

ACIL

INDEPENDENT LABORATORIES
INSTITUTE

ILI

QUALITY TRAINING FOR THE
LABORATORY COMMUNITY

Presents

***Assessing
Inorganic Chemistry
(Non-metals)***

***Laboratory Assessor
Online Training Course***

The Independent Laboratories Institute (ILI) is the educational foundation affiliated with the American Council of Independent Laboratories. ACIL is the trade association of independent commercial engineering and scientific laboratory testing, consulting and R & D firms.

Advanced Systems conducts training for environmental sampling, quality control, laboratory operations and field operations and design Quality Systems based on the ISO 9000 Quality Standards, ISO 14000 series of Environmental Management Standards, and ISO/IEC 17025 Laboratory Quality and Technical Competence Standards.

Assessing Inorganic Chemistry (Non-metals)

COURSE BACKGROUND

The Independent Laboratories Institute (ILI) is pleased to announce the release of a new online training course entitled, "Assessing Inorganic Chemistry (Non-metals)." This is the first of the online technical training courses ILI is preparing for NELAP assessors and for laboratory employees who work with quality systems.

ILI has partnered with Advanced Systems, Inc. for many years to offer classroom technical training courses for NELAP assessors across the U.S. These classroom courses are being converted to online learning through a cooperative agreement between the ILI and the US Environmental Protection Agency (US EPA). The online courses facilitate training by delivering content to students in a convenient, cost-effective and consistent format.

Marlene Moore, Advanced Systems, Inc., teaches the classroom courses and is the subject matter expert for the technical content of the new online course, "Assessing Inorganic Chemistry (Non-metals)."

In this online training course, the assessor learns how to conduct a laboratory on-site assessment. The assessment evaluates how the laboratory implements quality system components for inorganic chemistry (non-metals) technologies to ensure compliance with the 2003 NELAC Standard. The course meets the content requirements specified in the 2003 NELAC Standard, Appendix B.

COURSE SCOPE

The scope of this online technical training course is inorganic chemistry, non-metals. The analytical technologies and their associated instrumentation and software covered in this course are:

- ◆ Spectrophotometry
- ◆ Colorimetry
- ◆ Infrared Spectrometry
- ◆ Titrimetry
- ◆ Ion Chromatography
- ◆ Gravimetric Methods
- ◆ Potentiometry
- ◆ Total Organic Carbon and Total Organic Halides
- ◆ Chemical Oxygen Demand/Biochemical Oxygen Demand

LEARNING OBJECTIVES

Upon successful completion of this course, the learner will:

1. Know how to assess the implementation of the technology by the laboratory.
2. Understand how the technology is used in the various methods.
3. Identify the key elements of data packages and raw data to review and check effectively.

COURSE LENGTH

Most learners will require 8 to 16 hours to complete this self-paced online course. Completion time will depend, in part, upon the learner's familiarity with the 2003 NELAC Standard and the technologies covered in the course. The course consists of five modules plus a final exam covering all course materials. Learners may review prior modules or exit the course at any time and are automatically returned to their point of progress when they log back into the course. A certificate of completion may be printed if the learner achieves a passing score on the final exam.

The course must be completed within 90 days of registration.

SYSTEM REQUIREMENTS

There is no need to install a program to take the online course. Once you are registered, you simply point your browser to the URL and the course downloads and starts automatically. The platform for the course is the web browser and not a particular operating system. In order to run the course successfully, your browser must meet certain system requirements. In technical terms, the browser must be HTML 4.01 compliant and must support JavaScript 1.1.

The general minimum browser requirements for running the course are Microsoft Internet Explorer version 5.x or newer or Netscape 7.x or later. The course programming has been tested with and is known to work in Internet Explorer 5.0, 5.5 and 6.0 on Windows 95/98/ME/2000/NT and Mozilla 0.9.3 on Linux. Other browsers and versions of the above may also work if they support system requirements noted here. If you are a Mac user, the course may not operate as designed.

Please review the internet connection requirements in the following table. Dial-up internet service is too slow to ensure a successful learning experience.

Operating System:	<ul style="list-style-type: none"> ◆ Microsoft Windows 95/98/2000/Me/XP or NT 4.0 (SP 4) or ◆ Sun's Java Desktop Environment
Processor:	300 megahertz Pentium II processor or equivalent
RAM:	64 megabytes
Hard Drive Space:	10 megabytes Free Space
Browser:	IE 5.x or later Netscape 7.x or later
Browser Configuration:	Java Script must be enabled
Internet Connection:	28,800 bps or faster modem, integrated services digital network (ISDN), or local area network (LAN) connection (Dial-up access does not meet this requirement)
Graphics Card:	8 megabytes onboard memory

You also need a sound card and speakers to hear the audio portion of the course.

You will need to download reference documents, which are made available after you are registered for the course. The documents are pdf format. Free Adobe Reader software is available to download within the course.

COURSE PREREQUISITES

1. Possess basic knowledge of the inorganic technologies, their principles, and their applications by laboratories.
2. Understand quality systems, including Chapter 5 of the 2003 NELAC Standard.
3. If you are a NELAP assessor, complete the Basic Assessor Training prior to taking this course.

COURSE FEES

\$550 ACIL Members and Government Employees

\$725 Non-Members

REGISTRATION INFORMATION

To register for "Assessing Inorganic Chemistry (Non-metals)," go to www.acil.org and click on the Assessor and Laboratory link. After your payment is processed, you will receive an email with instructions on how to access the course (website address, your username and password) and the electronic documents that you will need to download. All instructions for taking the course are in the first course module.

ACKNOWLEDGEMENTS

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ILI is also grateful to the following experts who assisted in the technical review of this program: Lara Autry and Cheng-Wen Tsai, US EPA; Alice Colt and N.D. Kaku, Texas Commission on Environmental Quality; Eddie Clemons, Xenco Laboratories; Robert DiRienzo, DataChem Laboratories, Inc.; and Charles N. Dyer, former Accrediting Authority for the State of New Hampshire.

Testimonials

"This is an excellent course for all assessors, even those experienced with inorganic methods."

"I thought the course and materials were excellent. I enjoyed the course. I would definitely like to see the organic modules."