



World Meteorological Organization  
Organisation météorologique mondiale  
Organización Meteorológica Mundial  
Всемирная метеорологическая организация  
المنظمة العالمية للأرصاد الجوية  
世界气象组织

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17 نيسان/ أبريل 2018

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الرسالة رقم:

عدد المرفقات: 2 (متوافران بالإنكليزية فقط)

الموضوع: دورة تدريبية دولية بشأن "أساسيات المعايير"، في الفترة من 10 إلى 14 أيلول/ سبتمبر 2018، أنقرة، تركيا

الإجراء المطلوب: للعلم واتخاذ الإجراء الملائم، حسب الاقتضاء

تحية طيبة وبعد،

يسرني أن أبلغكم أن جمهورية تركيا ستستضيف دورة تدريبية دولية بشأن "أساسيات المعايير"، في الفترة من 10 إلى 14 أيلول/ سبتمبر 2018، في مرافق مركز التدريب الإقليمي التابع للمنظمة (WMO)، في أنقرة، تركيا.

وهذه الدورة التدريبية مفتوحة لأخصائيي وفنيي الأرصاد الجوية العاملين في المجالات المتعلقة بأجهزة الأرصاد الجوية ومعايرتها؛ وستجري فعاليات الدورة بالإنكليزية.

وسيعفي المرفق الحكومي التركي للأرصاد الجوية (TSMS) مشاركاً واحداً فقط ممن يُقبل من كل بلد من رسوم التدريب، وسيوفر له إقامة كاملة تشمل المسكن ووجبات الإفطار والغداء والعشاء وتكاليف الانتقال الداخلي. ولن يتحمل المرفق (TSMS) نفقات إضافية لتغطية بدل الإقامة اليومي أو تكاليف السفر الدولية والمحلية أو أي نفقات أخرى من قبيل مصاريف العبور (الترانزيت) ورسوم التأشيرات وما إلى ذلك، والتي من المتوقع أن يتحملها المشاركون أنفسهم أو حكوماتهم. ويرجى الاطلاع على "معلومات عن الدورة" المرفقة لمزيد من المعلومات عن الدورة وإجراءات التقديم.

ويرجى من المرشحين المهتمين استيفاء "استمارة التقديم" المرفقة، التي ينبغي أن يصدق عليها الممثل الدائم لبلدهم، وإعادتها مباشرة إلى مركز التدريب الإقليمي (RTC) بتركيا (السيدة Nur Söğütçüklü، nsogutcuklu@mgm.gov.tr) في موعد لا يتجاوز 31 تموز/ يوليو 2018.

وتفضلوا بقبول فائق الاحترام،

(ب. تالاس)  
الأمين العام

إلى: الممثلين الدائمين لأعضاء المنظمة (أو مديري مرافق الأرصاد الجوية أو الأرصاد الجوية الهيدرولوجية)

صورة إلى: المستشارين الهيدرولوجيين للممثلين الدائمين

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

Ref.: 09855/2018-1.1 DRA/ETR

**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.



- 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
- ✓ Pyrliometer 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.



WORLD  
METEOROLOGICAL  
ORGANIZATION



**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](mailto:nsogutcuklu@mgm.gov.tr)*

Ref.: 09855/2018-1.1 DRA/ETR

**Deadline for application: 31 July 2018**

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

**APPLICATION FORM**

**Note:** 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:		Photo
2. Given name:		
3. FAMILY NAME:		
4. Gender:	<input type="checkbox"/> Female <input type="checkbox"/> Male	
5. Date of birth:		
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:	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19. Do you need an entry visa for Turkey? ( <a href="http://www.mfa.gov.tr/visa-information-for-foreigners.en.mfa">http://www.mfa.gov.tr/visa-information-for-foreigners.en.mfa</a> )	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20. Departure City & Airport:		

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**

**Contact Person** : Ms. Nur Söğütçüklü  
**Address** : T.C. Orman ve Su İşleri Bakanlığı  
Beştepe Mahallesi Alparslan Türkeş Caddesi No: 71  
Yenimahalle / ANKARA  
**Telephone** : +90 312 203 29 24  
**E-mail** : nsogutcuklu@mgm.gov.tr

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