

**WMO OMM**

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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2024年3月7日

附件: 1 (仅以英文提供)

主题: “2024年WMO气象与环境仪器和观测方法技术会议”(TECO-2024)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**2024年4月30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“2024年WMO气象与环境仪器和观测方法技术会议”(TECO-2024),主题为:“支持WMO优先级倡议的测量与新技术”。

TECO-2024将于2024年9月23至26日在奥地利维也纳的维也纳展览会议中心(Messe Wien Exhibition & Congress Centre)以混合会议形式举行。会议将与“UKi媒体与活动”组织的“气象技术世界博览会”同期举行。会议期间还将举行2024年度Vilho Väisälä教授奖颁奖活动。

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观测和测量技术、方法和地球系统观测相关质量程序的知识,加强WMO全球综合观测系统(WIGOS)测量界的能力、分享有关仪器和测量技术的最新发展信息、促进环境可持续性观测系统和方法。这也将是促进WIGOS利益相关方(包括NMHS、公共和私营机构、制造商、研究机构和学术界)之间合作的机会。会议将特别审议与WMO全民预警(EA 4ALL)、全球基础观测网(GBON)和全球温室气体监视网(GGGW)等优先级倡议有关的测量做法与技术。

致: WMO 会员常任代表

抄送: 水文顾问

技术委员会主席和副主席

各区域协会主席

研究理事会主席和副主席

ASECNA 总干事

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(SC-MINT)主席 Jane Warne 博士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-2024 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 **2024 年 4 月 30 日**前在线提交的、300 字以内的英文摘要。

我们将于 2024 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。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。

烦请将此通知在贵部门内外广为散发。

谨上



席列斯特·绍罗教授
秘书长



WMO TECHNICAL CONFERENCE ON
METEOROLOGICAL AND ENVIRONMENTAL
INSTRUMENTS AND METHODS OF OBSERVATION
(TECO-2024)

Ref.: 02451/2024.1.9 I/ONM

The World Meteorological Organization is pleased to announce:

THE 2024 WMO TECHNICAL CONFERENCE ON METEOROLOGICAL AND ENVIRONMENTAL INSTRUMENTS AND METHODS OF OBSERVATION (TECO-2024)

Vienna, Austria, 23–26 September 2024

Conference Theme: Measurements and new technologies for WMO priority initiatives

The following main topics will be addressed at the Conference:

- 1. New measurement technologies and innovative integrated approaches**
 - New developments and innovations in instruments, methods, techniques and technologies for sustainable measurements to support the WMO strategic priorities
 - Newly developed or improved algorithms
 - Cost-effective sensors technologies
 - New and innovative integrated initiatives for measurements
 - Opportunities and challenges with artificial intelligence, big data and crowd sourcing (internet of things)
 - Best practices for data exchange and data formats
- 2. Environmental sustainability of observing systems**
 - Innovations in measurement technologies and methods reducing environmental impact
 - Life-cycle assessments of instruments and observing systems
 - Regulations, guidance, and incentives for environmentally sustainable approaches
 - Use of environmentally-friendly materials
 - Best practices related the procurement, management and operations of observing systems
- 3. Characterization and testing of instruments and methods**

- Characterization of instruments and measurement methods
- Testing procedures
- Verifying instrument performance
- Outcomes of instrument intercomparisons
- Performance of instruments under harsh environments and in extreme weather conditions

4. 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
- Best practices for ensuring measurement traceability
- Traceability and calibration of remote sensing observing systems
- Methods and procedures for laboratory and field calibration
- Assessment of laboratory, field and overall measurement uncertainty
- Adoption and implementation of ISO 17025 in calibration laboratories
- Collaboration between NMHSs and the metrology community (Regional Instrument Centres, National Metrology Institutes, ...)
- Protocols for, and experiences and results from interlaboratory comparisons

5. Quality assurance and maintenance of the observing systems

- Experience with the siting and measurement quality classification schemes
- Quality control procedures
- Observing system operation and maintenance strategies
- Preventive and corrective maintenance activities for improving the availability and quality of the observations
- Best practices for managing calibration results and their implementation in operational systems
- Spare parts and consumables management practices

6. Capacity development for sustainable and quality measurements

- Experience with personnel competences related to requirements identification, installation, operations, maintenance and calibration of equipment

- Experiences with training activities and outreach material including e-learning tools and platforms
- Modernization of observing systems and related infrastructure
- Best practices for tendering processes and purchasing of measurements related systems and instruments
- Experiences with capacity development projects, including with donors and funding agencies

TECO-2024 will be conducted in English only. All information concerning the Conference, including the Abstract Submission Form, is available on the [WMO 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 2024. 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 web links, not later than **30 April 2024**.

For any further information, please contact the WMO Secretariat:

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