



NEBB
FUME HOOD PERFORMANCE TESTING SEMINAR
JUNE 5 & 6, 2017

FHT SEMINAR DATES

MONDAY & TUESDAY, JUNE 5 & 6, 2017

SEMINAR REGISTRATION DEADLINE

MONDAY, MAY 22, 2017

FHT CP PAPER-BASED EXAM DAY

WEDNESDAY, JUNE 7, 2017

PRACTICAL EXAM DAYS

WEDNESDAY, JUNE 7 & THURSDAY JUNE 8



LOCATION

LABCONCO
KANSAS CITY, MO

ABOUT THIS SEMINAR

Chemical fume hoods are one of the most important items of safety equipment present within the laboratory. It is vitally important they are properly used and maintained. Chemical fume hoods serve to control the accumulation of toxic, flammable, and offensive vapors by preventing their escape into the laboratory atmosphere. Fume hoods provide physical isolation and containment of chemicals and their reactions, thus serving as a protective barrier between laboratory personnel and the chemical or chemical process within the hood. Chemical fume hoods are an important means of protecting professionals from chemical exposure.

Learning Objectives

The seminar will provide attendees with an overview of laboratory HVAC concepts, including discussions of environmental safety enclosures, such as fume hoods, biological safety cabinets and other containment enclosures. Instructors will review various HVAC systems currently employed in laboratory design. The basic operation of fume hoods and other containment enclosures and their respective applications and features will be presented.

The NEBB *Procedural Standard for Fume Hood Performance Testing* will be reviewed with emphasis on the requirements for NEBB Firm certification, NEBB Certified Professional certification, instrumentation, reporting requirements and testing requirements. Detailed presentations will be provided for the three primary fume hood performance tests: Airflow Velocity Tests, Airflow Visualization Tests and Tracer Gas Containment Tests. Instructors will also provide hands-on demonstrations of these performance tests.

Proper testing procedures will be emphasized, along with reporting requirements and the evaluation of test results and will conclude with a session on trouble shooting fume hood issues and problem resolution.

Who Should Attend

- Biosafety professionals
- Laboratory managers
- Industrial hygienists
- Researchers and fume hood instructors
- Facility engineers, architects and certifiers for fume hoods
- Others with a strong background in fume hood work who consider that an extensive review in a classroom setting will enhance their technical education
- Individuals who are gathering information about the testing procedures performed by NEBB- Certified Professionals to assist in the preparation of testing criteria and the auditing of Fume Hood Performance Testing. No previous knowledge or equipment is necessary to attend the seminar
- Individuals who want a refresher course before taking the NEBB FHT Certified Professional exams
- Business owners/executives who are considering the opportunities available for expanding into the fume hood testing market.

Note: As a pre-requirement, attendees should have a general understanding of HVAC, laboratory operation, and fume hoods.

This NEBB seminar has been awarded 12.25 continuing education credits (CECs) by NEBB.

INSTRUCTORS & FUME HOOD SEMINAR SCHEDULE

Don Fedyk

Don is NEBB's technical director. Prior to coming onboard with NEBB, he was the manager for Air Management in New York. Don is a former member of the NEBB Board of Directors, and is a NEBB-Certified Professional in FHT, TAB, S&V and BSC. He has tested chemical and radiological fume hoods under the ASHRAE/ANSI 110 Standard for nearly 30 years.



Mike Kelly

Mike is the project manager for Air Filtration Management. He is the Chairperson of the NEBB FHT Committee. He is a NEBB-Certified FHT and CPT Professional with over 25 years' experience in testing fume hoods, clean-rooms, biological safety cabinets and HEPA filtered equipment.



Important Reminders

1. **Registration deadline is Monday, May 22, 2017.**
2. Enrollment is limited to 25. Registrations will be filled on a "first come, first served" basis.
3. Seminar fees include the course instruction, lunch, and am/pm breaks.
4. Seminar fees do not include anything pertaining to eventual certification.
5. Registrants will receive a confirmation letter, including instructions regarding required seminar materials.
6. Questions? Call 301.977.3698 or email training@nebb.org.

SEMINAR SCHEDULE

Monday, June 5, 2017

8:00 AM	Registration
8:00 AM - 12:00 PM	Introduction to Fume Hood Performance Testing Laboratory HVAC Basics Fume Hood Types Fume Hoods versus Bio-Safety Cabinets FHT Procedural Standards Safety and Protocol Overview of Testing Requirements
12:00 PM - 1:00 PM	Lunch
1:00 PM - 5:00 PM	Review of FHT Protocol Airflow Velocity Testing and Hands-On Training

Tuesday, June 6, 2017

8:00 AM - 12:00 PM	Airflow Visualization Testing and Hands-On Training Tracer Gas Containment Testing and Hands-On Training
12:00 PM - 1:00 PM	Lunch
1:00 PM - 2:00 PM	Reporting Troubleshooting Seminar Review Session

Wednesday, June 7, 2017

8:00 AM - 11:00 AM	FHT CP Exam (Open Book)*
11:00 AM - 6:00 PM	Practical Exams
<i>4 slots available; First come, first served; separate application required) *</i>	

Thursday, June 8, 2017

7:00 AM - 6:00 PM	Practical Exams
<i>6 slots available; First come, first served; separate application required) *</i>	

**Separate fees and applications are required for those pursuing their FHT CP certification who desire to sit for the exams at the conclusion of the seminar. View more information on the certification process on page 6.*

HOTEL, TRANSPORTATION & IMPORTANT DATES/TIMES

Important Dates and Times

Seminar Location:

Labconco
8811 Prospect Avenue
Kansas City, MO

Seminar Registration Deadline:

Monday, May 22, 2017

Arrival in Kansas City:

Sunday, June 4, 2017

FHT Seminar Dates:

Monday & Tuesday, June 5 & 6, 2017

Optional FHT CP Paper-based Exam Day:

Wednesday, June 7, 2017 (Morning)

Optional FHT CP Practical Exams:

Wednesday, June 7, 2017 (Afternoon)
Thursday, June 8, 2017

Airport

One airport services the Kansas City area, Kansas City International Airport (MCI). There are many ground transportation options at the airport.

Transportation

Major car rental companies are based on site and shuttle service and Metro trains transport passengers from the airport to downtown Kansas City and other destinations.

Hotels

Attendees should make reservations directly with the hotel of their choice. Below is a short list of hotels in close proximity to the training center. Hotel and transportation costs are not covered by the seminar registration fee.

- **Hampton Inn & Suites Kansas City**
Country Club Plaza
4600 Summit, Kansas City, MO
Tel: 816.448.4600
Free Breakfast
- **Sheraton Suites Country Club Plaza**
770 W 47th Street, Kansas City, MO
Tel: 816.931.4400
Free Breakfast for Club Level Rooms
- **Marriott-Kansas City Plaza**
4445 Main Street, Kansas City, MO
Tel: 816.531.3000
Free Breakfast for Concierge Level Rooms
- **Embassy Suites Hotel Kansas City Plaza**
220 West 43rd Street, Kansas City, MO
Tel: 816.756.1720
Free Breakfast



NEBB FUME HOOD TESTING SEMINAR REGISTRATION FORM

1. Pre-registration and payment of fees are necessary to ensure your participation in the seminar.
2. **Seminar registration form & payment must reach the NEBB Office by Monday, May 22, 2016.**
3. **Mail:** NEBB, 8575 Grovemont Circle, Gaithersburg, Maryland 20877-4121
4. **Phone:** 301.977.3698 **Fax:** 301.977.9589 **Email:** training@nebb.org

Name _____ Date _____

Company _____

Address _____

City, State, Zip _____

Phone / Cell _____ Fax _____

Email _____ Chapter _____

Please list any dietary restrictions _____

Seminar Fee (Check all that apply)

\$1,300.00 FHT Seminar Registration Fee

\$75 NEBB FHT Procedure Standard,
ASHRAE 110-2016, ANSI Z9.5-2012

_____ **\$ Total Amount Paid**

Payment Method

Check Enclosed made payable to NEBB

Visa Mastercard American Express

Name on Card _____

CC Number _____

Expiration Date _____

Security code _____

Signature _____

Cancellation Policy

Cancellation by registrants, regardless of reason, will be subject to a \$250 service charge to cover NEBB's expenses. A refund of the prepaid registration will be made less the \$250 service charge.

No shows or late cancellations (those persons registered for the seminar who do not cancel 14 days prior to the seminar and subsequently do not attend the course) will forfeit the entire registration fee unless a replacement can be found.

NEBB reserves the right to cancel any seminars having insufficient registrants, in which case, all prepaid registration will be refunded in full. NEBB is not responsible for any losses resulting from cancellation of a seminar.

Please advise NEBB and your hotel of your cancellation as soon as possible.

NEBB FHT CP CERTIFICATION & EXAM PROCESS: A STEPPED APPROACH

Professionals who desire to achieve the FHT Certified Professional (FHT CP) certification and who want to sit for the written and practical exams at the conclusion of the FHT seminar are required to be in compliance with, and complete all certification requirements and processes BEFORE attending the seminar.

Please begin your certification process well in advance.

1.FHT CP certification requirements are available in the NEBB Comprehensive Certification Handbook available on the NEBB website at www.nebb.org, or email certification@nebb.org.

2.To obtain FHT CP certification and exam information, please email certification@nebb.org.

3.Deadline for receipt of FHT CP Applications for Candidacy: Monday, May 8, 2017. **Last-minute applications or walk-ins to the exam will not be accepted.**

4.Pre-requisites must be met and the FHT CP Application for Candidacy must be submitted for approval and the certification application fees paid. Once approved, the Candidate will receive payment information for the FHT CP paper-based written exam.

5.Application for Candidacy fees and exam fees are separate from the training seminar fees. **All exam-related fees are final but can be transferrable.**

6.Because a Candidate's exam results are entered into Kryterion, NEBB's online exam processing center, Candidates are required to set up a profile on Kryterion in advance of sitting for the FHT CP exams. **Instructions on the process will be sent.**

7.Again, those who wish to sit for the FHT CP exams must have all facets of the certification process completed prior to attending the FHT seminar.

8.Success with certification comes with dedicated self-study and preparation. As such NEBB recommends the following publications for FHT CP Candidates:

- NEBB Procedural Standard for Fume Hood Performance Testing*
- ASHRAE 110-2016 Methods of Testing Performance of Laboratory Fume Hoods*
- ANSI/AIHA Z9.5-2012 Laboratory Ventilation*
- Candidate will need a computer and working knowledge of Excel to complete reporting requirements.*

Reminder

The FHT CP seminar focuses on fume hood performance testing. Attending the seminar is insufficient for successful completion of NEBB FHT CP exams.

Overview of FHT CP Exam Process

The written and practical exams test the knowledge, engineering application and field testing skills required to properly test the performance of fume hoods.

The written examination is a three-hour test comprised of multiple choice questions in the following areas:

- NEBB FHT Procedural Standard testing requirements
- Basic laboratory HVAC design
- Operation of fume hoods and other containment enclosures
- Engineering applications of fume hood testing
- Testing of basic HVAC fundamentals

The practical exam has three sections: Airflow Velocity Tests (1 hour), Airflow Visualization Tests (½ hour) and Tracer Gas Containment Tests (1½ hour). Practical Exams test in the following areas:

- Correct application, knowledge and proper use of the appropriate instrumentation for each performance test
- Knowledge of the procedural requirements of each performance test
- Knowledge of the analysis of the measured data and reporting requirements of each performance test

NEBB will publish the Practical Testing schedule once the attendance minimum has been reached. Prior to booking travel, **confirm your testing schedule time as completion will occur based in order of confirmed seminar reservation.** Instruments for the Practical Exams will be provided; however, if you currently possess an instrument that meets the requirements of the NEBB FHT Procedural Standard and is calibrated, you are encouraged to bring it to the seminar for your use.



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