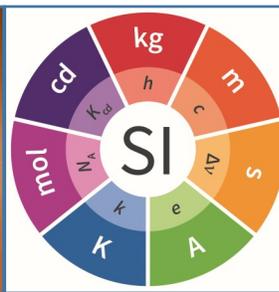
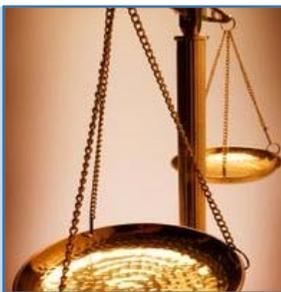


WEIGHTS & MEASURES CONNECTION



August 2020

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Notes from the Chief

Byline: Douglas Olson

Greetings to all of you from Gaithersburg, Maryland! The NIST Office of Weights and Measures (OWM) is adapting its program delivery to meet the needs of the Weights and Measures community in these changing times. NIST began a phased reopening of campus activity as of July 6, 2020, however all OWM staff are currently teleworking full-time.

This issue of W&M Connections will highlight several changes we have made in providing online training classes and technical materials which will benefit you and your staff. Our scheduled training classes are summarized in this newsletter and can always be found on our website. We have added a feature to our website that highlights our newest resources for education and training. We have changed some of our procedures for accessing training to allow you more flexibility in registering for classes and receiving your certificates. Read on, and you will learn more about all of these topics!

I am happy to report that the online training we have embarked upon has enabled us to reach many stakeholders in the last few months and will continue to do so in the months to come. As an example, in the topic of Laws and Regulations training, we held 26 online webinars from March 2020 through August 2020, and taught 1390 students. Students came from 43 states, a variety of U.S. industries, and 5 foreign countries. In this category alone, we taught more students than in the entirety of 2019!

Although our current emphasis has shifted to online training, we will resume many of our in-person training classes when conditions allow them to occur. However, the online mode has been shown to be extremely flexible and timely, and will become a permanent component of our program now and in the future.

This newsletter also summarizes our recent activity in the international legal metrology realm. The shift to online meetings has been a great benefit to this area, allowing OWM to participate fully and represent U.S. interests in this important area of international engagement.

Continuity of Service Shines with OWM Technical Training

Byline: Elizabeth Benham and Yvonne Branden

The year 2020 will be remembered as one of the most unusual years we'll likely experience in our lifetimes. At some level, every organization, program, family, and individual has been impacted.

Under normal conditions, OWM's annual technical training plan includes a combination of traditional in person seminars hosted around the United States and at our Gaithersburg, Maryland campus, as well as ongoing webinar offerings. However, 2020 has been anything but normal. In early March of this year, the NIST campus closed in response to the pandemic. Many normal operational functions were disrupted. Maximum teleworking was implemented to enable NIST staff to continue working from home. Instructor travel was cancelled and in-person learning events were suspended, both at NIST and at remote sites.

We commend and thank OWM's talented staff who have worked tirelessly to adapt and ensure our training mission is accomplished. Rest assured that OWM Instructors continue to design, develop, and plan to deliver technical training in a variety of modes. OWM looks forward to providing in person seminar learning events again when conditions permit. Other articles in this Newsletter highlight the new types of training opportunities now available and the breadth of students that have attended various events.

The OWM team extends a warm welcome to all our new training customers, especially individuals who have never had the opportunity to learn from NIST in the past! Because so many field officials, laboratory metrologists, and industry professionals have participated in our continuing education opportunities over the last several months, we have heard many great suggestions. For example:

- Jurisdictions have reported that many teams are working alternative work schedules, such as four 10-hour days so that Fridays may not be ideal for some webinar participants. In response, you will see an increased variety to the days of the week, start times, and duration of our learning events.
- OWM has also temporarily suspended webinar fees, which makes it an ideal time to attend an online event (seminar fees remain unchanged).
- First time students are often unfamiliar with OWM Training Services. Please use this Guide as you plan your professional development and continuing education goals during the coming months.

We hope you enjoy learning about the many exciting training developments happening within each of our technical programs!

Please see the *OWM Training Services Guide* on pages 3 and 4 to learn more about how to select, register, enroll, prepare for, and view records for OWM Training.

OWM Training Services Guide

Task	Helpful Information and Tips
Training Resources	The Training activities website is a hub of information from each OWM technical program (www.nist.gov/pml/weights-and-measures/about-owm/new-and-existing-resources-continuing-education-and-training).
Get Started	<p>Establishing an <i>OWM Contacts System</i> account is the first step to attending a class. Once your account has been activated, you may request training, review an unofficial training transcript, and request publications. This set of helpful instructions will walk you through the process.</p> <p>OWM Contacts System (tsapps.nist.gov/WMD)</p> <p><i>Quick Guide for OWM Contacts System</i> (www.nist.gov/system/files/documents/2016/09/07/Quick-Guide-for-Requesting-Training.pdf)</p> <p><i>How to Reset Password Using the Contacts System</i> (www.nist.gov/system/files/documents/pml/wmd/InstructionsHowToRequestResetPassword-web.pdf)</p> <p><i>How to Request Training & Transcript Using the Contacts System</i> (www.nist.gov/system/files/documents/2016/09/07/InstructionsHowToRequestTrainingTranscripts.pdf)</p> <p><i>How to Request Publications using OWM Contacts System</i> (www.nist.gov/system/files/documents/pml/wmd/InstructionsHowToRequestRequest-Pub.pdf)</p> <p>It's important to periodically review your <i>OWM Contacts System</i> profile to ensure up-to-date contact information is listed. Your email address will be used to deliver many important communications.</p>
Identify Training Offerings	There are multiple ways to learn about upcoming OWM training. Visiting the <i>Calendar of Events</i> is a convenient way to identify a scheduled class (www.nist.gov/pml/weights-and-measures/about-owm/calendar-events). OWM will periodically email promotional fliers that highlight upcoming learning events. Classes are also promoted within the <i>Weights and Measures Connections</i> newsletter, and of course are listed in the <i>OWM Contacts System</i> .
Request Training	Once your user account is established, log-in to the <i>OWM Contacts System</i> to request enrollment in a scheduled session. Review and identify training opportunities by course type, topic, course number, and class number (listed on the learning event webpage and promotional flier). If the course you are interested in has not been scheduled, your selection will notify OWM of your interest, which will be taken into consideration when planning future training events. Please understand that a request for training is not an enrollment in a course; those approved for the class will receive an e-mail acknowledgement indicating their enrollment has been confirmed.
Class Size	Space is limited within all OWM learning events and seats fill quickly. For both seminars and webinars, class sizes are based on the topic and activities. Maximum webinar class sizes are limited by the online system's room capacity. If a class is full, you may ask to be placed on the waiting list for that course. In the event of a withdrawal, a training seat may open and waiting list customers will be notified about acceptance into the class. Classes with insufficient training requests may be cancelled.
Registration	Pre-enrollment is required for all classes (walk-ins are not permitted) to ensure so that each participant seat is available on the day of the event. It's tempting to share a webinar URL with a colleague who's expressed interest in attending. If an unregistered person unexpectedly "walk-ins" to an online session, they may displace a registered student from entering the webinar platform.

(Continued on page 4)

OWM Training Services Guide

(Continued from page 3)

Task	Helpful Information and Tips
Registration Deadlines	<p>Cut-off dates to request training vary by class and are typically further away from in person seminar events (to allow for travel planning) and closer to the event date for webinars. Training requests will be processed by OWM, usually near the registration deadline date. OWM Instructors evaluate training request after the registration deadline on a case-by-case basis. Please don't hesitate to contact Yvonne Branden, Training Coordinator and the course Instructor when this situation occurs (yvonne.branden@nist.gov).</p>
Confirmation Communications	<p>When your request has been approved, you will receive a generic e-mail acknowledgment from the <i>OWM Contacts System</i>. For IACET seminar and webinar courses, you will also be contacted with class specific information under separate cover (which may include a separate confirmation letter with requests for payment if it is a fee-supported course). For some webinars, you may only receive the generic notification, but the Instructor will email log-in instructions and handouts prior to the learning event.</p>
Webinar Preparation	<p>Be mindful of webinar start times and your time zone. OWM webinars are advertised according to the Eastern time zone, referencing the location of the NIST Gaithersburg, Maryland campus. Arrive early. Before the session begins, run the Adobe Connect diagnostic test and test your computer and network. To enjoy all interactive webinar platform features, use the stand-alone Adobe Connect <i>Application for Desktop</i> that replaces the old add-in.</p> <p>Instructors and students are attending webinars from home, where broadband may be limited or weaker than within their office. Rural areas may lack high-speed internet access. OWM recommends using wired internet access rather than WIFI, avoiding connecting through a VPN, and minimizing other online activities that may stress upload/download speeds. We understand that balancing these resources is especially challenging for parents and their school age students who are simultaneously working and “distance learning.”</p>
Training Records	<p>Your unofficial transcript is available within the <i>OWM Contacts System</i>. To create your record, go to “My Training” then click on “Printer Friendly.” A pop-up window will display a link to initiate the print function. Please note that your updated transcript is generally available within 15 days after the class has been completed. For International Association for Continuing Education and Training (IACET) accredited training courses, your transcript will reflect the Continuing Education Units (CEUs) awarded. Contact Yvonne Branden to request an official transcript (yvonne.branden@nist.gov).</p> <p>Training certificates are another type of training record that are offered for some OWM courses. For IACET accredited courses, your training certificate will reflect the CEUs awarded and your name will be printed on the certificate. Some courses offer a generic training certificate without participant names, while other courses do not offer a training certificate. Currently all training certificates are delivered in electronic format (PDF) by email to the address listed in your <i>OWM Contacts System</i> profile.</p>

Spotlight on Metric Program Training

Byline: Elizabeth Benham

The Metric Program has developed two new webinar courses for K-12 educators and Science, Technology, Engineering, Arts, and Mathematics (STEAM) outreach ambassadors engaged in teaching the International System of Units (SI), commonly known as the metric system.



Figure 1. Metric Estimation Game participants collaborate in small groups to become familiar with SI measurement units.

The *Metric System Education Resources* webinar explores NIST Metric Program education publications and other resources that can be downloaded and freely reproduced by teachers, parents, and students. These resources are helpful to students as they become familiar with metric units, develop measurement quantity reference points, and learn more about SI basics.

The *Metric System Estimation* webinar demonstrates the *Metric Estimation Game*, a fun hands-on activity that helps middle school students become familiar with SI measurements by practicing estimation skills. This session reinforces the use of common measurement tools, developing reference points, and building proficiency and confidence working with metric measurements. Game participants collaborate in small groups to earn points as they become familiar with metric (SI) mass, length, and volume measurement units. If your organization hosts education outreach events to celebrate **Metric Week** (October 4 to 10, 2020), **Weights and Measures Week** (March 1 to 7, 2021), and **World Metrology Day** (May 20, 2021), or STEAM Nights and Career Fairs, then this webinar is for you!

Learning events are scheduled at a variety of times to accommodate participant schedules. Many technical sessions are hosted during normal business hours. Other sessions are hosted on weekday evenings and Saturday afternoons help avoid typical daytime obligations, making it convenient for K-12 educators to participate. Metric Program learning sessions are typically designed for 90-minute time blocks (or less) and all event times are published in the Eastern Time zone.

Course information is available on the **Metric Program Training** webpage (www.nist.gov/pml/weights-and-measures/metric-program-training). Each *Info Sessions* includes 99 participant seats and these classes are expected to fill up fast so please register soon. More information is available on the **OWM Calendar of Events** (www.nist.gov/pml/weights-and-measures/about-owm/calendar-events). Webinar students will receive a *Certificate of Attendance* (does not include participant name or CEUs) delivered by email after the session. Please contact TheSI@nist.gov with any questions or for more information.

International Legal Metrology Program Updates

Byline: Charles Ehrlich

OIML Update:

The Covid-19 global pandemic has led to the 55th CIML Meeting, originally scheduled to be held in China, to instead be held as a virtual meeting on October 20 to 22, 2020. The quadrennial OIML Conference will be postponed until the fall of 2021, and the current plan is to hold this meeting in China in conjunction with the 56th CIML Meeting. One result of the Conference postponement will be a delay in the approval of a new 4-year OIML budget, and so OIML plans to operate in 2021 using its 2020 budget. There will be no voting taking place during the virtual 55th CIML Meeting, but rather voting will be done securely via the OIML website following the meeting.

The first versions of the draft Agenda and Working Document for the 55th CIML Meeting can be found at **online-55ciml.oiml.org**. As a reminder, all OIML publications continue to be available electronically without cost at the OIML web site **www.oiml.org**.

Key technical documents that are planned for CIML approval are:

- New Recommendation: *Non-invasive non-automated sphygmomanometers* (Revision of R 16-1);
- New Recommendation: *Non-invasive automated sphygmomanometers* (Revision of R 16-2);
- Revision of R 129: *Multi-dimensional measuring instruments*;
- Revision of D 1: *National metrology systems – Developing the institutional and legislative framework*;
- New Document: *Pipe provers for testing measuring systems for liquids*; and
- New Document: *Petroleum measurement tables*.

For more information or to discuss any of these Recommendations or Documents, please contact Mr. Ralph Richter at **ralph.richter@nist.gov**.

A new Recommendation on *Continuous totalizing automatic weighing instruments of the arched chute type* will also be discussed during the CIML meeting. The U.S. has actively participated in the development of this new Recommendation that will cover this relatively-new type of measuring instrument. For more information, please contact Mr. Ken Butcher at **kenneth.butcher@nist.gov**.

The OIML Certification System (OIML-CS) now has 10 categories of measuring instruments in what is called Scheme A (full accreditation requirements for Issuing Authorities and Test Labs). The list can be viewed on the OIML website. The Certification System now includes the OIML Recommendation R 117:2019 (*Dynamic measuring systems for liquids other than water*); the project to revise and publish R117 was led by the U.S. A new Chairman of the OIML-CS Management Committee (Mr. Mannie Panesar of the UK) will be confirmed at the 55th CIML Meeting. Just recently, the OIML-CS Management Committee made the decision to support allowing the placement of OIML Certificate Numbers on the nameplates of individual instruments. Final approval of this change will be made by the CIML.

Two of the most important projects in OIML right now are:

- a revision of OIML D 31 *General Requirements for Software-controlled Measuring Instruments* – serving as a guidance document for the software requirements in all of the OIML International Recommendations; and
- a revision of OIML R 76:2006 *Non-automatic weighing instruments*.

Since the 55th CIML meeting will be virtual, a large number of U.S. participants will be able to serve as part of the U.S. delegation. There will be no “fee” to participate. This offers a very unique opportunity to observe and participate in a CIML meeting. If you are interested in registering and participating, please contact the U.S. CIML Member, Dr. Charles Ehrlich at **charles.ehrlich@nist.gov**.

APLMF Update:

The 2020 meeting of the Asia-Pacific Legal Metrology Forum (APLMF) will be held virtually on December 3-4, 2020. Because this will also be a virtual meeting, there could be another unique opportunity to participate in an APLMF meeting. For details on the activities of APLMF or on the planned meeting in December, please contact Mr. Ralph Richter (**ralph.richter@nist.gov**).

Webinars: The New Training Norm

Byline: David Sefcik

How quickly things can change! Prior to March 2020, the OWM Laws group had been offering two webinars on “Examination Procedure for Price Verification” and “Overview of the Package and Labeling Regulation”. We quickly added another webinar, “NIST Handbook 133 – Checking the Net Contents of Packaged Goods - Overview” to meet the needs of the states.

Due to the overwhelming interest and requests for training, we added additional dates and times to meet the demand. A total of twenty-six webinars were held from March to August. We were able to train nearly 1400 students from forty-three states.

Many Weights and Measures officials have taken OWM in-person, hands-on training, but this was their first time taking online training. For others, this was their first exposure to any type of OWM training. In addition, several states indicated that this was the first time that any of their officials have been able to participate in an OWM webinar. We continue to encourage you to spread the word with your co-workers to consider taking one of the many courses that OWM has to offer.

We also had many requests from industry and other interested parties. To help, OWM has temporarily suspended all webinar fees.

We are pleased to announce three NEW Webinars:

- **Weights and Measures Inspections - Evidence, Search and Seizure, and Due Process**

This 2.5-hour Webinar will provide an overview on how the U.S. Constitution, the Bill of Rights, Laws, and Court decisions control how weights and measures inspections must be conducted. You will learn about the powers and duties of the Director and the special police powers of an official, as outlined in NIST Handbook 130, Uniform Weights and Measures Law. Topics include a checklist for “opening” and “closing” an inspection; consent; search and seizures under the 4th Amendment of the U.S. Constitution; defining evidence and provide suggestions on collecting, protecting and using it to support enforcement actions evidence; enforcement actions and recommended compliance procedures; and model guidelines for the administrative review process. Multiple classes are to be offered starting September.

- **Method of Sale and Test Procedure for Packages of Animal Bedding**

This 2-hour Webinar will cover the different types of animal bedding, method of sale, test equipment, audit and test procedure, and documentation and evaluation of test results. Multiple classes are to be offered starting September.

- **Method of Sale and Test Procedure for Packages of Mulch and Soil Labeled by Volume**

This 2-hour Webinar will cover the different types of mulch and soil and how they are sold (method of sale), the labeling requirements, test equipment, sampling (and alternative sampling), test procedure, and evaluation of test results. Classes are expected to be made available in October/November.

A listing of all training can be found on the OWM Calendar of Events webpage (www.nist.gov/pml/weights-and-measures/about-owm/calendar-events).

Please routinely check this for new offerings and follow the instructions to request enrollment. Registration is required, since class sizes are limited. We encourage you and your staff to take advantage of these online learning opportunities and let us know how we can serve you better.

Please contact David Sefcik at david.sefcik@nist.gov or Lisa Warfield at lisa.warfield@nist.gov at (301) 975-4004 or OWM@nist.gov for additional assistance and information.

Professional Development Resources for Field Inspectors, Service Personnel, and Administrators

Byline: Tina G. Butcher

The NIST Office of Weights and Measures (OWM) has a mission to promote uniformity in U.S. weights and measures laws, regulations, and standards to achieve equity between buyers and sellers in the marketplace. Like many of you, the COVID-19 pandemic has required us to change the manner in which we deliver on our mission, at least in the short term. The purpose of this article is to highlight some of the OWM resources that are readily available to you on our website that may assist field inspectors and service personnel as well as weights and measures administrators in their continued professional development in the field of legal metrology. Upcoming Webinar training is discussed in other articles and listed on page 12 of this newsletter.

We are aware some jurisdictions have had to adjust their normal inspection and laboratory activities in response to COVID-19 restrictions on activities in their areas. OWM has a substantial amount of material readily available on our website. If the links provided don't work with a click, please copy and paste the web addresses into your browser. The resources are free to download, print, and share to best meet individual needs.

Online Training Materials:

The following is a link to a course on NIST Handbook 44 that is designed for use as a self-study. It describes the history, organization, and intended use of NIST Handbook 44. It also provides instruction on NIST Handbook 44 terminology; how to locate specific paragraphs; use of the National Conference on Weights and Measures Final Reports to understand the application of specific sections; and use of requirements in conjunction with the NIST Examination Procedure Outlines.

www.nist.gov/pml/weights-and-measures/legal-metrology-devices/training-materials

While this course is particularly relevant for newer inspectors, it is also valuable for more experienced inspectors to enhance their understanding and use of the NIST Handbook 44 and could also provide opportunities for discussion amongst field staff using web conferencing tools, if available. Note Chapters 2 to 5 of this course each include a quiz (along with answers) on the learning concepts covered in the chapter.

Online Videos:

We have a small number of videos illustrating field inspection and laboratory metrology procedures. On the topic of *field inspection*, a video on inspecting retail motor-fuel dispensers is available at the following link. This can be viewed as a continuous video in its entirety or you can view specific sections of the video to review certain parts of the inspection process such as how to properly wet the test standard or how to read the results on the standard.

www.nist.gov/pml/weights-and-measures/legal-metrology-devices/training-materials

In the area of *laboratory metrology*, we have a video which demonstrates calibration methods for volumetric standards using the volume transfer method. Select items 18 or 19 on the list at the following website for the video; various Standard Operating Procedures (SOPs) are available at the link as well:

www.nist.gov/pml/weights-and-measures/laboratory-metrology/standard-operating-procedures

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Professional Development Resources for Field Inspectors, Service Personnel, and Administrators (continued from page 8)

Newsletter Articles on Technical Topics:

NIST OWM staff have developed newsletter articles on a variety of technical topics over the years. Many of these articles are available for review or download on specific topics. Articles organized by topic area such as “weighing” or “packaging and labeling” or “metrology” or other technical areas can be found at the following address:

www.nist.gov/pml/weights-and-measures/weights-and-measures-newsletter-archives

Complete newsletters published from 2010 to present can be found at the following address:

www.nist.gov/pml/weights-and-measures/weights-and-measures-connection-newsletter-archive

Job Aids – NIST OWM Study Guides:

As we considered how inspectors and service companies might most efficiently access and make use of materials on our website for professional development, we realized it might be a bit time-consuming to sort through all the available information and identify those resources that are most relevant to a given area of inspection. For example, if an inspector or service person is looking for materials that can enhance and further his or her expertise in the area of small scales, what information on the NIST OWM web site might be of most use?

With this in mind we developed a new educational tool we refer to as a “Study Guide.” NIST OWM “Study Guides” are designed for use by weights and measures officials and service personnel to enhance and strengthen their knowledge of specific areas of legal metrology inspection and testing. As noted at the beginning of each study guide, these are not intended to be a comprehensive summary of *all* training and development opportunities recommended for inspectors working in a specific topic area. Rather, they are intended to help individuals in their professional development journey by targeting the use of information and resources available on the NIST OWM website.

This information might assist administrators and individuals in identifying resources and training opportunities as they create individual development plans for themselves or their staff and make associated assignments. We believe these study guides will be particularly ideal for use by individuals who are working remotely and are striving to enhance and strengthen their technical knowledge and can be used to assist inspectors, service personnel, and administrators in putting together a “study plan” for use in remote self-learning and as one of many resources referenced in the process of creating a comprehensive individual development plan. Each study guide can be tailored to the needs of an individual inspector or jurisdiction. These resources could be used to guide self-study activities or in conjunction with guidance from supervisors or administrators.

Below is a list of study guides NIST OWM has developed as of the date of this article:

- Grain Moisture Meters and NIR Grain Analyzers
- Measuring - Retail Motor-Fuel Dispensers
- Measuring – Large Meters
- Measuring - Liquefied Petroleum Gas Liquid-Measuring Devices
- Packaging and Labeling Inspections
- Weighing - Small Scales
- Weighing - Large Scales

You can find these study guides on our website at the following link:

www.nist.gov/pml/weights-and-measures/legal-metrology-devices/training-materials#studyguides

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Professional Development Resources for Field Inspectors, Service Personnel, and Administrators

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Included in each study guide are the following:

- An overview of resources available on the NIST OWM website, including self-study course material; videos; and newsletter articles and guidance documents on legal metrology issues.
- Suggestions for how each of these resources might be used for either independent, individual study or by groups of inspectors/service personnel led by an instructor or supervisor.
- Information on other training opportunities, including both online training and in-person instructor-led training and other resources for professional development.

Note that these study guides are intended for use in conjunction with other resources on the NIST OWM website, including NIST Handbooks 44, 130, and 133. We hope you find these guides useful. Please let us know if you have any questions about the guides or have ideas for improving upon them.

We welcome any suggestions for ways we can help you or your staff. Please contact me at tina.butcher@nist.gov or any of our technical staff using the technical contacts directory found on our website at:

www.nist.gov/pml/weights-and-measures/about-owm/staff-and-technical-experts-directory

Getting New Staff Ready for OWM Metrology Seminars

Byline: Micheal Hicks

All NIST OWM in-person metrology seminars (Fundamentals of Metrology, Mass, Volume, and Advanced Mass) have been temporarily suspended during the COVID-19 pandemic. NIST OWM is expecting to resume the onsite training as soon as permitted.

Introduction to New Online Course:

In the interim, OWM is offering a new online course: “Fundamentals of Metrology and Laboratory Auditing Program (LAP) Problems Preparation”. This course will be a four-week series of training webinars with supporting on-the-job training and associated homework. The course is for new Metrologists to ensure good measurement and laboratory practices are being followed, prepare those staff for the OWM seminars and proficiency tests, and enable staff to successfully complete the OWM LAP problems. This interim course is intended to give new metrologists the fundamentals and knowledge base required to operate with confidence in Mass Echelon III (**SOP 8**) and Volume Echelon II (**SOP 19**) measurement areas.

State laboratory Metrologists will still be required to complete the formal suite of in-person seminar courses (i.e., Fundamentals, Mass, and Volume), as required in the Program Handbook 143, Table 2, after the completion of the interim course to ensure appropriate hands-on training and demonstration of competency for all procedures covered in the core seminars. In addition, Handbook 143 requires new Metrologists to complete LAP problems within one year after the completion of the Fundamentals of Metrology Seminar to receive approved signatory status. For State laboratories in dire need of an additional staff member with approved signatory status, OWM will consider conditional signatory status after the successful completion of the interim course and the LAP Problems. Temporary conditional signatory status, if approved, will only be provided for Mass Echelon III (SOP 8) and Volume Echelon II (SOP 19) legal metrology measurement areas. The laboratory may submit the **Application_Conditional_Approved_Signatory** form to justify their need after successful completion of the course and LAP problems to be considered for conditional signatory status.

Getting New Staff Ready for OWM Metrology Seminars

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Mentor Requirements:

Metrologists interested in taking the “Fundamentals of Metrology and LAP Problems Preparation” course will require an onsite mentor in their laboratory. The mentor will be required to facilitate hands-on activities in the laboratory and guide the trainee through the laboratory’s quality system. If the registering lab is part of a NIST Handbook 143 program, the onsite mentor must have approved signatory status, meet the requirements on the **OWM_Mentor_Training_Requirements** form, and be committed to providing on the job training (OJT) to the trainee throughout the course. If from a public lab, the mentor must have taken NIST OWM seminars and commit to providing OJT to the trainee as outlined below. Before students are registered for the course, confirmation of mentor availability and commitment is essential. The mentor will have the following responsibilities, as outlined in the course agenda (www.nist.gov/news-events/events/2020/09/5673-fundamentals-and-lap-problems-preparation):

- Provide training on laboratory Quality Management System and SAPs, including Traceability hierarchies, Calibration certificate preparation and review; auditing, corrective and improvement action processes.
- Care and handling of standards and equipment in the laboratory (related to receipt and storage of submitted standards, operation of balances and standards, care and handling of laboratory standards).
- DEMONSTRATE Mass Echelon III (SOP 8) and Volume Echelon II (SOP 19) for (a) five 5 lb weights with a check standard and (b) a 5 gal test measure with a check standard to the trainee. All steps in the laboratory process from contract review to submitting a calibration certificate following the SOPs.
- Observe trainee demonstrating SOP 8 and SOP 19, entering and analyzing control chart data, comparing results between mentor and trainee, evaluation of uncertainty budget per the SOP, evaluation of the laboratory uncertainty files, and creation of calibration certificates.
- Full documented evidence of OJT must be maintained, should be reviewed and updated as needed and will be submitted to OWM. Sample forms will be provided by OWM.
- Measurement Results from the mentor and the trainee will be used in the course.

As noted above, the mentor will be required to demonstrate Mass Echelon III (SOP 8) and Volume Echelon II (SOP 19) measurement procedures with internal lab artifacts (5 x 5 lb weights and 5 gal TM). NIST held a Lab Metrology Information Hour (#5672) training on Tuesday, August 4 on best practices and resources available for OJT and mentoring. The review of this Info Hour training will be required for all mentors who were not able to attend and will have staff registered for the interim training course.

Summary:

The “Fundamentals of Metrology and LAP Problems Preparation” course is a four week long semester with webinars convening twice a week at 4 hour durations. Participants will be required to attend 100 % of the webinars and complete all homework assignments. There are currently 2 semesters of the course scheduled, one starting September 16, 2020 (Class #5673) and the other starting January 12, 2021 (Class #5674). All interested participants should register for the course in the OWM Contacts System (tsapps.nist.gov/WMD) as soon as possible. Please register for both semesters in case one has met its capacity. For additional information, please contact Mike Hicks at micheal.hicks@nist.gov.

Updated SP1020 Now Posted

Byline: Lisa Warfield

The OWM Laws and Metric Group is pleased to announce a new release for the NIST SP 1020, Guide for Labeling Consumer Package by Weight, Volume, Count, or Measure (length, area or thickness). This single guide replaces the older four-series SP1020 that had once appeared on our website and was used in training classes.

The SP 1020 is based on the Uniform Packaging and Labeling Regulation (UPLR) found in NIST Handbook 130, Uniform Laws and Regulation in the Areas of Legal Metrology and Fuel Quality. It provides a summary of labeling requirements for consumer products and commodities sold by weight, volume, count, or measure. This guide is not a replacement for the UPLR. The reader should refer to the UPLR to ensure that all requirements are met.

This redesigned publication allows the user to see all information in one publication. In addition, we have added a Table of Contents, Indexing, Federal labeling links, and graphics to assist the user. To be environmentally friendly we are not offering printed copies but this publication is available free of charge from: doi.org/10.6028/NIST.SP.1020.

Calendar of Events

OWM Webinar Events

Date	Event Name	Class
September 10, 2020	State Laboratory Annual Submission Process	5641
September 12, 2020	Metric System Education Resources	5676
September 15 to 17, 2020	Northeastern Measurement Assurance Program (NEMAP)	5625
September 16, 2020	Metric System Estimation	5678
September 16, 2020 to October 7, 2020	Fundamentals and LAP Problems Preparation	5673
September 26, 2020	Metric System Estimation	5675
September 29, 2020 to October 1, 2020	Southwest Assurance Program (SWAP)	5626
September 30, 2020	Metric System Education Resources	5679
October 6 to 8, 2020	MidAmerica Measurement Assurance Program (MidMAP)	5627
October 21, 2020	Measurement System Basics: SI & U.S. Customary Units for Regulator Officials	5668
January 12, 2021 to February 4, 2021	Fundamentals and LAP Problems Preparation	5674

Shown are OWM webinar events as of August 2020. Please refer to the OWM website for the most recent listing www.nist.gov/pml/weights-and-measures/about-owm/calendar-events.

To request training, visit the OWM Contacts System (tsapps.nist.gov/WMD).

Calendar of Events

Meetings

NCWM and Regional Associations		
September 28 to 30, 2020 (online)	Western Weights and Measures Association (WWMA)	westernwma.org
October 4 to 7, 2020 (online)	Southern Weights and Measures Association (SWMA)	www.swma.org
October 26 to 28, 2020, Springfield, IL	Central Weights and Measures Association (CWMA)	cwma.net
TBD	Northeastern Weights and Measures Association (NEWMA)	newma.us
January 10 to 12, 2021, St. Pete Beach, FL	NCWM Annual Meeting (Conclusion)	www.ncwm.com
January 13 to 15, 2021, St. Pete Beach, FL	NCWM Interim Meeting	www.ncwm.com
July 18 to 22, 2021, Rochester, NY	NCWM Annual Meeting	www.ncwm.com
September 2021, Golden, CO	Western Weights and Measures Association (WWMA)	westernwma.org
January 7 to 12, 2022, Tampa, FL	NCWM Interim Meeting	www.ncwm.com
OIML		
October 20 to 22, 2020 (online)	55th CIML Meeting	www.oiml.org/en

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