques
*Temperature and Other
Thermal Quantities
Measurement*

REPAS / LUNCH

Jeudi 22 /
Thursday 22

Visites techniques /
Technical Visits

Sessions de formation
Training Courses

Session Technique
(pour les entreprises
et les exposants)
*Technical Session
(for companies and
exhibitors)*

Table Ronde
Round Table

Session de clôture
Closing Session

1:00 p.m. COCKTAIL / COCKTAIL

Vendredi 23 /
Friday 23

Tourisme /
Tourism

8:30
a.m.
/
12:30
a.m.

2:00
p.m.
/
7:00
p.m.

Tourisme /
Tourism

GENERAL PROGRAM

4

* A l'hôtel où se déroule la conférence : Pyramids Park Hotel, Giza, Egypte
* *At the conference hotel : Pyramids Park Hotel, Giza, Egypt*

: conférence / *conference*

5



DIMANCHE 18 / SUNDAY 18



Salle 1 /
Room 1

Sessions de formation / *Training Courses*

DIMANCHE 18 / SUNDAY 18

8:30 a.m. • Applied Statistics for Measurement,
T. Tiplica, ISTIA, France
/ 12:30 a.m. ☕ 10:30 a.m. : coffee-break

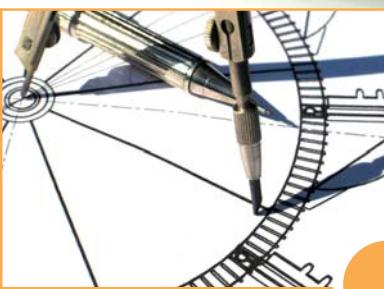
2:00 p.m. • Statistiques Appliquées pour la Mesure,
T. Tiplica, ISTIA, France
/ 6:00 p.m. ☕ 4:00 p.m. : coffee-break

6

• en français

• in English

DIMANCHE 18 / SUNDAY 18



Salle 2 /
Room 2

Sessions de formation / *Training Courses*

DIMANCHE 18 / SUNDAY 18

8:30 a.m. • Métrologie Dimensionnelle,
A. Michel, IP, France
/ 12:30 a.m. ☕ 10:30 a.m. : coffee-break

2:00 p.m. • Metrology in Medical Laboratory,
G. Girault, Institut Pasteur, Senegal
/ 6:00 p.m. ☕ 4:00 p.m. : coffee-break

DIMANCHE 18 / SUNDAY 18

7



DIMANCHE 18 / SUNDAY 18



Salle 3 /
Room 3

Sessions de formation / *Training Courses*

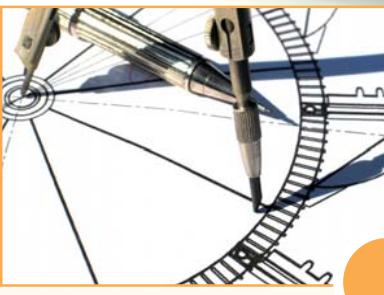
- L'infrastructure de reconnaissance internationale des certificats de conformité. Métrologie, accréditation, essais et certification.
Les moyens modernes de garantir la capacité de mesure dans le domaine réglementé. Choix judicieux, contrôle et maintenance d'un parc d'instruments de mesure,
J-M. Virieux, IP, Switzerland

8:30 a.m.
/
12:30 a.m.



10:30 a.m. : coffee-break

DIMANCHE 18 / SUNDAY 18



Salle 4 /
Room 4

Sessions de formation / *Training Courses*

- Evaluation Technique d'un Laboratoire d'Analyses selon les normes ISO/CEI 17025 et ISO 15189,
A. Charki, ISTIA, France

8:30 a.m.
/
12:30 a.m.



10:30 a.m. : coffee-break

DIMANCHE 18 / SUNDAY 18

- International recognition infrastructure for conformity certificates.
Metrology, accreditation, testing and certification. Modern means to guarantee the measurement capability in the regulated area.
Judicious choice, control and maintenance of a unit of measuring instruments,
J-M. Virieux, IP, Switzerland

2:00 p.m.
/
6:00 p.m.



4:00 p.m. : coffee-break

- Testing Laboratory Technical Assessment according to ISO/IEC 17025 standard,
A. El Said, NIS, Egypt

2:00 p.m.
/
6:00 p.m.



4:00 p.m. : coffee-break



LUNDI 19 / MONDAY 19



S0

Salle / Room
Om Kalthoum

LUNDI 19 / MONDAY 19



S1

Salle / Room
Om Kalthoum

Session d'ouverture / *Opening session*

- 8:00 a.m. • Metrological Capabilities of National Institute for Standards(NIS),
A. Abuelezz, President of NIS, Egypt
- Metrology : the frontier measurement,
M. Himbert, Director of the National Institute of Métrology-CNAM-LNE,
France

Session : Organisation de la Métrologie dans le Monde et en Afrique ;
Développement économique et industriel / *Metrology Organization in the World
and in Africa ; Industrial and Economic Development*

Chairmen : S.PRINS, NMISA, South Africa, H. SHAARAWY, EGAC, Egypt

- 9:30 a.m. • Promotion of Cooperation Activities in Metrology between Europe
and South East Asia, T. Yandayan(1), A. M. Dahlan(2), TUBITAK UME(1), NML(2),
Turkey(1), Malaysia(2)
- 10:00 a.m. • Joint Research Projects in metrology for Industry and Society,
L. Erard, LNE, France
- 10:30 a.m. : coffee-break
- 11:00 a.m. • Building the AFRIMETS Metrology in Chemistry Infrastructure,
S. Prins, NMISA, South Africa
- Métrologie : enjeux et impacts dans la gestion de l'énergie électrique
en République du Bénin, A. Bohoun, Ministère de l'Industrie et du
Commerce, Bénin
- 12:00 a.m. • International Measurement Confederation-IMEKO,
M. Borsic, IMEKO, Croatia

LUNDI 19 / MONDAY 19

10

• conférence en français

• presentation in English

LUNDI 19 / MONDAY 19

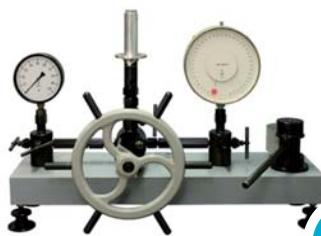
11

• conférence en français

• presentation in English



LUNDI 19 / MONDAY 19



S2

Salle/ Room
Om Kalthoum

Session : Métrologie Légale ; Normalisation, accréditation et certification /
Legal Metrology ; Standardization, accreditation, certification

Chairmen : J M. VIRIEUX, IP, Switzerland, M. MOKHTAR, NIS, Egypt

LUNDI 19 / MONDAY 19

- 2:00 p.m. •• Strategy of the Egyptian Organization for Standardization & Quality, H. Barakat, EOS, Egypt
- Egyptian system for accreditation (EGAC) and its international relationship, H. Sharawy, EGAC, Egypt
- Developments in the OIML, A. Johnston, OIML, Canada
- Content of Prepackages. The Swiss Sequential Statistical, J-M. Virieux, IP, Switzerland
- Legal Metrology in Egypt Present and Future A. Ez El-Den Mohamed, Legal Metrology, Egypt
- 4:00 p.m. : coffee-break
- Toward the transformation of national metrology legislation, O. Velychko, S. Pronenko, Ukrmetrteststandard, Ukraine
- Toward the harmonization of national documents in field of metrology, O. Velychko, T. Gordiyenko, Ukrmetrteststandard Uk SREC, Ukraine
- Managing competence within a European network of calibration centres, J-C. Krynicki, Agilent, France
- Encouragement à l'intégration régionale par l'usage des technologies de l'information et de la communication, F. Ouerdiane, C. Heider, PTB, Germany

12

• conférence en français

• présentation in English

MARDI 20 / TUESDAY 20



S3

Salle/ Room
Sakkara

Session : Evaluation des incertitudes et comparaisons inter-laboratoires /
Uncertainties Evaluation and Interlaboratory comparisons

Chairmen : F. PAVESE, INRIM, Italy , M. BERRADA, LNM/LPEE, Morocco

- 8:30 a.m. •• The most common mistakes in estimation of measurement uncertainty, V. Gašljević, M. Jakovčić, Croatian Metrology Society, Croatia
- 9:00 a.m. •• On hierarchical vs non-hierarchical comparisons in metrology and testing, F. Pavese, INRIM, Italy
- Proficiency Testing for Calibration Laboratories, P. Briggs, Proficiency Testing Australia
- 10:00 a.m. •• Maximum permissible speed measurement errors at the Portuguese Institute for Quality, O. Pellegrino(1), C. Pires(1), A. Cruz(2), Laboratoire de Photométrie, Radiométrie et Radiofréquences(1), Unité de Métrologie Scientifique et Appliquée(2), Portugal
- 10:30 a.m. : coffee-break
- 11:00 a.m. •• Comparison of the GUM and Monte Carlo Measurement Uncertainty Techniques with Application to Effective Area Determination in Pressure Standards, V. Ramnath, NMISA, South Africa

MARDI 20 / TUESDAY 20

13



MARDI 20 / TUESDAY 20



S4



MARDI 20 / TUESDAY 20



S5



Session : Qualité, Fiabilité et Sécurité / *Quality, Reliability and Safety*

Chairmen : E.A. ELSAYED, Rutgers University, USA, A. KOBI, ISTIA, France

MARDI 20 / TUESDAY 20

- 8:30 a.m. •• Reliability Prediction using Equivalent Test Plans, E.A. Elsayed, Rutgers University, USA
- Reliability of Components for Optical Fiber Systems under Irradiation, D. Sporea(1), A. Sporea(1), C. Oproiu(1), I. Vata(2), B. Constantinescu(2), D. Negut(2), National Institute for Laser, Plasma and Radiation Physics(1), National Institute for Physics and Nuclear Engineering(2), Romania
- Reliability of Photovoltaic Modules based on climatic measurement data, R. Laronde, A. Charki, D. Bigaud, ISTIA, France
- 10:00 a.m. •• Verification of flash memory reliability using an accelerated test, Z. Vintr, D. Valis, University of Defence, Czech Republic



10:30 a.m. : coffee-break

- 11:00 a.m. •• Road safety and metrology : what's binomial ?, M. do Céu Ferreira, A. Cruz, Instituto Português da Qualidade, Portugal
- Investigation of Effective Factors in Measurement Errors of Aeronautical Telemetry Systems, S. Marzban, S.M. Hoseini Miangafsheh, K. Mohamed-pour, K.N. Toosi University of Technology, Iran

- 12:00 a.m. •• Digital System as Base for Using Materials and Products in Ideal Way A Study on Waterproof Sheets, A.A.H. Abdullah, M.E. ElAttar

14

• conférence en français

• présentation in English



MARDI 20 / TUESDAY 20



S5

Session : Mesures en agro-alimentaire, dans l'environnement, dans la santé / *Measurement in food, environment and health*

Chairmen : E. A. HASSANI, IP, Morocco, P. ULLIG, PTB, Germany

- 8:30 a.m. •• Environment analysis by corrosion of the Silver Thin Film, K. Ayadi, FERHAT Abbas University, Algeria
- Method development for the analysis of biodegradable polymers, E. Vuorinen(1), M. Hakkarainen (2), NMISA(1), KTH(2), South Africa(1), Sweden(2)
- Inter comparison on particular classification, air velocity measurement and differential pressure measurement trials, B. THAVEAU(1), R. BOREL(2), M. ROCA(3), Aerolab(1), Virbac(2), Orbital Pharma(3), France
- 10:00 a.m. •• From opacimetry to nanoparticle characterization : Regulation, research, and new national standards for exhaust gas analysers in Europe, P. Ulbig, PTB, Germany



10:30 a.m. : coffee-break

MARDI 20 / TUESDAY 20

15

• conférence en français

• présentation in English



MARDI 20 / TUESDAY 20



S5

Salle / Room
Om Kalthoum

Session : Mesures en agro-alimentaire, dans l'environnement, dans la santé /
Measurement in food, environment and health

Chairmen : T. TIPLICA, ISTIA, France, H. EISSA, NIS, Egypt

- 2:00 p.m. • Identification of apple varieties using acoustic measurements, T. Tiplica(1), P. Vandewalle(2), S. Verron(1), C. Grémy-Gros(1), E. Mehinagic(2), ISTIA(1), ESA(2), France
- Certification of Food Reference Materials by Collaborative Study, L. Regalado-Contreras, C.M. Salazar-Arzate, Y. Mitani, Centro Nacional de Metrologia, Mexico
- 3:00 p.m. • Proficiency Testing for Determination of Metals in Tomato Paste, F. Akcadag, N. Tokman, E. Uysal, TUBITAK-UME, Turkey
- Determination of adulteration of different types of commercial honey samples by the $^{13}\text{C}/^{12}\text{C}$ isotopic ratio, A. Şimşek, M. Bilsel, TUBITAK-UME, Turkey
- 4:00 p.m. : coffee-break
- Development viscosity transfer standards from Chitosan / gelatin mixtures, K. El-Nagar, M. Amer, M. Mekawy, E. El Din Mahmoud, National Institute for Standards (NIS), Egypt
- 5:00 p.m. • Determination of intermediate γ -ray dose in tooth enamel and its uncertainty Using ESR, G.M. Hassan(1), E. Aboelezz(1), A. ElKhodary(2), H.M. Eissa(1), NIS(1), Mansoura University(2), Egypt
- La métrologie dans une institution telle que l'Institut Pasteur de Dakar, G. Girault, Institut Pasteur de Dakar, Senegal
- 6:00 p.m.

MARDI 20 / TUESDAY 20

16

• conférence en français

• présentation in English

MARDI 20 / TUESDAY 20



S6

Salle / Room
Habiba

Session : Maîtrise statistique des procédés / *Statistical Process Control*

Chairmen : E.A. ELSAYED, Rutgers University, USA, A. KOBI, ISTIA, France

- 2:00 p.m. • The management of measurement processes - key to robust and cost optimal production of high quality products, R. Schmitt, J. Lose, M. Harding, RWTH Aachen University, Germany
- Remote Access and On-Line Monitoring of Production Parameters and Quality Variables Using SPC Software, M.K. Hassan, Faculty of Engineering and Technology, AASTMT, Egypt
- 3:00 p.m. • Monograph about Data Mining, A. Horníková(1), N. Durakbasa(2), University of Economics(1), Institute of Production Engineering and Laser Technology(2), Slovakia(1), Austria(2)
- Statistical Modeling for Voice Distortion Characterization of Arabic Dysphonic Speakers, A. Ghelis(1), M. Guerti(2), LEREC Université(1), Ecole Nationale Supérieure Polytechnique(2), Algeria
- 4:00 p.m. : coffee-break
- Application of the method of multicriteria decision « PROMETHEE » for HACCP system, D. Ayadi(1), L. Azzabi(1), A. Kobi(2), C. Robledo(2), H. Chabchoub (1), Y. Boujelbenne(1), GIAD/FSEG(1), ISTIA(2), Tunisia(1), France(2)
- 5:00 p.m. • Tools for Multicriteria decision support for diagnosis industrial process, L. Azzabi(1), D. Ayadi(1), A. Kobi(2), C. Robledo(2), Y. Boujelbenne(1), H. Chabchoub(1), GIAD/FSEG(1), ISTIA(2), Tunisia(1), France(2)
- Integrated training module developed by mechanical engineers students for quality, metrology and safety tools study, L. Malasar, J. Lemaire, A. Martinez, University of Liege, Belgium
- 6:00 p.m. • Evaluation du rendement et optimisation par Analyse en Composantes Principales d'une Eolienne, C.M.F. Kebe(1), A. Kobi(2), UCAD/ESP(1), ISTIA(2), Senegal(1), France(2)

MARDI 20 / TUESDAY 20

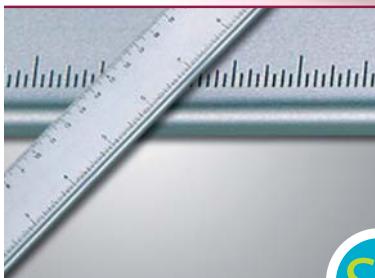
17

• conférence en français

• présentation in English



MARDI 20 / TUESDAY 20



S7

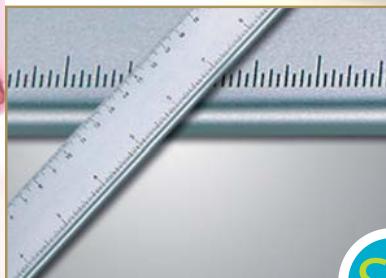
Salle / Room
Sakkara

Session : Mesures optique et dimensionnelle / *Dimensional and optical measurement*

Chairmen : A. MICHEL, IP, France, S. BAYTAROGLU, TUBITAK-UME, Turkey

- 2:00 p.m.
- Displacement system from nanometer to millimeter, A. Sinno(1), L. Chassagne(1), P. Ruaux(1), S. Topçu(1), G. Lérondel(2), S. Blaize(2), A. Bruyant(2), P. Royer(2), Y. Alayli(1), Laboratoire d'Ingénierie des Systèmes de Versailles(1), Laboratoire d'Instrumentation Optique et de Nanotechnologies(2), France
 - Metrological applications of ellipsometry, P.R. Dahoo, CNRS/INSU et Université Versailles St-Quentin, France
- 3:00 p.m.
- Development of a metrological AFM with minimized Abbe errors, B. Poyet(1&2), S. Ducourteux(1), LNE(1), Laboratoire d'Ingénierie des Systèmes de Versailles(2), France
 - Automatisation des mesures de longueur par analyse des images interférentielles, A.Michel, indépendant, France
- 4:00 p.m. : coffee-break
- Stabilisation d'une source laser He-Ne à 543nm en vue de son utilisation en interférométrie, A.Michel, indépendant, France
- 5:00 p.m.
- Metrological Characterization of Synthesized CNTs, S.H.R. Ali(1), M.K. Bedewy(2), M.A. Etman(3), B.S. Azzam(4), NIS(1), Misr Univ. for Science and Technology(2), Al-Ahram Higher Institute for Eng. and Tech(3), Cairo University(4), Egypt
 - Morphology and Properties of Polymer Matri Nanocomposites, S.H.R. Ali(1), M.K. Bedewy(2), M. A. Etman(3), H.A. Khalil(4), B.S. Azzam(5), NIS(1), Misr Univ. for Science and Technology(2), Al-Ahram Higher Institute for Eng. and Tech(3), NRC(4), Cairo University(5), Egypt

MERCREDI 21 / WEDNESDAY 21



S7

Salle / Room
Sakkara

Session : Mesures optique et dimensionnelle / *Dimensional and optical measurement*

Chairmen : Y. ALAYLI, LISV, France, S. BAYTAROGLU, TUBITAK-UME, Turkey

- 8:30 a.m.
- Primary Laboratory of Photometry of the Portuguese Institute of Quality, O. Pellegrino(1), C. Pires(1), A. Cruz(2), Laboratoire de Photométrie, Radiométrie et Radiofréquences(1), Unité de Métrologie Scientifique et Appliquée(2), Portugal
 - Adapted technique for length scale measurement, M. Bahrawi, N. Farid, National Institute for Standards (NIS), Egypt
 - Small Angle Generators for Angle Measurement, T. Yandayan, N. Karaböce, B. Özgür, O. Yaman, TUBITAK-UME, Turkey
- 10:00 a.m.
- Dynamic Characteristics of Probing System in Coordinate Metrology, S.H.R. Ali, NIS, Egypt



10:30 a.m. : coffee-break

MARDI 20 / TUESDAY 20

18

• conférence en français

• présentation in English

MERCREDI 21 / WEDNESDAY 21

19

• conférence en français

• présentation in English



MERCREDI 21 / WEDNESDAY 21



S8

Salle / Room
Habiba

Session : Pressure / *Pressure Measurement*

Chairmen : A. EL TAWIL, NIS, Egypt, I. KOCAS, TUBITAK-UME, Turkey

- | | |
|--|---|
| 8:30 a.m.
10:00 a.m.
11:00 a.m. | <ul style="list-style-type: none"> • The Infrastructure and Activities of Tubitak UME pressure group laboratories, I. Kocas, Y. Durgut, TUBITAK-UME, Turkey • Effects of supply voltage on calibration results for pressure transducers, Y. Durgut, I. Kocas, TUBITAK-UME Turkey • Proficiency test in the gauge pressure range for Croatian accredited laboratories, D. Zvizdic, L.G. Bermanec, University of Zagreb, Croatia • Membrane-capacity vacuum meter for state primary standard of unit of low absolute pressures in the range 10^{-3} - 10^3 Pa, V.N. Gorobei, E.K. Izrailov, D.I. Mendeleyev Institute for Metrology (VNIIM), Russia |
| | 10:30 a.m. : coffee-break |
| | <ul style="list-style-type: none"> • The national standard in the field of molecular gas flows in vacuum, V.N. Gorobei, A.A. Chernyshenko, D.I. Mendeleyev Institute for Metrology (VNIIM), Russia • Elastic constants of pressure balanced piston-cylinder assemblies measured with the resonant ultrasound spectroscopy, W. Sabuga(1), P. Ulbig(1), A.D. Salama(2), PTB(1), National Institute of Standards (NIS)(2), Germany(1), Egypt(2) |

MERCREDI 21 / WEDNESDAY 21



S10

Salle / Room
Om Kalthoum

Session : Température et autres grandeurs thermiques / *Temperature and Thermal Quantities Measurement*

Chairmen : G. BONNIER, IP, France, M.M. AMMAR, NIS, Egypt

- | | |
|--|--|
| 8:30 a.m.
10:00 a.m.
11:00 a.m. | <ul style="list-style-type: none"> • Implementation of the ITS-90 over the Temperature Range 83 K to 3200 °C at the National Institute for Standards NIS-Egypt, M.G. Ahmed, K. Ali, NIS, Egypt • National Interlaboratory Comparison of Thermocouples between 500°C and 1040°C, A.K. Dogan, N. Arifovic, A. Uytun, TUBITAK-UME, Turkey • Calibration of Intelligent Resistive Temperature Devices, A.K. Dogan, M. Kalemci, A. Derelioglu, K. Ozcan, TUBITAK-UME, Turkey |
| | 10:30 a.m. : coffee-break |
| | <ul style="list-style-type: none"> • Improvements in Calibration at Silver Point, J.P. Tavener, D. Southworth, ISOTECH, UK • Improvements in Calibration at Copper Point, J.P. Tavener, D. Southworth, ISOTECH, UK • From the user needs to the new definition of the temperature unit at LNE, Y. Hermier, INM/CNAM-LNE, France |

MERCREDI 21 / WEDNESDAY 21

20

• conférence en français

• présentation in English

MERCREDI 21 / WEDNESDAY 21

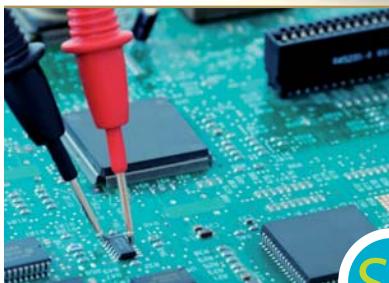
21

• conférence en français

• présentation in English



MERCREDI 21 / WEDNESDAY 21



S9

Salle / Room
Sakkara

Session : Mesures électriques et électromagnétiques / *Electrical and Electromagnetic Measurement*

Chairmen : M. BORSIC, IMEKO, Croatia, N.N. TADROS, NIS, Egypt

11:00 a.m. • Determination of Temperature Coefficient of Standard Inductors and Capacitors, M.A. Ansari, M. Saleem, Jyotsana, A.K. Saxena, LF&HF Impedance Standards National Physical Laboratory, India

• Computer Aided Techniques for Estimation and Reduction of Uncertainties of Electromagnetic Measurement Devices, M. Cundeva-Blajer, L. Arsov, Faculty of Electrical Engineering and Information Technologies (FEIT), R. Macedonia

12:00 a.m. • Compensated Current Transformers for Closed-Link Electricity Meter Testing, T. Kefeli, H. Çayci, TUBITAK-UME, Turkey

2:00 p.m. • A calibration system for Electronic Current Transformers with Analogue Outputs, H. Çayci, T. Kefeli, TUBITAK-UME, Turkey

• New Concept in Measuring and Calibrating the Solar Cell Short Circuit Current, H.A. Mageed(1), A.F. Zobaa(2), A. Ghitas(3), H.A. Raouf(1), A.H.A. El-Rahman(1), M.A. Aziz(4), NIS(1), University of Exeter(2), National Research Institute of Astronomy and Geophysics(3), Cairo University(4), Egypt(1)(3)(4), UK(2)

MERCREDI 21 / WEDNESDAY 21



S10

Salle / Room
Om Kalthoum

Session : Température et autres grandeurs thermiques / *Temperature and Thermal Quantities Measurement*

Chairmen : E. RENAOT, INM/CNAM-LNE, France, M.G. AHMED, NIS, Egypt

2:00 p.m. • New temperature and pressure sensors using spin crossover compounds, J. Linares(1), E. Codjovi(1), Y. Garcia(2), GEMaC-UMR CNRS(1), Université Catholique de Louvain(2), France(1), Belgium(2)

• New SMU gallium point cells, J. Ranostaj, SMU, Slovakia

3:00 p.m. • Calibration of infrared ear thermometers, N. Arifovic, A. Derelioğlu, K. Özcan, TUBITAK-UME, Turkey

• Verification of blackbodies emissivity, P. Nemeček, I. Christov, Metrodat, Slovakia



4:00 p.m. : coffee-break

4:30 p.m. • Fiabilité à long terme des cellules thermométriques matérialisant les points de définition de l'EIT-90 entre 29,76°C et 660,323°C, E. Renaot, INM/CNAM-LNE, France

MERCREDI 21 / WEDNESDAY 21

22

• conférence en français

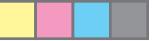
• présentation in English

MERCREDI 21 / WEDNESDAY 21

23

• conférence en français

• présentation in English



MERCREDI 21 / WEDNESDAY 21



S11

Salle / Room
Habiba

Session : Grandeurs mécaniques / *Mechanical Quantities*

Chairmen : M.G. EL SHERBINY, NIS, Egypt, R. BOREL, VIRBAC, France

MERCREDI 21 / WEDNESDAY 21

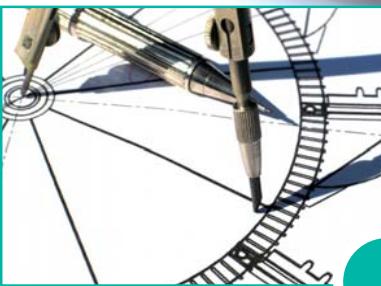
- 2:00 p.m. • Comparison of micropipettes calibration by accredited laboratories, T. Madec(1), S. Amarouche(2), Laboratoire commun de métrologie(1), Laboratoire national de métrologie et d'essais(2), France
- Estimation de l'incertitude de mesure sur l'essai de grammage, M.Z. Adouani, PACKTEC, Tunisie
- 3:00 p.m. • Developing the NIS 5 kN deadweight machine, S.N. Osman(1), E.H. Hasan(1), H.M. El-Hakeem(1), F. Kouta(2), National Institute for Standards(NIS)(1), Faculty of Engineering(2), Egypt
- Experimental study of digital micro-particle-image-velocimetry (μ PIV) system with LED illumination, H. Nasibov(1), A. Kholmatov(1), B. Akselli(2), A. Nasibov(1), TUBITAK-UEKAE(1), TUBITAK-UME(2), Turkey
- 4:00 p.m. : coffee-break
- Recent Advances in Digital Particle Image Velocimetry Methods for flow motion analysis, H. Nasibov(1), S. Baytaroglu(2), TUBITAK-UEKAE(1), TUBITAK-UME(2), Turkey
- 5:00 p.m. • Investigation of laminar flow in microchannels through μ PIV measurements at UME, B. Akselli(1), V. Ciftci(1), A. Kholmatov(2), H. Nasibov(2), TUBITAK-UME (2), Turkey
- Evaluation of sine approximation realised by FFT in accordance with SO 16063-11 Primary Vibration Calibration by Laser Interferometry, T.R. Licht, S.E. Salbøl, P. Callec, Brüel & Kjaer sound & vibration, Denmark
- 6:00 p.m. • Primary Standard for Sound Pressure in Air in INM Romania, A. Popescu, National Institute of Metrology

24

• conférence en français

• presentation in English

JEUDI 22 / THURSDAY 22



Salle 1/
Room 1

Sessions de formation / *Training Courses*

- 8:30 a.m. • Temperature measurement, G. Bonnier, IP, France
- /
- 12:30 a.m. 10:30 a.m. : coffee-break

- 2:00 p.m. • Mesure de température, E. Renaot, INM/CNAM-LNE, France
- /
- 6:00 p.m. 4:00 p.m. : coffee-break

JEUDI 22 / THURSDAY 22

25

• en français

• in English



JEUDI 22 / THURSDAY 22



Sessions de formation / *Training Courses*

JEUDI 22 / THURSDAY 22

8:30 a.m.
/



10:30 a.m. : coffee-break

- Mesures acoustique et vibratoire
P. Callec, Brüel & Kjaer Sound & Vibration, Denmark

12:30 a.m.

4:00 p.m. : coffee-break

- Vibration and acoustic measurements,
F. Erling, Brüel & Kjaer Sound & Vibration, Denmark

2:00 p.m.
/



6:00 p.m.

26

• en français

• in English

JEUDI 22 / THURSDAY 22



Sessions de formation / *Training Courses*

8:30 a.m.
/



10:30 a.m. : coffee-break

- Flowrate measurement,
J.M. Montel, Krohne, Germany

12:30 a.m.

- Verification of balances and micropipettes,
A. El Tawil, NIS, Egypt

2:00 p.m.
/



6:00 p.m.

4:00 p.m. : coffee-break

JEUDI 22 / THURSDAY 22

27

• en français

• in English



JEUDI 22 / THURSDAY 22

Salle 4 /
Room 4



Sessions de formation / Training Courses

JEUDI 22 / THURSDAY 22

8:30 a.m.
/



10:30 a.m. : coffee-break

- Evaluation des incertitudes de mesure,
J.P. Senelaer, ESM-Douai, France

12:30 a.m.

2:00 p.m.
/



4:00 p.m. : coffee-break

- Verification des balances et des pipettes,
M. Berrada, LNM-LPEE, Morocco

6:00 p.m.

en français

in English

28

JEUDI 22 / THURSDAY 22

Visites techniques / Technical Visits

le matin / in the morning

- Visite des laboratoires du NIS /
NIS laboratories visit

l'après-midi / in the afternoon

- Visite des laboratoires du NIS /
NIS laboratories visit

inscription / registration

Merci de contacter le bureau de
CAFMET avant mercredi matin /
Please contact CAFMET Office
before Wednesday morning

Salle / Room
Om Kalthoum

Session Technique / Technical Session

9:00 a.m. •• METTLER TOLEDO

- ISOTECH



10:30 a.m. : coffee-break

11:00 a.m. Table Ronde : La métrologie en Afrique /
Round Table : Metrology in Africa

Chairmen : L. OSSENI, DMNQ, Benin, M. GNANKAMBARY, RSU, Nigeria

12:30 a.m. Session de clôture / Closing Session

Honor Guests : A. ABUELEZZ, President of NIS, Egypt
A. NEJJAR, Director of SNIMA, Morocco

Session Technique / Technical Session

2:00 p.m. •• KROHNE

- SIKA

3:00 p.m. •• SARTORIUS

- BIPEA

- ESM

JEUDI 22 / THURSDAY 22

29

TOURISME / SIGHTSEEING

TOURISME / SIGHTSEEING

Sont inclus dans les tarifs ci-contre les services suivants :

- Tous les transferts par bus avec air conditionné
- Tous les frais d'entrée pour toutes les visites mentionnées
- Tous les repas mentionnés
- Un guide francophone expérimenté
- 1 petite bouteille d'eau minérale par personne

Sont exclus des tarifs ci-contre les services suivants :

- Les achats personnels, les voyages touristiques en dehors de ce qui est mentionné dans le programme
- Les boissons aux repas
- Les coûts supplémentaires, la consommation personnelle, etc.
- Tout ce qui n'est pas mentionné

These rates include the following services :

- All transfers by air conditioned buses
- All entrance fees for all sightseeing spots mentioned
- All meals as mentioned
- Licensed well experienced speaking guide all through
- 1 small bottle of mineral water per person

These rates exclude the following services :

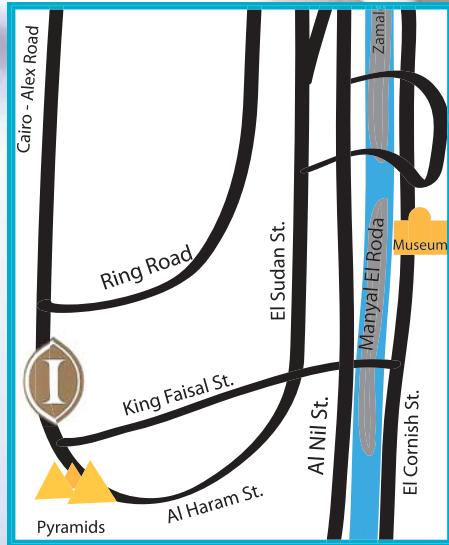
- Personal extras, sightseeing trip outside what mentioned in the program
- Beverages with meals
- The additional costs arising exclude the itinerary, personal consumption, etc.
- Any item not mentioned

30 contact : sameh.ragab@hotmail.com



INFORMATIONS / INFORMATION

INFORMATIONS / INFORMATION



Lieu de la Conférence / Conference Venue

INTERCONTINENTAL PYRAMIDS PARK RESORT CAIRO

Pyramids Gardens

Alexandria Desert Road-KM 2.5,
PO Box 70, Pyramids, 12561 Cairo EGYPT

Informations sur le site www.ac-metrology.com/CAFMET2010,
rubrique «Lieu de la Conférence»

Information at www.ac-metrology.com/CAFMET2010 link «Venue»

Contact / Contact

CAFMET
ISTIA-62, avenue Notre Dame du Lac
49 000 Angers FRANCE

Courriel / *E-mail* : cafmet2010@ac-metrology.com
Téléphone / *Phone* : +33(0) 673 623 262
Fax : +33(0) 241 888 421

Contact local / Local Contact

National Institute for Standards (NIS)
Tersa St., El Haram El Giza EGYPT
Mokhtar_sharaf@yahoo.com



EXPOSANTS / EXHIBITORS

CAFMET 2010



EXPOSANTS / EXHIBITORS

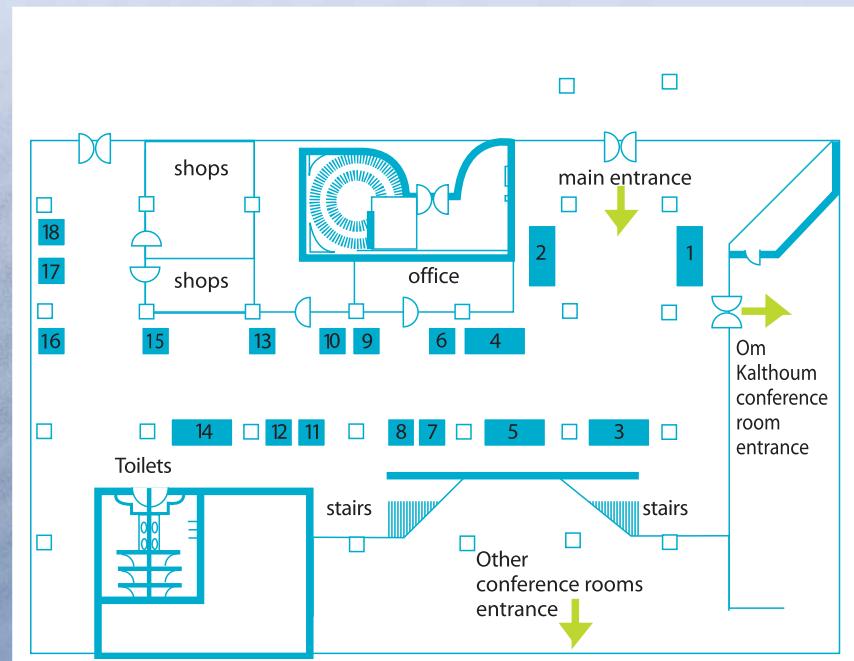
CAFMET 2010



EXPOSANTS / EXHIBITORS

- | | |
|-------------------|---|
| 1. CAFMET | 12. ESM |
| 2. KROHNE | 13. BIPEA |
| 3. METTLER TOLEDO | 14. FLUKE |
| 4. NIS | 15. AFM |
| 5. Brüel & Kjaer | 16. EOS (Egyptian Organisation for Standardization & Quality) |
| 6. SPEKTRA | 17. CKMétrologie |
| 7. ZWIEBEL | 18. EGAC (Egyptian Accreditation Council) |
| 8. ISOTECH | |
| 9. OMEGA | |
| 10. SARTORIUS | |
| 11. SIKA | |

32



EXPOSANTS / EXHIBITORS

33



TARIFS

inscription

Non Membre + Proceedings + Pauses-Café	515 €
Membre, Participant Africain + Proceedings + Pauses-Café	385 €

autres prestations

Sessions de formation	150 €
Déjeuners (x3)	100 €
Dîner de Gala	65 €



FEES

registration

Non member + Proceedings + Coffee Breaks	515 €
Member, African Participant + Proceedings+ Coffee Breaks	385 €

extras

Training courses	150 €
Lunches (x3)	100 €
Gala dinner	65 €



Des formations auront lieu les **18 et 22 avril 2009**.

Un tarif spécial est accordé aux ressortissants des pays arabes grâce à une convention signée avec AFM (Fédération Arabe de Métrologie) et le NIS.

Pour plus de renseignements, écrivez-nous : cafmet2010@acmetrology.com

Votre inscription ne sera validée que si le paiement est effectué.

Paiement

Paiement sécurisé : directement sur le site : www.ac-metrology.com/CAFMET2010

Transfert bancaire :

Détenteur : CAFMET

BANQUE : Société Générale

ADRESSE DE LA BANQUE : 15 rue Alsace

49100 Angers FRANCE

N° IBAN : FR76 30003 00080 00050546112 28

Adresse BIC SWIFT : SOGEFRPP

Le prix de l'inscription n'inclut pas les taxes de transfert bancaire. Une copie de l'ordre de transfert est à envoyer avec le formulaire au Comité d'Organisation du CAFMET par fax ou par courrier postal.

Exceptionnellement, un paiement en liquide ou par carte de crédit (Visa, Mastercard, American Express, CB, etc.) est accepté à l'enregistrement le premier jour.

Si vous souhaitez réserver un stand d'exposition, contactez-nous par e-mail avant fin Mars.

Annulations

Seules seront prises en compte les annulations reçues au CAFMET avant le 31 mars 2010.

Les annulations après le 31 mars 2010 ne donneront lieu à aucun remboursement.

Training courses are scheduled **on April 18th and 22nd**.

Special rates are available for participants from Arab countries through an agreement with AFM (Arab Federation of Metrology) and the NIS.

For further information please email us at : cafmet2010@acmetrology.com

Your registration cannot be processed until full payment has been completed.

Payment

By secured on-line payment : www.ac-metrology.com/CAFMET2010

By bank transfer to :

Holder : CAFMET

BANK : Société Générale

BANK POSTAL ADDRESS : 15 rue Alsace

49100 Angers FRANCE

N° IBAN : FR76 30003 00080 00050546112 28

BIC SWIFT Address : SOGEFRPP

Please note that you are expected to pay for all bank expenses. A copy of the bank transfer must be sent with the registration form to CAFMET organizing committee fax or postal address.

Exceptionally payment by cash or by credit card (Visa, Mastercard, American Express, CB, etc.) is accepted on the first day.

If you wish to book an exhibition professional stand, please contact us before the end of March.

Cancellations

Cancellations must be sent before March 31st, 2010.

Cancellations received after March 31st, 2010 will not be refunded.



Next Event Announcement

CAFMET 2012

23-27 April 2012 / Marrakech, MOROCCO

4th International Metrology Conference

Contact : cafmet2012@ac-metrology.com

