

## Accreditation to ISO 17025 -- building international confidence

### (presented by ANAB)



# Webinar Outline

- ANAB and Accreditation World overview
- Technical areas in ISO 17025 testing and calibration
- What it means and looks like to be "accredited"
- How ILAC describes the benefits and value of accreditation
- What key factors help build confidence



 ANAB Partnership / Parents
 ANSI – American National Standards Institute (offices in "L" St. in Washington, D.C. and W. 43<sup>rd</sup> St. in New York City )

 ASQ – American Society for Quality (ASQ building, downtown Milwaukee)



### **ANSI-ASQ National Accreditation Board**

- Laboratories ISO/IEC 17025
- Inspection Bodies ISO/IEC 17020
- RMPs ISO Guide 34 (Reference Materials)
- PT Providers ISO 17043
- Product Certifiers ISO 17065
- Government Programs: DoD ELAP, EPA Energy Star, CPSC Toy Safety, FDA, NRC, NIST IPV6, TNI, NLLAP, NEFAP
- TRAINING Programs

- Certification Bodies ISO/IEC 17021
- Accreditation for Management
  System Certification Bodies
  that certify to :
  - ISO 9001 (QMS)
  - ISO 14001 (EMS)
  - TS 16949 (US Automotive) and more than 30 other standards



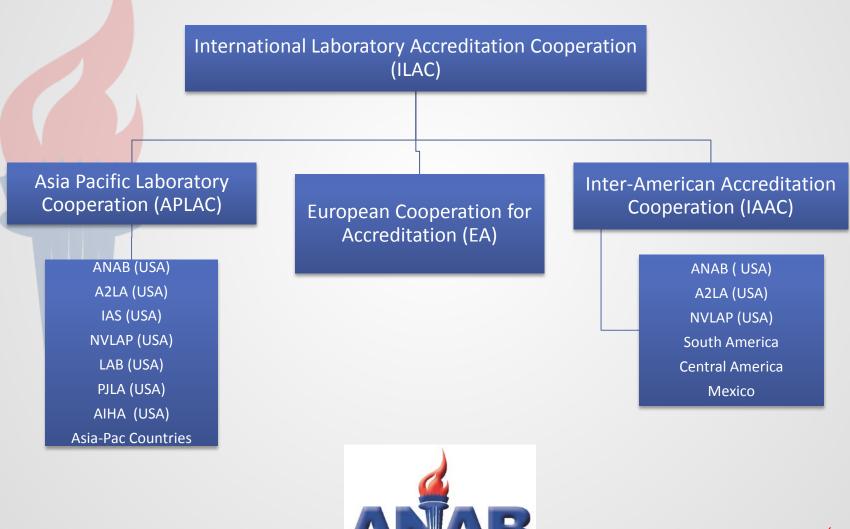
## Accreditation Hierarchy for 17025

 ILAC – global oversight entity for 17025 and RMP and PT providers and 17020

- APLAC and IAAC Asia Pacific and Inter-American Regional Recognition Body
- ANAB Representative Accreditation Body
- AB Customers Laboratories seeking Accreditation



## ILAC – International and Regional Relationships



# **ILAC Testing Categories**

- Acoustics/Vibration
- Biological/Microbiological
- Chemical
- Construction materials
- Electrical
- Environmental
- Geotechnical
- Mechanical

- Non-destructive
- Optical / Photometric
- Ionizing / Radiometric
- Thermal
- Multidisciplinary
  - IT, Health-Hygiene, Forensic, Medical, Occupational, Foodbeverage



# **ILAC Calibration Categories**

Dimensional

 Electromagnetic – RF/MW

- Mechanical
- Thermodynamic

- Time & Frequency
- Optical Radiation

 Electromagnetic – DC/low frequency

Ionizing Radiation

# Key items assessed during ISO 17025 accreditation

- Technical competence of staff
- Validity and appropriateness of technical methods
- Traceability of measurements and calibrations to national standards
- Suitability, calibration, and maintenance of equipment
- Testing or calibration environment
- Sampling, handling, and transportation of test items
- Quality assurance of test and calibration data





### **CERTIFICATE OF ACCREDITATION**

ANSI-ASQ National Accreditation Board 500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

#### American Type Culture Collection (ATCC) 10801 University Blvd. Manassas, VA 20110

has been assessed by ANAB and meets the requirements of international standard

### ISO/IEC 17025:2005

while demonstrating technical competence in the field(s) of

#### TESTING

Refer to the accompanying Scope(s) of Accreditation for information regarding the types of tests to which this accreditation applies.

#### AT-0000

Certificate Number

ANAB Approval

Certificate Valid: 03/17/2015-03/17/2017 Version No. 001 Issued: 02/27/2015



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-LAF Communique dated January 2009).





# Value of Accreditation-1

International technical standards are introduced to meet the legitimate requirements of quality and safety that consumers, businesses, regulators and other organizations demand of goods and services, whatever their country of origin.



# Value of Accreditation-2

It is vital, not only for individuals and organizations but for national and international economic health, that products and services can cross borders to meet global demand without causing undue risk to the health and security of individuals or the environment.



# What benefit does accreditation provide? -1

- For National Authorities and Regulators
  - accreditation bodies have helped make accreditation an internationally recognized 'stamp of approval' to demonstrate compliance against agreed standards and requirements
  - provide a credible and robust framework to develop multi-lateral international trade agreements



What benefit does accreditation provide? -2

### For consumers

- helps increase the choice of goods and services available on the market
- helps ensure that goods and services meet relevant standards of quality and safety, whatever the country of origin



What benefit does accreditation provide? -3

- For businesses
  - contributes to operational efficiency of businesses
  - Reduces bureaucracy and improves risk management
  - Allows efficient and informed choices on suppliers
  - Promotes confidence in imports from other countries
  - Demonstrates due diligence in the event of legal action

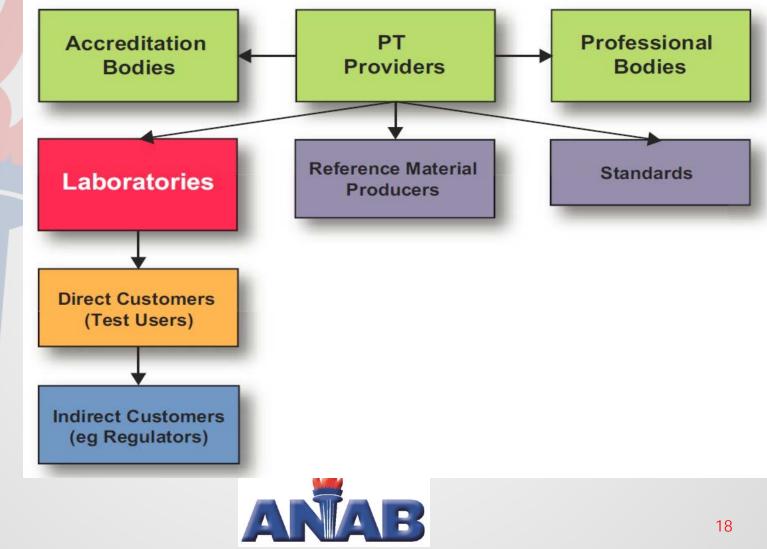


## Key Value of Accreditation

- International confidence but need ILAC signatories
- Standardized practices 4-year evaluations
- Regional and ILAC committees and guidance docs
- Coordination of industry, government, trade, and commerce
- ISO standards for conformity plus accreditation and encouragement of industry standards development
- Critical role of metrology institutes and ILCs



## Building confidence via PT / ILC



# Proficiency testing – Interlaboratory comparisons

- The basic purpose of PT is to assess performance of labs for their conduct of specific tests, calibrations, or measurements.
- It gives an independent appraisal of the lab's data compared to similar labs or reference values or other performance criteria
- The results of each study either confirms satisfactory performance or alerts a lab to investigate and fix potential problems



# Building confidence via peer evaluations

- Each region within ILAC requires evaluations of Accreditation Bodies every 4 years or less.
- Practices verified of :
  - technical assessors and experts reviewing labs
  - accreditations granted, expanded, suspended, reduced, or withdrawn as appropriate
  - assuring both AB and lab corrective actions done promptly
  - good methods & equipment used, reporting done
  - PT/ILComparisons done



## For further information :

- www.anab.org and <u>bhirt@anab.org</u>
- www.ilac.org
- www.aplac.org
- www.atcc.org and gbright@atcc.org



## About ATCC

- Founded in 1925, ATCC is a non-profit organization with headquarters in Manassas, VA
- World's premiere biological materials resource and standards development organization
- ATCC collaborates with and supports the scientific community with industry-standard biological products and innovative solutions
- Strong team of 400+ employees; over onethird with advanced degrees





## Proficiency Testing and ISO/IEC 17025:2005



- Proficiency testing is a significant component in the laboratory accreditation process under ISO/IEC 17025:2005 and ISO 15189:2012
- There are a number of benefits to participating in proficiency testing, including:
  - Monitoring and improving measurements
  - Demonstrating analytical competence
  - Developing and training analysts
  - Validating methods and instruments



## Proficiency Testing and ISO/IEC 17025:2005

- Regular participation in a proficiency testing program provides an external independent tool for monitoring and verifying the effectiveness of routine methods employed in the laboratory
- For ISO/IEC 17025:2005 accredited laboratories, proficiency testing must be performed in order to demonstrate compliance with accreditation requirements





## ATCC Proficiency Testing Programs

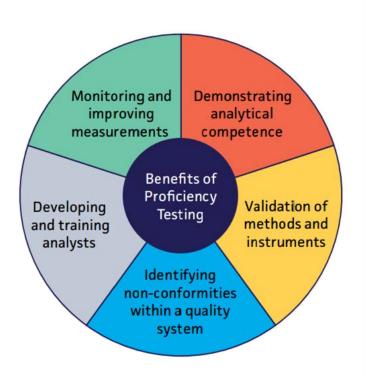
- ATCC has partnered with LGC to provide food and pharmaceutical quality control laboratories in the U.S. with a broader range of proficiency testing programs that are critical to ensure the safety of food and drugs
- The programs offered through this agreement support a variety of sectors, and includes:
  - Food microbiology (QMS)
  - Animal Feed (AFPS)
  - Pharmaceuticals (PHARMASSURE)
  - Food chemistry (QFCS)
  - Meat and Fish (QMAS)
  - Water microbiology (QWAS)

- Beverages (QBS)
- Dairy chemistry (QDCS)
- Chocolate (QCS)
- Gelatin (QGS)
- Sugar (SUPS)

Visit us online at www.atcc.org/PTPrograms



## ATCC Proficiency Testing Programs



With ATCC Proficiency Testing Programs you can:

- Report results for up to 10 analysts per sample to easily establish and continually verify individual proficiency
- Reduce costs by reporting results for up to 3 different methods per sample
- Monitor performance and identify required improvements quickly and efficiently with an unparalleled turnaround time of 5-7 days for results
- Submit results to ISO/IEC 17025:2005 accreditation bodies and satisfy audit requirements with unique individual lab reports



## Thank you for joining today!

Watch recorded ATCC "Excellence in Research" webinars at <u>www.atcc.org/webinars</u>



### Please email additional questions to: tech@atcc.org

