Chrom Africa

Bringing Scientific & Technical Resources to the Africa Continent

TRAINING ON PREPARATION AND DISTRIBUTION OF MICROBIOLOGICAL PROFICIENCY TESTING (PT) SAMPLES

16th - 20th MARCH 2026

Course Overview

This 5-day training program is designed for Proficiency Testing (PT) providers involved in microbiological programs. The course equips participants with practical knowledge and skills to prepare, stabilize, package, and distribute microbiological PT samples in compliance with international standards such as ISO/IEC 17043, ISO 17034, and relevant biosafety guidelines. Through a combination of theoretical sessions, hands-on exercises, and case studies, participants will learn to:

- Select, characterize, and handle microbial strains safely for PT use.
- Prepare homogeneous and stable PT samples for qualitative and quantitative schemes.
- Apply rigorous quality control, documentation, and calibration practices.
- Package and distribute PT samples while maintaining integrity, traceability, and biosafety.
- Manage post-distribution activities, including result evaluation, reporting, and continuous improvement.

By the end of the program, participants will be fully equipped to design, produce, and manage high-quality microbiological PT materials that support laboratory competence assessment and accreditation requirements.

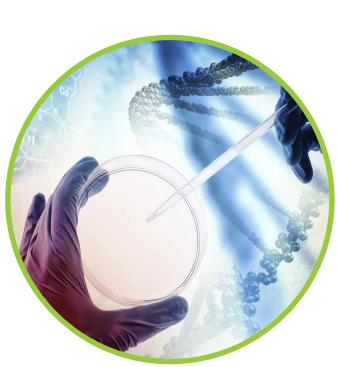
Target Audience:

PT Providers, PT Program Managers, PT Production Specialists, Microbiology Analysts supporting PT, Quality Managers, Technical Managers, Laboratory Scientists involved in PT sample manufacturing and distribution.

Day 1	16-03-26	EVENTS
09:00 – 10:00 am		**FOUNDATIONS OF PT IN MICROBIOLOGY & PROGRAM DESIGN** **Introduction to PT in Microbiology** • Role and importance of PT in laboratory competence verification • PT for qualitative, quantitative, and identification schemes • Overview of PT vs. Interlaboratory Comparison (ILC) • How PT supports accreditation under ISO/IEC 17025 and ISO/IEC 15189
10:00 – 10:30 am		*TEA- BREAK*
11:00 – 12:30 p.m		**Requirements for PT Providers** • Key requirements of ISO/IEC 17043:2023 & overview of ISO 17034:2016 for CRMs producers • Responsibilities of PT Providers in microbiological programs • Ethical considerations and impartiality safeguards • Responsibilities of a PT provider vs PT participant
12:30 – 14:00 p.m		*LUNCH - BREAK*
14:00 – 16:30 p.m		**PT for Microbiology Laboratories, Operational Planning & Documentation** • Determining PT measurands (Salmonella, E. coli, Listeria, total viable count) • Qualitative vs. quantitative PT scheme design/ culture-based and molecular methods • Establishing participant numbers and sample format • PT provider documented procedures &Scheduling events • Planning worksheets, timelines, responsibilities, Risk assessments for PT production, Biosafety and biosecurity considerations

Chrom Africa Instrumentation Services Limited
Buruburu Business Complex Suite No.26, Mumias South Road, Nairobi.
P.O Box 4963-00100, Nairobi, Kenya.
Phone number: (20) 2594918
Email info@chromafrica.co.ke | info@chromafrica.com
www.chromafricacomwww.chromafrica.co.ke

Day 2	17-03-26	EVENTS
09:00 – 10:30 am		**PREPARATION OF MICROBIOLOGICAL PT MATERIALS** **Selection & Characterization of Microorganisms** • Criteria for choosing strains (ATCC, NCTC, in-house isolates) • Verification of strain identity, Biosafety and handling of pathogens & Assigning strain codes and traceability
10:30 – 11:00 am		*TEA- BREAK*
11:00 – 12:30 p.m		**Matrix Selection & Pre-Treatment** • Food, Water, Surface/environmental matrices as well as Sterilization & homogeneity considerations
12:30 – 14:00 p.m		*LUNCH - BREAK*
14:00 – 16:30 p.m		**Preparation of PT Suspensions, Contamination Control & Aseptic Techniques** • Reviving, sub-culturing, and purifying microorganisms • Preparation of working stocks, quantitative suspensions & Methods for concentrating/diluting organisms to desired levels. Aseptic workflows for PT material production. Environmental monitoring



Day 3	18-03-26	EVENTS
09:00 – 10:30 am		**HOMOGENEITY, STABILITY & VALUE ASSIGNMENT** **Homogeneity Testing** • Requirements under ISO/IEC 17043 and ISO 13528 • Sampling strategy, Test methods for qualitative and quantitative PT materials, interpreting results acceptance criteria & troubleshooting non-homogeneous batches
10:30 – 11:00 am		*TEA- BREAK*
11:00 – 12:30 p.m		**Stability Studies & Value Assignment for PT Samples** • Real-time vs. accelerated stability testing • Temp and transport simulation studies, Acceptance criteria for stability & Determining sample shelf-life and distribution windows • Qualitative (consensus, strain verification) & Quantitative schemes (Assigned value from reference labs - expert labs, Using CRMs)
12:30 – 14:00 p.m		*LUNCH - BREAK*
14:00 – 15:30 p.m		**Uncertainty in PT Production** • When and how to estimate uncertainty, components contributing to uncertainty in microbial counts • Participating in PT

Chrom Africa Instrumentation Services Limited
Buruburu Business Complex Suite No.26, Mumias South Road, Nairobi.
P.O Box 4963-00100, Nairobi, Kenya.
Phone number: (20) 2594918
Email info@chromafrica.co.ke | info@chromafrica.comwww.chromafrica.com/
www.chromafrica.co.ke

Day 4	19-03-26	EVENTS
09:00 – 10:30 am		**PACKAGING, LABELING, STORAGE & DISTRIBUTION OF PT SAMPLES** **Packaging Protocols for Microbiological PT Samples** • Primary containers (cryovials, ampoules, lyophilized vials, swabs), Requirements for sealed, tamper-proof packaging, protective secondary packaging & Use of cold-chain materials: ice packs, dry ice, gel packs
10:30 – 11:00 am		***TEA- BREAK***
11:00 – 12:30 p.m		**Sample Labeling, Coding and Storage Conditions & Inventory Management** • Barcoding, sample IDs, and traceability and avoidance strain names to maintain PT integrity • Short-term vs. long-term storage, Temperature monitoring and data logging • Batch tracking using LIMS or manual logs
12:30 – 14:00 p.m		***LUNCH - BREAK***
14:00 – 15:30 p.m		**Distribution Logistics and Instructions for Participants** • Domestic vs. international shipping considerations, compliance with IATA and biosafety shipment requirements as well as temperature control during transit • Documenting dispatch, chain of custody, contingency planning for delays and failed shipments • Designing user-friendly PT instructions, Safety information, Sample reconstitution guidelines & Storage instructions prior to testing

Day 5	20-03-26	EVENTS
09:00 – 10:30 am		**QUALITY CONTROL, DOCUMENTATION, AND POST-DISTRIBUTION ACTIVITIES** **Quality Management in PT Production, Data Handling & Statistical Treatment of Results** • Internal QC of PT batches, Equipment calibration and maintenance needs, Documentation and records for PT manufacturing & Deviations and corrective actions • Collection of participant results, Statistical evaluation according to ISO 13528, Outlier detection • Calculation of z-scores, z'-scores, and other performance scores
10:30 – 11:00 am		***TEA- BREAK***
11:00 – 12:30 p.m		**Reporting, Communication with Participants, Internal Audits & Continuous Improvement** • Preparing comprehensive PT summary reports, Confidentiality considerations, providing corrective action guidance to poorly performing labs • Best practices in customer communication • Auditing PT production workflows, reviewing homogeneity/stability failures, Implementing improvements and innovation in PT programs, QA, Accreditation
12:30 – 14:00 p.m		***LUNCH - BREAK***
14:00 – 15:00 p.m		**Recap of the course, closing ceremony and issuance of certificates**

Online Training available at: www.chromafrica.com

Deadline: 6th March 2026

16th - 20th MARCH 2026

Cost Kes. 195,000.00 or USD 1,500.00 exclusive of taxes

NAIROBI

Chrom Africa Instrumentation Services Limited
Buruburu Business Complex Suite No.26, Mumias South Road, Nairobi.
P.O Box 4963-00100, Nairobi, Kenya.
Phone number: (20) 2594918
Email info@chromafrica.co.ke | info@chromafrica.comwww.chromafrica.com/
www.chromafrica.co.ke

Online Training available at: www.chromafrica.com