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

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

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附件： 1（仅以英文提供）

主题： “2022 年 WMO 气象与环境仪器和观测方法技术会议”（TECO-2022）公告及摘要征集

要求采取的行动： 将公告分发给有关各方，并于 **2022 年 5 月 15 日前**尽快通过 WMO 网站提交论文摘要

尊敬的先生/女士，

世界气象组织(WMO)现正在组织“2022 年 WMO 气象与环境仪器和观测方法技术会议”(TECO-2022)，主题为：可持续的切合用途的测量– WMO 地球系统方法的基础。

TECO-2022 将采用混合会议形式，于 2022 年 10 月 10 至 13 日在法国巴黎凡尔赛门 7.1 号馆举行。

会议将与“UKi 媒体与活动”组织的“气象技术世界博览会”（2022 年 10 月 11 至 13 日）同期举行。会议期间还将举行 2021 年度和 2022 年度 Vilho Väisälä 教授博士奖颁奖活动。

本次活动面向来自国家气象和水文部门(NMHS)、环保机构、从事测量的其他国家和国际组织、研究机构和学术界、私营部门(特别是仪器制造商和测量提供商)和其他感兴趣的个人等所有仪器和观测方法相关人员。

会议旨在通过强化对环境测量技术、方法和相关质量程序的知识，包括实施全球基本观测网络、分享有关仪器和测量技术的最新发展信息，加强 WMO 全球综合观测系统(WIGOS)测量界的能力，并促进 WIGOS 利益相关者（包括制造商、研究机构和学术界）之间的合作。

致： 会员 WMO 常任代表

抄送： 常任代表的水文顾问

各技术委员会的主席和副主席

各区域协会主席

研究理事会的主席和副主席

ASECNA 局长

HMEI 执行秘书

会议将由 WMO 基础设施委员会测量、仪器和溯源性常设委员会主席 Bruce Hartley 先生主持的国际计划委员会(IPC)监督，并由它负责筛选用于宣讲或海报展示的论文。

本函的目的是宣布此次会议并邀请提交论文摘要。请希望在 TECO-2022 上宣讲或做海报展示的各方按照附件或会议网站上提供的说明操作。

鉴于技术原因，我们只能考虑 **2022 年 5 月 15 日**前在线提交的 **300 字**以内的英文摘要。

我们将在于 2022 年 6 月向 IPC 选定论文的主要作者提供拟发表于会议论文集的论文或海报的格式及提交截止日期的进一步说明。

已向因 COVID-19 疫情未举行的 TECO-2020 会议提交摘要的作者请按上述说明再次提交您的摘要。

会议有可能向来自欠发达国家、获选并正在提交论文的与会者提供有限的资助。

烦请将此公告在贵部门内外广为散发。

谨上

张文建博士
代秘书长

WORLD METEOROLOGICAL ORGANIZATION
WEATHER CLIMATE WATER

WMO TECHNICAL CONFERENCE ON METEOROLOGICAL AND ENVIRONMENTAL INSTRUMENTS AND METHODS OF OBSERVATION (TECO-2022)

The World Meteorological Organization is pleased to announce

The 2022 WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (TECO-2022)

Paris, France, 10-13 October 2022

Theme: ***Sustainable fit-for-purpose measurements – a foundation of the WMO Earth System approach***

The following main topics will be addressed at the Conference:

1. Innovative measurements, techniques and integration

- *New developments and innovations in instruments, techniques and technologies, including overcoming challenges to make them sustainable, including the Greenhouse Gas emission measurements supporting global emission monitoring*
- *Integrated approaches*
- *Newly developed or improved algorithms*
- *Opportunities and risk management of low-cost sensors and systems*
- *Updates on innovative initiatives and programmes (such as Hydrohub, etc.)*

2. Intercomparisons and characterization of instruments and methods

- *Instrument intercomparisons – current initiatives and projects, methods, techniques, performance, analyses and results*
- *Characterization of new instruments and measurement methods*
- *Performance of instruments under harsh environments and in extreme weather conditions*
- *Characterization of new and crowd-sourced data sources, such as radio links, vehicles, cellular phones*
- *Transition of research-based observing systems and techniques into sustained operations*

3. Traceability of measurements to recognized standards

- *Mechanisms to ensure measurement traceability to recognized standards*
- *Development and maintenance of standards and standard procedures*
- *Field inspection and verification methods and procedures*
- *Calibration methods and procedures applied in the laboratory and in the field*

- *Measurement uncertainty and verification criteria in the laboratory, the field, and overall*
- *Protocols for, and experiences and results from interlaboratory comparisons*

4. Measurement quality assurance and quality control

- *Techniques and procedures for quality assurance (including maintenance, verification, and preventive and corrective measures)*
- *Quality control mechanisms - the ideal and actual experiences*
- *Experiences with implementation and operation of quality management systems*
- *Mechanisms for assessment of measurement qualification and classification, and indicators in support of various application areas*

5. Capacity development towards quality measurements and sustainability

- *Organization experience with personnel competences related to installing, operating, calibration and maintenance of equipment*
- *How to identify gaps in competency frameworks and what action can be taken*
- *Experiences with training activities and outreach material*
- *Best practices for tendering processes and purchasing of systems and instruments*
- *Experiences with capacity development projects, including with donors and funding agencies*

6. Advancing Measurements in support of WIGOS vision 2040

- *Implementation of environmentally-friendly and sustainable measurement equipment technologies*
- *Best practices for addressing the user measurement requirements with existing technologies*
- *Addressing challenges for user requirements where suitable technology does not exist*
- *Approaches for addressing user requirements in data-sparse areas*
- *Integration of measurements (space-, aircraft- and surface- based) through collaboration with different entities at national, regional and global levels*
- *Development and implementation of Global Basic Observing Network*
- *Experiences with Public-Private-Engagement*
- *Opportunities and challenges with artificial intelligence, big data and crowd sourcing (internet of things)*
- *Best practices for data exchange and data formats*

TECO-2022 will be conducted in English only. All information concerning the Conference, including the Abstract Submission Form, is available on the WMO/IMOP website.

The deadline for submission of the extended abstracts and posters in their required format will be provided in the acceptance letter to be sent to authors of selected abstracts, in June 2022. 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 300 words, in English only, should be submitted, using the electronic version of the Submission Form, via the above-mentioned weblinks, not later than **15 May 2022.**

Should you have any further questions, please do not hesitate to contact:

The WMO Secretariat

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