



Our ref.: OBS/OSD/IMO/TECO-2016

GENEVA, 11 March 2016

Annex: 1 (available in English only)

Subject: Announcement and Call for Papers for the 2016 WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (TECO-2016)

Action required: To distribute the announcement to interested parties, and to submit abstracts of papers via the WMO/CIMO website as soon as possible, but **not later than 30 April 2016**

Dear Sir/Madam,

The World Meteorological Organization (WMO), under the auspices of the Commission for Instruments and Methods of Observations (CIMO), is organizing the 2016 WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (TECO-2016) with the theme: *Ensuring sustained high-quality meteorological observations from sea, land and upper atmosphere in a changing world*.

TECO-2016 will be held in Madrid, Spain, at the kind invitation of *Agencia Estatal de Meteorología* (AEMET), at IFEMA, Feria de Madrid, from 27 to 30 September 2016.

The Conference will take place in conjunction with the Meteorological Technology World Expo 2016 (27-29 September 2016), which is being independently organized by UKIP Media and Events Ltd, and with the second International Workshop on Metrology for Meteorology and Climate (MMC-2016, 26-27 September 2016).

TECO-2016 is for experts in instruments and methods of observation from National Meteorological and Hydrological Services, research institutes and the private sector. It promotes the exchange of information on the latest developments in instrumentation, methods of observation and related topics. All this in a changing society: assessing the quality and traceability of data sourced from partner and private networks, capitalizing on information provided by social media and crowdsourcing, and also adapting to the challenges and opportunities of big data. It provides an invaluable opportunity for training and capacity development, particularly for participants from developing countries, who are strongly encouraged to present their work at the Conference.

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6894)

cc: Hydrological Advisers to Permanent Representatives )  
Presidents and vice-presidents of technical commissions )  
Presidents of regional associations )  
Members of CIMO ) (for information)  
Director General, ASECNA )  
Executive Secretary, HMEI )

TECO-2016 will take place over four days, thus enabling presentations of recent achievements, ample attendance at the exhibition, and time for personal contacts and exchanging experiences. It will also include the presentation of the 2016 [Professor Dr Vilho Väisälä Awards](#). TECO-2016 will also include a number of plenary discussion sessions on topics of particular current interest to CIMO.

An International Programme Committee (IPC), chaired by Dr Bruce Forgan, the vice-president of CIMO, will oversee the Conference and will be responsible for the selection of papers for oral presentations or poster displays.

The purpose of this letter is to announce the Conference and to invite submission of abstracts. Those wishing to present an oral or poster presentation at TECO-2016 are kindly requested to complete the electronic version of the Abstract Submission Form, which is available on-line, at:

<http://www.wmo.int/pages/prog/www/CIMO/cimo-teco-meteorex.html>

For technical reasons, consideration can only be given to abstracts, in English, of less than **300** words, which are submitted on-line before **30 April 2016**.

Lead authors of papers selected by IPC will be advised in June 2016 with further instructions concerning the format and submission deadline for papers or posters for publication in the Conference Proceedings.

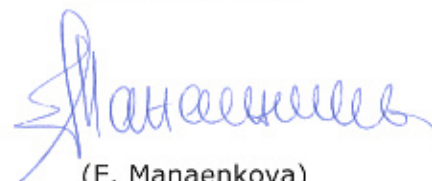
Limited financial support may be available for selected participants from developing countries, who are presenting papers.

The Conference Announcement is provided in the Annex and additional information will also be available at the above-mentioned web link and [www.wmocimo.net](http://www.wmocimo.net) will be available from 1 April 2016.

In the spirit of the WMO Integrated Global Observing System (WIGOS), CIMO is particularly keen on strengthening collaboration with other communities contributing to WIGOS and would particularly like to invite them to contribute to TECO.

I should be grateful if you would make this announcement widely known within your respective Service and beyond.

Yours faithfully,



(E. Manaenkova)  
for the Secretary-General



**WORLD METEOROLOGICAL ORGANIZATION**  
**Weather • Climate • Water**

***The World Meteorological Organization is pleased to announce***  
**The WMO 2016 Technical Conference on Meteorological and**  
**Environmental Instruments and Methods of Observation (TECO-2016)**

**Madrid, Spain, 27-30 September 2016**

**Theme:** *Ensuring sustained high-quality meteorological observations from sea, land and upper atmosphere in a changing world*

Instrument experts from National Meteorological and Hydrological Services, research institutes, and the private sector will address the following main topics:

**1. Traceability, uncertainty and standardization of meteorological and environmental measurements;**

*This session will include metrological issues related to meteorological measurements and methods of observation: traceability assurance to the International System of Units (SI) (including trace gas measurements), calibration of weather radars and space-based (satellite) instruments, measurement uncertainty achieved in the field and in the laboratory, calibration and measurement capabilities of accredited calibration laboratories, collaboration with Regional Instrument Centres (RICs) and Regional Radiation Centres (RRCs), competencies, implementation of and compliance with WIGOS related standards (such as siting classification, metadata, ISO/IEC 17025, ITU radio-regulations, the International Cloud Atlas).*

**2. Developments in observing technologies and systems;**

*This session will include: achievements of Lead Centres, developments in in-situ technologies, developments in remote sensing instruments, systems and technologies (such as weather radars, radar wind profilers, lidars and lightning detection systems), developments in integrated (composite) systems, developments in data acquisition and quality control software, developments in design and installation of measurement infrastructure including their standardization, performance of new technologies.*

**3. Intercomparisons, characterization and testing of instruments and methods of observation;**

*This session will include: outputs of international intercomparisons (such as the WMO Solid Precipitation Intercomparison Experiment (SPICE), the WMO International Pyrheliometer Comparison (IPC)), results of regional or national intercomparisons of different instruments, technologies and systems, interlaboratory comparisons, outcomes of testing of instruments and observing methods, achievements of Testbeds, procedures for organization and conduct of intercomparisons and testing.*

**4. Challenges and opportunities of continuous improvement in observing technologies;**

*This session will include: transition from mercury-based and obsolete instruments to modern alternatives, migration from manual to automated observations, combining information from composite observing systems, introduction and experience with Automatic Weather Stations (AWSs), low-cost technologies, weather-proofing - strategies for improving operation of observing equipment in harsh environments and extreme weather, assessment of externally-sourced meteorological data (incl. crowdsourcing, partner and private networks), adapting to the challenges and opportunities of big data.*

TECO-2016 will be conducted in English only. All information concerning TECO-2016, including the Form for Submission of Abstracts and Papers, is available on the WMO/CIMO website under:

<http://www.wmo.int/pages/prog/www/CIMO/cimo-teco-meteorex.html>

The International Programme Committee will give preference to papers on the above-mentioned subjects.

The deadline for submission of full papers and posters in their required format will be provided in the acceptance letter to be sent to authors of selected abstracts, in June 2016. Papers accepted for presentation will be published in their original form (without editing) in the WMO Instruments and Observing Methods Report series.

Abstracts of proposed papers, not exceeding half a page, in **English only**, should be submitted, using the electronic version of the Submission Form, via the above-mentioned web link, not later than **20 April 2016**.

#### **The International Programme Committee**

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