



CRCL-ITEC PROGRAMME (NOVEMBER, 2026)

16th November to 27th November, 2026 (02-Week)

BRICS Customs Laboratories - International Cooperation Training on Chemical Analysis of Customs, Forensic and Regulatory Goods

1. Background

With the expansion of BRICS in 2026, Customs Laboratories of member countries play an increasingly important role in facilitating legitimate trade, ensuring correct HS classification, safeguarding revenue, and preventing illicit trafficking. The growing complexity of traded goods and evolving regulatory requirements necessitate closer cooperation, harmonisation of testing practices, and sustained capacity building among BRICS Customs Laboratories.

The Central Revenues Control Laboratory (CRCL), India, proposes a **two-week training programme** aimed at promoting technical exchange, standardisation, and enhanced collaboration among BRICS member countries.

2. Objectives

The objectives of the training programme are to:

- Strengthen technical capabilities of BRICS Customs Laboratories in chemical testing and HS classification
- Promote harmonisation of laboratory practices and quality standards
- Facilitate exchange of best practices and emerging technologies
- Enhance cooperation and professional networking among BRICS Customs Laboratories

3. Target Participants

The programme is designed for:

- Officers and scientists from BRICS Customs and Revenue Laboratories
- Chemical Examiners, Analysts, and Technical Officers involved in testing, classification, and forensic analysis
- Laboratory managers and senior officers responsible for quality assurance, accreditation, and laboratory administration



- Officers dealing with trade facilitation, enforcement, narcotics control, and regulatory compliance
 - Nominated representatives from each BRICS member country
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4. Duration and Methodology

- **Total Duration:** 02 Weeks (10 Working Days)

Methodology includes structured lectures, guided discussions, case studies, practical demonstrations, and planning exercises.

5. Course Structure (Two-Week Modular Schedule)

Module I: Inaugural & Orientation

Day 1

Welcome, Registration & Programme Overview

- Introduction of Participants & Programme Objectives
 - Overview of CRCL and Indian Customs Laboratory Framework
 - BRICS Customs Laboratories – Role in Trade Facilitation & Enforcement
 - BRICS Member Country Presentations (Part-I) – PPT & Q&A
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Module II: HS Classification & Sampling Procedures

Day 2

- Harmonized System (HS) – Structure, Interpretation & Classification
 - Sampling Procedures for HS-Classified Goods
 - Sampling & Testing of Petroleum Liquids
 - Sampling & Testing of Textiles and Furskins
 - Sampling & Testing of Metals
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Module III: Chemical & Industrial Goods Testing



Day 3

- Sampling & Testing of Plastics and Rubber
- Sampling & Testing of Organic Chemical Liquids
- Sampling & Testing of Solid Chemicals
- Analysis of Petroleum Products & Industrial Chemicals
- Case Studies on Chemical Mis-declaration & HS Disputes

Module IV: Consumer Goods & Environmental Testing

Day 4

- Testing of Pharmaceuticals – Customs Perspective
- Testing of Food Items & Consumer Products
- Environmental & Hazardous Substances Analysis
- Regulatory Frameworks & Safety Compliance
- BRICS Experience Sharing & Interactive Discussion

Day 5 – Module V: NDPS & Forensic Testing

- Overview of NDPS & International Control Regimes
- Sampling Procedures & Chain of Custody for NDPS
- Testing of Narcotic Drugs & Psychotropic Substances
- Precursor Chemicals & Forensic Interpretation
- Case Studies & Best Practices in NDPS Enforcement

Module VI: Advanced Analytical Techniques

Day 6

- Advanced Analytical Techniques in Customs Laboratories
- Modern Instrumentation (GC-MS, LC-MS, ICP-MS, FTIR, etc.)
- Rapid Screening & Field Testing Technologies
- Data Interpretation & Reporting in Advanced Analysis
- Practical Challenges & Solutions – Group Interaction



Module VII: Digital Transformation of Customs Laboratories

Day 7

- Digitisation of Customs Laboratory Workflows
 - Laboratory Information Management Systems (LIMS)
 - AI Applications in Customs Testing & Decision Support
 - Cyber Security, Data Integrity & Traceability
 - Global Best Practices & Case Studies
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Module VIII: Laboratory Management & Quality Systems

Day 8

- ISO/IEC 17025 – Requirements & Implementation
 - Method Validation, Measurement Uncertainty & QA/QC
 - Proficiency Testing & Inter-Laboratory Comparisons
 - Laboratory Audits & Continuous Improvement
 - Best Practices in Laboratory Management & Compliance
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Module IX: International Cooperation & Group Work

Day 9

- Role of International Organisations (WCO, UNODC, OPCW, WTO)
 - Reference material producer (RMP) as ISO : 17034
 - International Cooperation Mechanisms & Information Sharing
 - Mutual Recognition of Test Results & Collaboration Models
 - Group Work – Developing BRICS Lab Cooperation Roadmap
 - Group Presentations & Feedback
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Module X: Valedictory Session

Day 10

- Consolidated Review of Key Technical Learnings
- Outcomes & Way Forward for BRICS Customs Laboratories
- Participant Feedback & Experience Sharing



- Valedictory Address & Recommendations
- Certificate Distribution & Closing Session

Expected Outcomes

Upon completion of the training programme, participants are expected to:

- Gain enhanced technical competence in HS classification, sampling, and chemical testing of customs goods
- Apply harmonised laboratory practices and quality standards aligned with international best practices
- Improve effectiveness in detection of mis-declaration, revenue leakage, and illicit trafficking
- Strengthen institutional capacity in NDPS, environmental, and forensic testing
- Develop practical understanding of advanced instrumentation, digitisation, LIMS, and AI applications
- Establish sustained professional networks and cooperation mechanisms among BRICS Customs Laboratories
- Contribute to the formulation of a common roadmap for BRICS Customs Laboratory collaboration

Working Hours and Break Schedule

- Working Hours: 09:30 hrs to 18:00 hrs
- Morning Tea Break: 11:00 hrs – 11:15 hrs
- Lunch Break: 13:00 hrs – 14:00 hrs
- Afternoon Tea Break: 16:00 hrs – 16:15 hrs
