

## TECHNICAL TRAINING

**Use of the results of proficiency testing by interlaboratory comparisons &  
Measurement uncertainty: from theory to practice**

## PROGRAM

## DAY 1 - Use of the results of proficiency testing by interlaboratory comparisons

**STATISTICAL REMINDERS AND VOCABULARY – CURRENT STANDARDS**

Data set characteristics, statistical laws, 17043 and 13528 standards.

**PROFICIENCY TESTING REPORTS BY INTERLABORATORY COMPARISONS**

Different types of tests (quantitative, qualitative, microbiology, etc..) –one-time interpretation

**TRUENESS CHARTS**

Definitions and principles, monitoring trueness charts with fixed or proportionnal tolerance values, interpretation of the charts, exercises.

**TRUENESS – INTERMEDIATE PRECISION – A WAY TO UNCERTAINTIES**

Definitions and principles, practical implementation, exercises.

**CONCLUSION AND DISCUSSION**

## DAY 2 - Measurement uncertainty: from theory to practice

**DEFINITION OF THE MEASUREMENT UNCERTAINTY CONCEPT****BASIC STATISTICS****NORMATIVE STATUS****CALCULATION OF THE UNCERTAINTY**

Two approaches: global and deterministic.

**QUALITY CONTROL OF ANALYTICAL RESULTS: CASE OF FOOD MICROBIOLOGY**

History of standardization, methodology, examples, exercises.

**QUALITY CONTROL OF ANALYTICAL RESULTS: CASE OF ENVIRONMENTAL CHEMISTRY**

Methodology, examples, exercises.

**CONCLUSION AND DISCUSSION**

*Important note: Trainees are required to bring a laptop computer. Each participant must check with his IT department that the Excel Add-ins (Analysis ToolPak) are properly installed and functional.*

## PRACTICALITIES

### Schedule

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1st day :

- 09:00 AM – 09:30 AM: Welcome
- 09:30 AM - 12h30 PM: Training
- 12:30 PM – 01:30 PM: Lunch
- 01:30 PM – 05:30 PM: Training

2<sup>nd</sup> day :

- 08:30 AM – 09:00 AM: Welcome
- 09:00 AM – 12:30 PM: Training
- 12:30 AM – 01:30 PM: Lunch
- 01:30 AM – 05:00 PM: Training

### Venue

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The training will take place in BIPEA facilities: CAP 18 - Bâtiment D19 - 189 rue d'Aubervilliers  
75018 PARIS - France

### Timeline

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Training is planned as followed:

- Day 1 : 1 whole 7 hours day.
- Day 2 : 1 whole 7 hours day.

### Hosting & training documents

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BIPEA trainers' hosts will be:

- Anne TIRARD: Statistical Treatment Expert,
- Abdelkader BOUBETRA: Scientific and technical Manager.

### Number of participants

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The training is scheduled for a minimum of 8 persons per day.

*In case of insufficient number of participant, BIPEA is subject to cancel the training at least one week prior the beginning of the event.*

### Person involved

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- Engineers
- Laboratory Managers
- Laboratory Technicians
- Quality Assurance Managers.

### Useful information

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BIPEA assumes:

- Managing participants' registrations,
- Documents supply,
- Lunch break and other breaks,
- Training file's creation.

The trainee assumes :

- Travel to the venue,
- Accomodation, Breakfast & dinner,
- Booking for the above.

### Primary contacts

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- Mrs Florence PENELET, Director Assistant  
+33 1.40.05.26.35 / [contact@bipea.org](mailto:contact@bipea.org)

## TRADE CONDITIONS AND SUBSCRIPTION MODALITIES

### Pricing

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- BIPEA training for 2 days: 863,00 € (BT)

Subscription modality: upon receipt of the purchase order and registration form.

Payment method: 30 days after invoice's issuance.

Completion date: According to the chosen date.

*Important Notice: If the training session is postponed or canceled within two weeks prior the starting date, 50% of the total amount will still be billed as compensation.*

### Registration modality

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In order to confirm your registration, you must send us your purchase order along with the duly completed registration form. **Such action must be done 15 days before the training starting date.**

Paris,

On 08/04/2019

**Caroline LAURENT**

Director

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[contact@bipea.org](mailto:contact@bipea.org)