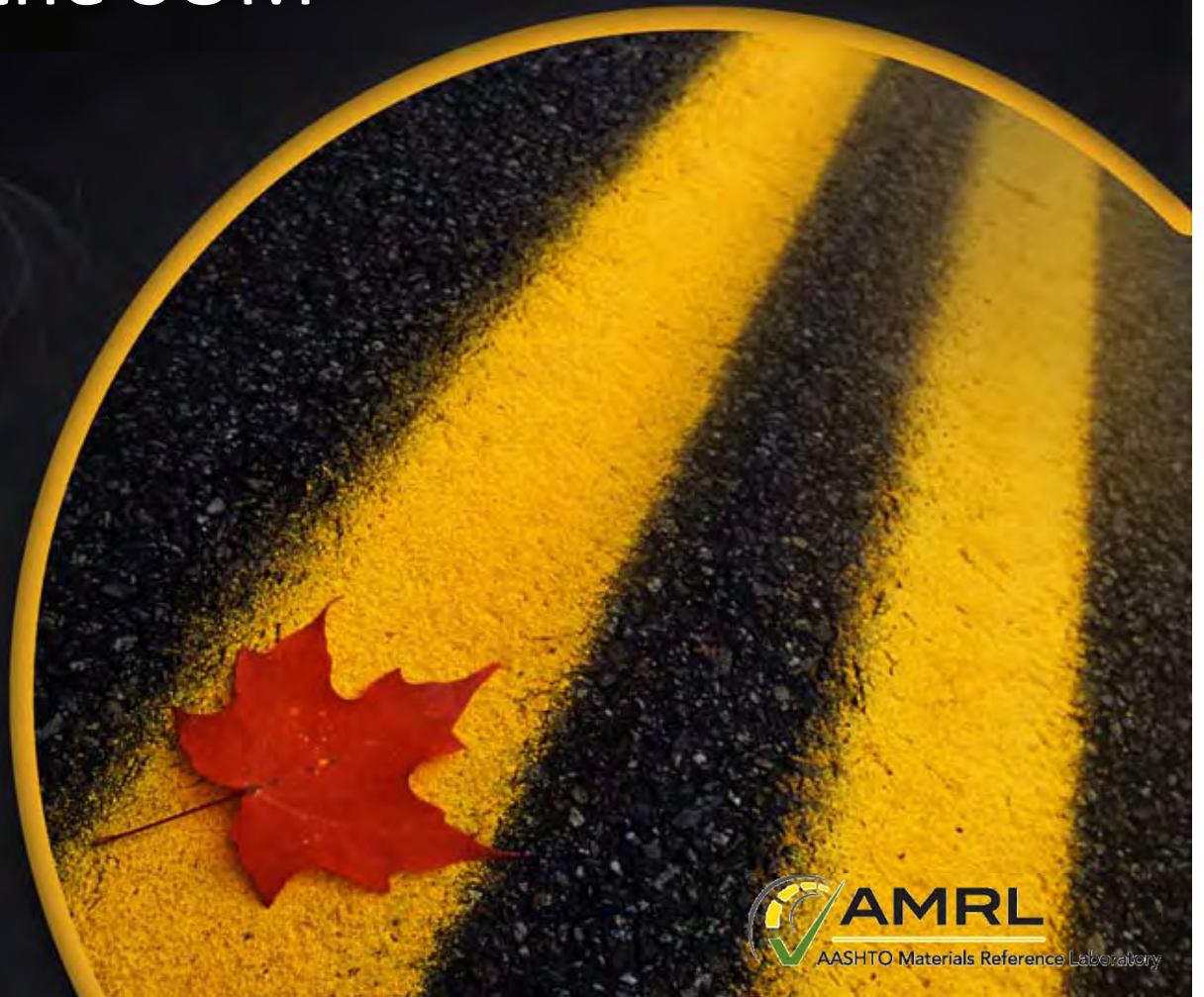


AMRL Report to the SOM

Biloxi, Mississippi

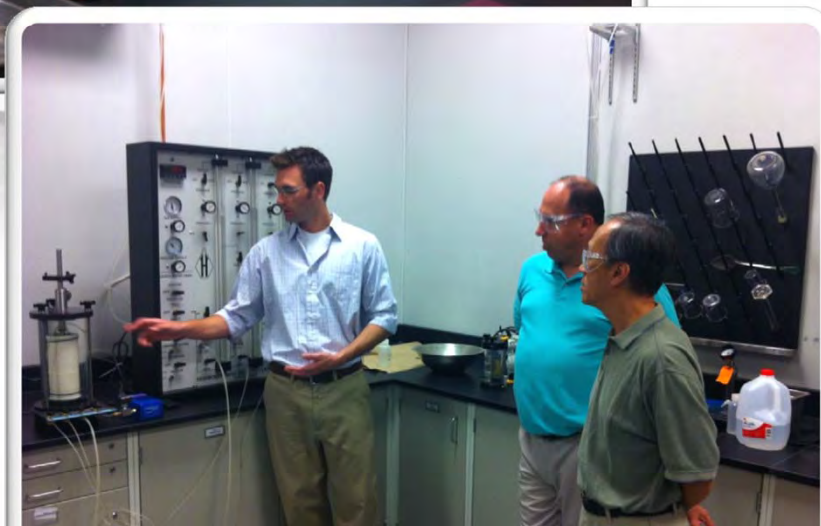
August 6, 2012



North Carolina DOT Visit



North Carolina DOT Visit



AMRL In Focus



Technician Certification Requirements in ASTM Standards

By [Brian Johnson](#), Program Supervisor (AAP)



It has been over a year since AMRL started to request technician certification information during a laboratory's annual review for AASHTO accreditation rather than during the on-site assessment. This change was made to improve the consistency of our evaluation of laboratory conformance to the ASTM quality system standards that require technician certification (ASTM C1077, D3666, D3740, or E329). [Read More](#) ▶

The Road to Developing an Effective Quality Management System – Part 2, Getting Started

By [Tracy Barnhart](#), Quality and Information Manager

It's time to hit the road and get this QMS thing started! The first part of my series ([Part 1 – Why QMS?](#)) focused on the many benefits of developing and implementing an effective QMS. Now see where this road will take us next... [Read More](#) ▶



Topics: Making the Grade, Part I

By [Soneira](#), Quality Analyst

Contact Us

Email: info@amrl.net

Website: www.amrl.net

Questions about the Laboratory Assessment Program?

Contact Greg Uherek at guherek@amrl.net

Questions about scheduling an assessment?

Contact Chris Breth at cbreth@amrl.net

Questions about proficiency sample testing?

Contact Ron Holsinger at rholsinger@amrl.net

Questions about accreditation?

Contact Brian Johnson at bjohnson@amrl.net

- Electronic newsletter sent out via email twice a year.
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DIGITAL

Unraveling the Tangled World of Digital Thermometers

Type of Device

How Much?

Uncertainty

Durability

Range of Use

Benefits

Downfalls

STANDARD PLATINUM
RESISTANCE
THERMOMETERS

\$6,000
or More



Excellent
To Within 0.0001°C



Low



-200°C
to
650°C

- Highly Accurate

- High Cost
- Susceptible to Damage
- Readings tend to drift

INDUSTRIAL
PLATINUM
RESISTANCE
THERMOMETERS

\$200 to \$2000



Good
0.02 to 0.1°C



Mediocre



-200°C
to
650°C

- Great Accuracy
- More rugged than SPRT
- Reasonable cost

- Somewhat susceptible to damage
- Readings tend to drift

THERMISTORS

\$200 to \$2000



Great
0.01 to 0.1°C



Good



-5°C
to
90°C

- Great Accuracy
- Rugged
- Little drift over time

- Limited Range of use

THERMOCOUPLES

\$100 to \$1000



Mediocre
Over 1°C



Great



-200°C
to
1800°C

- Rugged
- Low Cost

- Problems with Accuracy
- Readings tend to drift

NON-C
CONTACT
THERMOMETERS

\$30 to \$200



Poor
Over 2°C



Fair



-50°C
to
1100°F

- Low Cost
- Non-Contact Measurement

- Problems with Accuracy
- User Error Likely