

# BLOODSTAIN PATTERN ANALYSIS & OTHER COURSE(S) ( SPRING 2014).



## ***BASIC BLOODSTAIN ANALYSIS COURSE ( 40 HOURS -5 DAYS )***

❖ 3-7 February 2014.

## ***BASIC EVIDENCE COLLECTION COURSE ( 40 HOURS -5 DAYS )***

❖ 10-14 March 2014.

## ***ADVANCED BLOODSTAIN ANALYSIS COURSE ( 40 HOURS -5 DAYS )***

❖ 14-18 April 2014.

## ***VISUALIZATION OF LATENT BLOODSTAIN COURSE ( 40 HOURS - 5 DAYS )***

❖ 19-23 May 2014.

## ***THE FABRICS OF BLOODSTAIN COURSE ( 40 HOURS -5 DAYS )***

❖ 9-13 June 2014.

## **UNIQUE COURSES IN A FANTASTIC FACILITY**



50% THEORETICAL - 50% HANDS ON !!

OVER 1000 M<sup>2</sup> TRAINING SPACE.

MULTIPLE INVESTIGATION AND BLOODSTAIN ROOMS.

SPECIAL ROOMS FOR CHEMICAL BLOOD SEARCH AND ENHANCE TECHNIQUES.

Loci Forensics B.V. - Haverstraat 44 - 2153 GB - Nieuw-Venep - The Netherlands.

*Bloodstain pattern analysis (BPA) is defined as the examination of the shapes, size, locations and distribution patterns of bloodstains, in order to provide an objective analysis of the physical events that gave rise to their origin by application of concepts of biology, biochemistry, physics and mathematics. Not only can these concepts help to define and reconstruct events associated in a bloodletting event but also may provide investigative leads/information. They can lead to new information, as well as supportive or non-supportive evidence for victims, suspect's and witness statements. Besides this they give investors a better understanding in collection of relevant blood samples for DNA analysis.*



After giving several years of training at different facilities outside The Netherlands to; investigators, crime scene technicians, forensic scientists, attorneys and medico-legal investigators from Norway, Germany, England, U.S.A, Canada, France, The Netherlands, Estonia, Swiss and Denmark we will start giving bloodstain courses at our new forensic facility in The Netherlands (September 2011). This new Institute includes several training facilities such as laboratories, mock rooms for BPA, chemical enhancement and bloodstain rooms.

Our Staff Trainers, Martin Eversdijk and René Gelderman represent more than 50 years working experience in law enforcement, of which 40 years forensic working experience as; crime scene investigator, crime scene coordinator and staff trainer/examiner at the National Police Academy. Martin and René have contributed numerous new forensic techniques to the field: New chemical blood enhancement techniques as Sulva dyes and Titanium dioxide dye, spraying luminol with the use of special compressors, air breathable swabs, collection of blood from a gun barrel etc.

With this extensive background in Forensics and our unique Institute we feel our BPA training represents the most comprehensive and updated study plan for Bloodstain Pattern Analysis offered in Europe. All our courses are divided into both lecture and laboratory sessions. The theoretical and fundamental principles related to Bloodstain Pattern Analysis or the chemical searching and enhancement techniques for latent bloodstains will be illustrated in the various lectures segments. These principles will then be reinforced in the laboratory segments where participants will have an opportunity to utilize the methods ( e.g. experiments, simulated field situations) discussed in lecture.

Therefore these courses will provide the participants first-hand knowledge of how and when to employ Bloodstain Pattern Analysis and/or searching and enhancement techniques to locate and visualize latent bloodstains. Participants will acquire first-hand knowledge of the benefits as well as the limitations of Bloodstain Pattern Analysis our commonly utilized chemical searching and enhancement techniques.

Martin Eversdijk and René Gelderman.

## **“New” Basic Evidence Collection Course ( 40 hours) “New”**

This extensive five day, 40 hour, practical and theoretical course is designed for inexperienced and newly appointed crime scene technicians, crime scene investigators, crime laboratory analysts, and others in the field of forensic science or as a refresher/ up date . By lectures, hands-on training, experiments and mock evidence and scenes the attendee will have theoretical and working knowledge of the proper procedures in detection, collection, documentation and preservation of physical evidence and the techniques required to examine crime scene and physical evidence from these scenes;

### **Course topics include:**

- Basics in crime scene investigation ( theory and mock scenes)
- Basic forensic-, crime scene- and personal equipment
- Trace evidence collection, packaging and marking techniques(including body fluids, hair, fiber, gunshot residue)
- Fundamentals of crime scene and evidence photography ( theory and experiments)
- Fingerprint theory, locating and processing of latent prints ( theory and experiments)
- Fingerprint taking techniques
- Tire, Shoeprint and toolmark casting and lifting techniques ( theory and experiments)
- Presumptive field testing of blood
- Mock evidence and scenes of all types will be presented for the students to have hands-on training.
- Evidence and their value, Contamination, chain of custody, crime scene protection/ securing a crime scene, Basics in report writing and many more.

### **Class:**

Maximum of 20 participants.

### **What to bring to the course:**

Participants are advised to bring seasonally appropriate clothing.

We also encourage to bring a digital camera which could be very helpful if you wish to document any of your experiments.

### **Assessment Standards/ Certification:**

A certificate will be issued for successful completion of a written assessment of the course requirements.

### **Course duration, date, location & fee:**

The length of the course is 40 hours of instruction. The course will be conducted Monday through Friday, 8:30 a.m. – 5:00 p.m. at Loci Forensics Training Institute, Nieuw-Vennep, the Netherlands.

The course will be held on Monday 10<sup>th</sup> March through Friday the 14<sup>th</sup>, 2014.

This course has a price of 1150.00 euro ( exclusive 21% VAT) per participant. Each participant is responsible for making his or her own hotel reservation ( see Hotel list).

Upon receipt of your registration and payment you will receive a confirmation e-mail. In the event of insufficient registrations, this course will be cancelled.

# **The Fabrics Bloodstain**

## **Pattern Analysis Training Course:**

### ***An Advanced Training Course***



#### **Course Presenters**

***Dr. Mark Reynolds***

Forensic Science Consultant and Manager, Quality Assurance,  
Forensic Divisional Office, Western Australia Police, Australia

***Edmund Sileniks***

Coördinator – Evidence Recovery,  
Forensic Science SA, South Australia, Australia

**Nieuw-Vennep, The Netherlands**

**9 – 13 June 2014**

# **The Fabrics Bloodstain Pattern Analysis Training Course (40 Hours)**

## **Introduction**

This course is designed primarily for practitioners who routinely examine bloodstained fabrics and other textiles and are required to assess, interpret and report on bloodstain patterns as part of those examinations. The course is delivered through a combination of “face to face” instruction and self-directed learning. A minimum 80 hours of structured learning activities is required, inclusive of the 40 hour “face to face” residential component.

The course will review the underpinning principles of BPA, and apply these principles to the analysis and interpretation of bloodstains on fabrics and other textiles. When examining clothing and other fabrics, the practitioner must be mindful of influences such as the fabric type, texture, treatments and the orientation of clothing, all of which may affect the appearance of bloodstains at the time the blood was deposited. The primary focus of the course is to develop those skills required for the examination of bloodstain patterns found on clothing items, including the use of microscopy to discriminate between spatter and transfer bloodstains.

Prior to attending the 40 hour residential, participants will be expected to complete at least 20 hours of preparatory work including selected readings, a review of a slow motion BPA video and preparing and submitting a mock report covering the bloodstain pattern analysis of an item of bloodstained clothing. Participants may be required to present oral and demonstrable evidence based on this report in a moot court situation and will receive feedback on their BPA knowledge and evidence presentation skills.

Following the 40 hour “face to face” residential, participants will be required to complete a report summarising their findings related to the examination of bloodstained clothing during practical exercises at the residential. The report must be submitted within eight weeks of completing the residential.

## **Course Content**

The course has a practical hands-on emphasis. Participants will work in small groups to complete a set of experiments, review and analyse experimental data and prepare and present findings to the class describing their results. Participants will be encouraged to draw connections between the dynamics of pattern formation and the features of the resultant static bloodstain pattern.

The practical component of the course will be supplemented with lectures and class discussions which will introduce the participants to principles of fluid mechanics and assist participants gain higher level interpretative pattern recognition skills.

## **Equipment and Stationery**

Participants will be provided with notepaper and pens as well as course manuals which will have space to record notes, measurements and observations.

Participants are also required to bring their own digital camera to record experimental findings. All other consumables required for the course, including personal protective equipment, will be provided where required.

## **Course Pre-Assignments**

Prior to course attendance, participants will be required to complete approximately 20 hours of preparation including related readings; a review of a slow motion BPA video and a mock case report.

### **1. Readings.**

The following are the suggested pre-course readings for the course:

- Bevel and Gardner (2008): Bloodstain Pattern Analysis with an Introduction to Crime Scene Reconstruction 3<sup>rd</sup> Ed – Chapter 11;
- James *et al* (2005): Principles of Bloodstain Pattern Analysis – Theory and Practice – pages 283 to 294 inclusive;

- Karger *et al* (1998): Experimental Bloodstains on Fabric from Contact and from Drops. *Int J Legal Med* 111: 17-21;
- White (1986): Bloodstain Patterns on Fabrics: The Effect of Drop Volume, Dropping Height and Impact Angle. *Can Soc Forens Sci J Vol 19 No 1*, and.
- Slemko (2003): Bloodstain on Fabrics – The Effects of Droplet Velocity and Fabric Composition. *IABPA News* 19(4): 4-11.

***Additional course related readings will be supplied at the commencement of the course.***

## 2. **Slow Motion Video Review.**

**All participants** will review a slow motion BPA video and present their observations to the class as part of the face to face component of the course. The video will relate to the deposition of blood on fabric, and will be allocated to the participant once enrolled in the course. The participant will be required to:

- Evaluate the dynamics of the bloodstain formation.
- Evaluate the influence of the fabric has on the bloodstain formation.
- Present a five minute summary to the class.

## 3. **Mock Court Report / Moot Court.**

Prior to attending the course, participants are required to submit an actual case report (de-identified if necessary) covering BPA of at least one item of bloodstained clothing. Where practical, an accompanying case scenario should also be included. Participants will be required to give evidence in a moot court based on this case report.

**It is strongly urged that if possible the case report be one personally compiled by the participant and not the work of another.**

## **Course Assessment**

Participants will be assessed and evaluated with two separate examinations as follows:

1. **Written Exam (75% pass mark):** 90 minute assessment covering basic BPA theory, bloodstain formation, fibre and fabric types and the interpretation of bloodstain patterns on fabrics.
2. **Practical Assignment (competency based, i.e. pass / fail):** Assessment requiring participants to report their examination and interpretation of bloodstained clothing completed at the course. Participants will be required to submit their examination in the form of a court report within **8 weeks** of completing the 40 hour face to face component.

***Failure in both assessments will deem the participant not competent and subsequently fail the course overall. Failure one assessment only will require a re-sit or resubmission, a second failure in that assessment will deem the participant not competent and subsequently fail the course overall.***

Penalties will be incurred for failure to meet the practical assignment deadline. Where an extensions to the assignment deadline is required <sup>[1]</sup>, please contact course instructor Dr. Mark REYNOLDS ( [mark.reynolds@police.wa.gov.au](mailto:mark.reynolds@police.wa.gov.au) ).

<sup>1]</sup> Late returns for the pre course assignment will incur a 5% penalty / per day up to the period of 7 days late after which the assignment will automatically fail.

Upon successful completion of the course assessment requirements, course certificates will be issued to participants.

**Instructors:**

Instructors on this course will be:

- Dr. Mark REYNOLDS APM (PhD), Forensic Science Consultant and Manager, Quality Assurance Forensic Divisional Office - Western Australia Police ( [mark.reynolds@police.wa.gov.au](mailto:mark.reynolds@police.wa.gov.au) ).
- Edmund (Ted) SILENIEKS, Bachelor of Applied Sc (Forensic Investigation), Coordinator - Evidence Recovery, Biology Section, Forensic Science SA - South Australia ( [Ted.Silenieks@sa.gov.au](mailto:Ted.Silenieks@sa.gov.au) ).

**Course duration, date, location & fee:**

The length of the course is 40 hours of instruction. The course will be conducted Monday through Friday, 8:30 a.m. – 5:00 p.m. at Loci Forensics Training Institute, Nieuw-Venep, the Netherlands.

The course will be held on Monday 9<sup>th</sup> June through Friday the 13<sup>th</sup>, 2014.

This course has a price of 1995.00 euro ( exclusive 21% VAT) per participant . Each participant is responsible for making his or her own hotel reservation ( see Hotel list).

Upon receipt of your registration and payment you will receive a confirmation e-mail. In the event of insufficient registrations, this course will be cancelled.

**Class:** Maximum of 12 participants.



# **Basic Bloodstain Pattern Analysis course ( 40 Hours)**

Our 5 day ( 40 hours) Basic Bloodstain Pattern Analysis Course is designed to give the participants a basic foundation on Bloodstain Pattern Analysis. The focus of this intensive course is to provide the participants knowledge of Bloodstain Pattern Analysis through the application of concepts of biology, biochemistry, physics and mathematics to objectively define and reconstruct events associated in a bloodletting event. This training will give participants a unique opportunity to acquire first-hand knowledge of the bloodstain pattern analysis through lectures of theory, demonstrations and hand-on practical laboratory exercises.

This course is designed for all levels of law enforcement personnel, especially those who search for blood at scenes as well as on articles of physical evidence, investigators, crime scene personnel, attorneys, prosecutors, judges, medico legal investigators and participants studying forensics science and/or criminal justice.

This 40 hour basic course follows the recommended training guideline as set forth by the Scientific Working Group for Bloodstain Pattern Analysis (SWGSTAIN) and the International Association of Bloodstain Pattern Analysis (IABPA).

## **Training topics to be covered:**

- History of Bloodstain Pattern Analysis.
- Characteristics of Liquid Blood.
- Flight characteristics of blood and their patterns.
- Target Surface Considerations.
- Impact Angle Determination.
- Calculating the Area of Origin.
- Limitations of bloodstain pattern analysis.
- Sampling techniques and presumptive testing.
- Interpretation with the use of the SWGSTAIN taxonomy.
- Proper documentation and photographing of bloodstains.
- Approaching a bloodstain pattern case.
- Using bloodstain patterns to reconstruct crime scenes.
- Case reviews.
- Health and Safety Issues.
- Bloodstain analysis equipment.



## **Pre-Requisites:**

None.

## **What to bring to the course:**

Participants are advised to bring seasonally appropriate clothing.

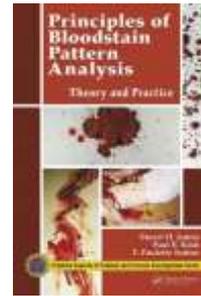
We also encourage to bring a digital camera which could be very helpful if you wish to document any of your experiments.

## **Assessment Standards/ Certification:**

A certificate will be issued for successful completion of a written assessment of the course requirements.

**Materials/Supplies Loci Forensics B.V. will provide:**

- Book: Principles of Bloodstain Pattern Analysis (by Stuart H. James, Paul E.Kish and T.Paulette Sutton)
- Laboratory and Reference Manual.
- All lab supplies.
- Certificate of Completion.
- Water, coffee, tea, hot chocolate, orange juice and milk.
- Lunch.



**Course duration, date, location & fee:**

The length of the course is 40 hours of instruction. The course will be conducted Monday through Friday, 8:30 a.m. – 5:00 p.m. at Loci Forensics Training Institute, Nieuw-Vennep, the Netherlands.

The course will be held on Monday 3<sup>th</sup> February through Friday the 7<sup>th</sup>, 2014.

This course has a price of 1350.00 euro ( exclusive 21% VAT ) per participant . Each participant is responsible for making his or her own hotel reservation ( see Hotel list).

Upon receipt of your registration and payment you will receive a confirmation e-mail. In the event of insufficient registrations, this course will be cancelled.

Note: This course utilizes animal blood for experimentation.



# **Advanced Bloodstain Pattern Analysis I ( 40 HOURS)**

This 5 days (40 hours) course is designed for those who wish to become an expert in bloodstain pattern analysis and have satisfactorily completed a basic 40 hour bloodstain pattern course. It's the next step in order to conduct a bloodletting crime scene analysis. During this course the participant will approach relatively simple to complex complete crime scenes including clothing. A format for reporting is learned as well as the requirements on courtroom testimony and expert evidence. This course will enhance basic skills and develop the novice to a core competency level required for independent analysis and will enhance the analyst skill in preparation of acceptance as an expert in the court room

The course of instruction is designed for investigators, crime scene technicians, forensic scientists, attorneys and medico-legal investigators. There is no minimum educational standard for those who decide to attend this course although we recommend at least 1 year field experience after successful completion of a basic 40-hour course.

## **Training Topics to be covered:**

- Review of Basic Bloodstain Pattern course.
- Analysis of Bloodstain Patterns on Clothing.
- Analyse (complex) bloodstain pattern in several mock scenes.
- Clothing and drying times of blood.
- Sequencing.
- Problem solving by review of actual bloodletting cases.
- Utilizing Bloodstain Patterns to reconstruct past events.
- Approaching a Bloodstain Pattern case.
- Report writing.
- Designing Case Related Bloodstain Pattern Experiments ( scientific method).
- Limitations of bloodstain pattern analysis.
- Apply a scientific method to questioned stains.
- Expert Evidence.



## **Pre-Requisites:**

Successful completion of a Basic Bloodstain Pattern Analysis course meeting the requirements of the IABPA basic course.

## **Class:**

Maximum of 16 participants.

## **What to bring to the course:**

Participants are advised to bring seasonally appropriate clothing.

We also encourage to bring a digital camera which could be very helpful if you wish to document any of your experiments.



## **Assessment Standards/ Certification:**

A certificate will be issued for successful completion of a written assessment of the course requirements.

**Course duration, date, location & fee:**

The length of the course is 40 hours of instruction. The course will be conducted Monday through Friday, 8:30 a.m. – 5:00 p.m. at Loci Forensics Training Institute, Nieuw-Vennep, the Netherlands.

The course will be held on Monday 14<sup>th</sup> April through Friday the 18<sup>th</sup>, 2014.

This course has a price of 1350.00 euro ( exclusive 21% VAT) per participant. Each participant is responsible for making his or her own hotel reservation ( see Hotel list).

Upon receipt of your registration and payment you will receive a confirmation e-mail. In the event of insufficient registrations, this course will be cancelled.

Note: This course utilizes animal blood for experimentation.



# Visualization Of Latent Bloodstain Course ( 40 hours)

This course will provide the participants with first-hand knowledge of how and when to employ searching and enhancement techniques to visualize latent bloodstains. Students will acquire first-hand knowledge of the benefits as well as the limitations of commonly utilized chemical searching and enhancement techniques.

The course is divided into both lecture and laboratory sessions. The theoretical and fundamental principles related to the chemical searching and enhancement techniques for latent bloodstains will be illustrated in the lecture segments. These principles will then be reinforced in the laboratory segments where students will have an opportunity to utilize the methods discussed in lecture.

Upon completion of this course, the participants will have acquired a basic understanding of how and when to utilize blood searching and enhancing chemicals to assist in their investigation where latent blood is suspected.

This course is recommended for investigators, crime scene technicians, and forensic scientists who search for blood at crime scenes as well as on articles of physical evidence

## Training Topics to be covered:

- Searching vs. Enhancing Techniques.
- Blood Searching Techniques:
  - Luminol.
  - “NEW” Lumiscene.
  - Fluorescein.
- Blood Enhancement Techniques:
  - Amido Black.
  - Acid Fuchsin (Hungarian Red).
  - Aqueous Leucocrystal Violent ( ALVC).
  - Titanium Dioxide.
  - Suspension Dyes.
  - Acid Dyes.
- On-scene Preparation Methods.
- Photographic Documentation.
- Introduction to IR Photography.
- Methods for Applying Blood Searching Chemicals e.g.:
  - Pump sprayer’s vs Compressors.
- Health and Safety Issues.
- Reporting of Findings.
- “False Positive” Reactions / Environmental Factors.
- Case Examples.

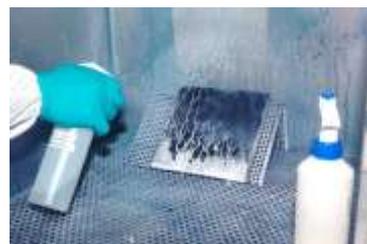


## Pre-Requisites:

None.

## Class:

Maximum of 16 participants.



### **What to bring to the course:**

Participants are advised to bring seasonally appropriate clothing.

We also encourage to bring a digital camera which could be very helpful if you wish to document any of your experiments.

### **Assessment Standards/ Certification:**

A certificate will be issued for successful completion of a written assessment of the course requirements.

### **Course duration, date, location & fee:**

The length of the course is 40 hours of instruction. The course will be conducted Monday through Friday, 8:30 a.m. – 5:00 p.m. at Loci Forensic Training Institute, Nieuw-Vennep, the Netherlands.

The courses will be held on Monday 19<sup>th</sup> May through Friday the 23<sup>th</sup>, 2014.

This course has a price of 1450.00 euro ( exclusive 21% VAT) per participant . Each participant is responsible for making his or her own hotel reservation ( see Hotel list).

Upon receipt of your registration and payment you will receive a confirmation e-mail. In the event of insufficient registrations, this course will be cancelled.

Each participant is responsible for making his or her own hotel reservation ( see Hotel list).

Note: This course utilizes animal blood for experimentation.

## **Agency-Sponsored Training**

In addition to hosting our own bloodstain pattern analysis courses, we provide a large number of agency-sponsored courses. Agencies which have several people in need of bloodstain pattern analysis training will often find bringing the course to their agency is more cost efficient than sending their personnel to an outside course. Sponsoring an in-house bloodstain pattern analysis course(s) assures that all your analysts will have an equivalent knowledge base.

If you are interested in sponsoring a bloodstain pattern course or basic evidence course at your agency, please contact us to schedule an available date. Please note that you should allow 3-6 months lead time when scheduling a week-long bloodstain/evidence course. We will provide a detailed course proposal upon request.

**Location:**

Our training Institute is situated in the city of Nieuw-Vennep, just 10 kilometers south of the international airport Schiphol Amsterdam. Amsterdam is just 15 kilometers away and easy accessible by car/train or bus.

**By Air:**

Schiphol National airport ( approximately 15 minutes by car).

Cab Fare is approximately euro 50.00.

**Railway:**

Nieuw-Vennep Railway station is on walking distance ( 1500 meters) of the Training Institute and 900 meter from hotel "De Rustende Jager".

**Accommodations:**

There are a numerous hotels in the area but on walking distance to our Training Institute is:

***Best Western Hotel "De Rustende Jager"***

Venneperweg 471

2153 AD Nieuw – Vennep

Tel: +31(0)252-629333

Fax: +31(0)252-629334

Email: [info@hotelderustendejager.nl](mailto:info@hotelderustendejager.nl)

Website: [www.hotelderustendejager.nl](http://www.hotelderustendejager.nl)



There is a Group rate of euro 79.00 per night ( exclusive 6% tourist tax).

*Please specify that you are attending a Bloodstain Pattern Analysts Course or other Course from Loci Forensics B.V.*



**Loci Forensics B.V. - Haverstraat 44 - 2153 GB - Nieuw-Vennep - The Netherlands.**

# REGISTRATION

The registration fee includes course materials, training manuals and lunch.

Please check which week and course you are registering for:

- [Basic Bloodstain Pattern Analysis Course](#), 3-7<sup>th</sup> February 2014 - € 1350.00 ( exclusive 21% VAT).
- [Basic Evidence Collection Course](#), 10-14<sup>th</sup> March 2014 - € 1150.00 ( exclusive 21% VAT).
- [Advanced Bloodstain Pattern Course](#), 14-18<sup>th</sup> April 2014 - € 1350.00 ( exclusive 21% VAT).
- [Visualization of Latent Bloodstain Course](#), 19-23<sup>th</sup> May 2014, € 1450.00 ( exclusive 21% VAT).
- [The Fabrics of Bloodstain Course](#), 9-13<sup>th</sup> June 2014 - € 1995.00 ( exclusive 21% VAT).

Check or Purchase Order **must** accompany registration:

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_

State / Zip: \_\_\_\_\_

Country: \_\_\_\_\_

Phone: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Make all checks payable to: **Loci Forensics B.V.**

**Banking information:**

Rabobank accountno. 3005.89.085

Swift RABONL2U

VAT-no. NL850403157B01

Iban NL54RABO0300589085

Chamber of Commerce Amsterdam, the Netherlands 52341186

Bic RABONL2U



Mail Registrations To: [info@lociforensics.nl](mailto:info@lociforensics.nl) or +31 (0)20 8907749

Check or Purchase Order **must** accompany registration.