#### WMO OMM



World Meteorological Organization Organisation météorologique mondiale Organización Meteorológica Mundial Всемирная метеорологическая организация المنظمة العالمية للأرصاد الجوية 世界气象组织 Secrétariat 7 bis, avenue de la Paix – Case postale 2300 CH 1211 Genève 2 – Suisse Tél.: +41 (0) 22 730 81 11 Fax: +41 (0) 22 730 81 81 wmo@wmo.int – public.wmo.int

17 de abril de 2018

Nuestra ref.: 09856/2018/CRS-1718

Anexos: 2 (disponibles en inglés solamente)

Asunto: Curso internacional de formación sobre los fundamentos de la calibración (Ankara, Turquía, 10 a 14 de septiembre de 2018)

Finalidad: Para información y para que se adopten las medidas pertinentes, según proceda.

Estimado señor/Estimada señora:

Me complace informarle de que la República de Turquía acogerá un curso internacional de formación sobre los fundamentos de la calibración, del 10 al 14 de septiembre de 2018, en el Centro Regional de Formación (CRF) de la Organización Meteorológica Mundial (OMM) en Ankara (Turquía).

Este curso de formación se impartirá en inglés y está destinado a meteorólogos y técnicos en meteorología que trabajen en ámbitos relacionados con instrumentos meteorológicos y su calibración. El Servicio Meteorológico Estatal de Turquía eximirá a un solo participante por cada país del pago de la matrícula y le proporcionará alojamiento en régimen de pensión completa (que incluye alojamiento, desayuno, almuerzo y cena) y los traslados locales.

El Servicio Meteorológico Estatal de Turquía no efectuará otros desembolsos en concepto de dietas, viajes internacionales o nacionales u otros gastos, entre otros tarifas de tránsito o tasas de visados, cuyo importe se espera corra a cargo de los propios participantes o de sus respectivos gobiernos. Adjunto a la presente figura un documento informativo con detalles adicionales sobre el curso y el procedimiento de solicitud.

Se solicita a los candidatos interesados que cumplimenten el formulario de solicitud adjunto (*Application Form*), que deberá contar con el aval del Representante Permanente de su país, y lo remitan directamente a la atención de la señora Nur Söğütçüklü (nsogutcuklu@mgm.gov.tr), del CRF en Turquía, no más tarde del **31 de julio de 2018**.

Le saluda atentamente.

for (P. Taalas) Secretario General

A los Representantes Permanentes (o Directores de los Servicios Meteorológicos o Hidrometeorológicos) de los Miembros de la OMM





## 2<sup>nd</sup> International Training Course on **"Basics of Calibration"** 10-14 September 2018 Ankara, TURKEY

#### **General Information**

Calibration is a set of process that measures the reliability and quality of the meteorological instruments by using measuring instruments, system or values according to the measurement standards.

Calibration is required for the meteorological instruments in order to be sure that the meteorological instruments are providing accurate indications or output signals when they are installed or any kind of instrument error that can occur due to a variety of factors in the process of time.

Being aware of the increasing importance of the accuracy of the instruments and traceability of the measurements throughout the world, Turkish State Meteorology Service (TSMS) paid more attention to become a Calibration Center in Region-VI.

TSMS got TS EN ISO/IEC 17025:2005 Certification and became the Calibration Center of TSMS on 30<sup>th</sup> April 2010. It has been accredited in the fields of:

- Temperature Laboratory
- Relative humidity Laboratory
- Pressure Laboratory
- Wind speed Laboratory

Other laboratories working in accordance with TS EN ISO/IEC 17025:2005 standards are;

- Precipitation Laboratory
- Solar Radiation Laboratory
- Electrical Laboratory
- Wind Direction Laboratory

#### **Objectives of the Training Course**

Training Course on Calibration provides an understanding of metrology, calibration and measurement, and how ISO/IEC 17025 relates to equipment, personnel, calibration procedures and reporting. In addition to that, this training will provide an opportunity to exchange information/knowledge and experience from the related countries.



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- $_{\odot}$  The standards and requirements for implementation and maintenance of calibration and measurement
- The basic concept of metrology for different types of calibrations and the technical terms commonly used
- Specifications, tolerances and accuracies
- How to interpret and understand the content of a typical calibration report
- The common findings of a quality audit
- What is required to meet and exceed the relevant quality standard and apply the best industry practices

#### Content

- ✓ Introduction to metrology
- ✓ ISO/IEC 17025 standards
- ✓ Measurement uncertainty
- ✓ Calibration of LIG thermometers and resistance thermometers
- ✓ Hygrometer calibrations
- ✓ Mechanical, frequency-output, digital and analog barometers calibrations
- ✓ Calibrations of different types of anemometers
- ✓ Tipping bucket and pluviometer calibrations
- ✓ Pyrheliometer and pyranometer calibrations
- ✓ Wind direction calibration
- ✓ Datalogger calibration

#### **Course Format**

The course will consist of group-learning activities, case study and field trips.

#### Working Languages of the Course

The Training Course will be conducted in **English** and all documentation will be in English. No translation/interpretation services will be provided.

#### **Internet Facilities**

Wireless internet will be available. The password will be provided to the participants during the training.

#### **Travel and Accommodation Arrangements**

As the host of the training course, TSMS will arrange transportation to and from the airport to the Ankara Facilities of RTC Turkey as well as the transportation for the field visits. Accepted participants will be provided with accommodation, meals, and coffee





breaks throughout the training from 09 to 15 September 2018. TSMS will also waive the tuition fee.

Please be informed that there will be no additional payment from TSMS to cover per diem or international and domestic travel costs or any other expenses like visa fees, etc.

#### Venue of the Course

Training Course will be held in Ankara Facilities of RTC Turkey, located at:

Kütükçü Alibey Caddesi No:4 06120 Kalaba Keçiören/ANKARA



#### **Eligibility and Application**

This training course is open to one participant from each country and aimed at the meteorologists and meteorological technicians working on the field related to meteorological instruments and their calibration and have good command of English. Applications with below mentioned documents should be sent to the contact person preferably by e-mail **not later than 31 July 2018**.

#### **Required Documents for Application**

- 1- Official Letter: A letter signed by the Permanent Representative of your country with WMO nominating you for the training course.
- 2- Application Form: This form should be filled and signed by the participant and endorsed by Permanent Representative by signing it. It should be sent with the official letter mentioned above.
- 3- Photocopy of Passport: A copy of passport, which you will carry when entering Turkey for this training, should also be submitted with the application form. If you do not have it at the time you are applying, you are requested to submit its photocopy as soon as you obtain it. Passport photocopy should include at least the following information: Name, Date of Birth, Nationality, Sex, Passport Number and Expiration Date.





#### **Contact Person and Course Coordinator**

For any information regarding Regional Course and local logistics arrangements, participants may contact with

#### Contact Person and Course Coordinator

Ms. Nur Söğütçüklü External Relations Division Phone: 0090 312 203 29 24 E-mail: nsogutcuklu@mgm.gov.tr

### Deadline for application: <u>31 July 2018</u>

# 2<sup>nd</sup> International Training Course on "Basics of Calibration" 10 – 14 September 2018, Ankara, Turkey

# **APPLICATION FORM**

<u>Note:</u> Please complete the form in **CAPITAL LETTERS**; get it scanned in PDF version, and send directly to Ms. Nur Söğütçüklü (nsogutcuklu@mgm.gov.tr) by e-mail **with a passport copy and official letter signed by your PR** not later than **31 July 2018**.

1. Country:			
2. Given name:			Photo
3. FAMILY NAME:			
4. Gender:	□ Female	□ Male	
5. Date of birth:	8		
6. Nationality:			
7. Passport number:			
8. Name of the Organization:			
9. Official address:			
10. Telephone number:			
11. E-mail address:			
12. Health condition:			

13. Details of contact person in case of emergency:				
14. Qualification (certificates, diplomas, degrees):				
15. English proficiency:	□ Excellent	□ Good	🗆 Fair	🗆 Poor 🛛 Nil
16. Current position and brief description of duties:				
17. State why you wish to attend the course and indicate the practical use of the course to your work in the future:				
18. Do you require travel support?			🗆 Yes 🛛 No	
19. Do you need an entry visa for Turkey? (http://www.mfa.gov.tr/visa-information-for- foreigners.en.mfa)			🗆 Yes 🗆 No	
20. Departure City & Airp	port:			

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21. Declaration by applicant:

- □ I fully understand that the course organizer does not take any responsibility for risks such as loss of life, accidents, illness, loss of property etc.
- □ I hereby declare that the information given above is true, correct and complete. I shall bear the responsibility for the above information.
- □ I pledge to observe all the Turkish laws and will respect the local customs and follow the course regulations during my stay in Turkey for the training course.

Date:

Signature of applicant:

22. Statement by the Permanente Representative with WMO on why this nominee should be selected for this course:

□ I endorse this application.

Date:

Signature of Permanent Representative:

#### **Contact Details**

To be returned to the Contact Person not later than 31 July 2018