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REMINDER

**THE 99TH NATIONAL CONFERENCE ON
WEIGHTS AND MEASURES
ANNUAL MEETING
July 13 - 17, 2014**

The 2014 Annual Meeting will take place in Detroit, Michigan. Early Bird registration closes June 20, 2014. Information can be obtained on the NCWM website at <http://www.ncwm.net>. Register today and share your valuable experience and knowledge with the membership. Federal, state, county, and industry participation is welcome.

Contact: (402) 343-4880 or
info@ncwm.net

County of Los Angeles Agriculture Commission, Weights and Measures Hosts a Handbook 130, Packaging and Labeling Class

A five day Packaging and Labeling class was held in Arcadia, California, April 7 to 11, 2014. This five day class was taught by Office of Weights and Measures' (OWM) Laws and Metric Program staff members Lisa Warfield and David Sefcik. The class had 26 participants.

The objective of the class was to teach students how to interpret requirements under Handbook 130, *Uniform Laws and Regulations in the Areas of Metrology and Engine Fuel Quality*, Uniform Packaging and Labeling Regulation (UPLR) section. Students learned how to explain, demonstrate, and apply the UPLR to everyday packaging of consumer and non-consumer commodities, determine the appropriate method of sale for various products, and recognize and evaluate various package labelings in the marketplace.

This training is available to the states and can be requested through our office (email: owm@nist.gov). You can also check the Calendar in this newsletter or on the OWM website for other training opportunities that are currently being offered. OWM's website URL: <http://www.nist.gov/pml/wmd/>.



The Editor

HAVE YOU CHECKED OUT THE TRAINING CALENDAR?

Welcome to the Minecraft Measurement Units Video Challenge!

Byline: Mark Esser, NIST Public and Business Affairs Office

The NIST Public and Business Affairs Office has announced the **Minecraft Measurement Units Video Challenge** (<http://www.nist.gov/public-affairs/minecraft.cfm>). Your Challenge (should you choose to accept it) is to create one or more video clips in Minecraft that teaches others about what the seven units of the International System of Measurement (SI) are or why they are important in a fun way. Participants should post a link to your completed videos in the comments on the NIST **YouTube** channel (<http://youtu.be/SRjDOh6d7PQ>).

Rules:

- The total running length of each clip should be no longer than 20 seconds.
- Only one SI unit should be featured per clip.
- Videos must be G-rated.
- Do your own work, please.



The seven base **SI units** are (Link to this URL: <http://www.nist.gov/pml/wmd/metric/si-units.cfm>):

1. **Meter (m)**—length, used for measuring the distance between things;
2. **Second (s)**—time, there are 60 of them in a minute;
3. **Ampere (A)**—an amount of electric current, quite shocking;
4. **Candela (cd)**—brightness, the amount of useful light (light humans can see by) an object emits;
5. **Kelvin (K)**—temperature, this unit tells you how hot or cold something is;
6. **Kilogram (kg)**—mass, a measure of the amount of matter an object has, related to, but not the same as, weight; and
7. **Mole (mol)**—an Avogadro’s number’s worth of “entities,” like a chemist’s, as opposed to a baker’s, dozen (One mole of something has 6.022×10^{23} atoms or molecules.)

Good luck!

For more exacting definitions, see the NIST reference on constants, units, and uncertainty webpage (<http://physics.nist.gov/cuu/Units/>).

Calendar 2014

Registration for training in the NIST Office of Weights and Measures is handled by Yvonne Branden at yvonne.branden@nist.gov.

Course descriptions can be viewed on the Office of Weights and Measures website at <http://www.nist.gov/pml/wmd/calendar.cfm> and clicking on the name of the course.

May 19 - 22 (4 days)
Central Weights and Measures Association (CWMA) Annual Meeting
St. Louis, MO
Contact: Sherry Turvey at sherry.turvey@kda.ks.gov

May 22
NIST Training at the Central Weights and Measures Association (CWMA) Annual Meeting - Evaluating Performance, Learning Objectives, and Training Effectiveness for Managers
Class No. 5310
St. Louis, MO

June 2
Webinar - NISTIR 6969 - SOP 8, Part 1
10:00 a.m. to 12:00 p.m.
Class No. 5315

Webinar - Calibration Method Validation
2:00 p.m. - 4:00 p.m.
Class No. 5317

June 2 - 6 (5 days)
Liquefied Petroleum Gas Liquid-Measuring Devices Instructor Training
Class No. 5314
Las Cruces, NM

June 3
Webinar - NISTIR 7383 - SOP 18, Part 1
10:00 a.m. - 12:00 p.m.
Class No. 5319

June 3
Webinar - Software Verification and Validation
2:00 p.m. - 4:00 p.m.
Class No. 5318

June 4
Webinar - OWM and NVLAP Application (Submission) Processes
10:00 a.m. - 12:00 p.m.
Class No. 5330

Webinar - NISTIR 6969 - SOP 8, Part 2
2:00 p.m. - 4:00 p.m.
Class No. 5316

June 5
Webinar - Conducting an Effective Management Review
10:00 a.m. - 12:00 p.m. (*cont'd on pg 3*)

PLAN YOUR WEEK OF WEBINAR TRAINING NOW!

Byline: Elizabeth Gentry

Don't miss your chance to participate in the 2014 "Week of Webinars." Enroll today as registration deadlines begin three weeks before each event! Use the OWM Contact System (<https://tsapps.nist.gov/WMD/default.aspx>) to submit your training request. The current fee for these two-hour webinars is \$199 and confirmed participants will be provided a link to make a payment. Registration fees for weights and measures metrologists and regulatory officials are funded by NIST OWM. Pre-work assignments and payment are due two weeks prior to each webinar. Pre-work assignments will be provided to participants with the confirmation letter and instructors will provide log-in instructions before each event.

Who should attend? Laboratory staff who have responsibilities for developing, implementing, and/or improving the quality management system and/or technical system in their laboratory, as well as those who are seeking OWM recognition and/or accreditation or improvements to support recognition/accreditation will be interested in these courses. Most webinars are available for both state and non-weights and measures laboratory staff. Wednesday's OWM and NVLAP Application (Submission) Processes is open to weights and measures laboratory staff and administrators. Friday's Traceability Assessments for Weights and Measures is open to weights and measures field officials and administrators.

Learning event descriptions are available on the OWM Training Calendar (<http://www.nist.gov/pml/wmd/calendar.cfm>).

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Weights and Measures Historical Moment

DID YOU KNOW?

From the Report of the *Third Annual Conference on Weights and Measures of the United States*, May 16 and 17, 1907.

Looking at the past reports, one realizes that the concerns of 1907 are not much different from those of today. The desire to establish and publish "uniform" standards for use in the United States was very much on the minds of the early weights and measures officials that attended those first annual meetings. First concern was establishing a working structure, which was briefly hit upon in the last newsletter. This structure was necessary to create a cooperative and productive environment to work on developing measurement standards in a country made up of multiple jurisdictions under one giant umbrella of a "Nation." Early on, the realization of the importance to protect the consumer be it industry or the individual was a major concern for our country.

Dr. E. B. Rosa, Acting Director of the National Bureau of Standards began the first session of this third meeting inviting the attendees to take the opportunity to tour the various laboratories where weights and measures were tested and other laboratories as well. Dr. Rosa emphasized that much of the work carried out at the Bureau depended greatly on the standards of length and

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Class No. 5321

Webinar - NISTIR 7383 - SOP 18, Part 2
2:00 p.m. - 4:00 p.m.
Class No. 5320

June 6
Webinar - Uncertainty Budgets for SOP 14
10:00 a.m. - 12:00 p.m.
Class No. 5322

Webinar - Traceability Assessments for
Weights and Measures
2:00 p.m. - 4:00 p.m.
Class No. 5331

June 9 - 13 (5 days)
HB 133, Basic - Checking the Net Contents of
Packaged Goods
Class No. 5304
Williamston, MI

June 9 - 13 (5 days)
Laboratory Administration
Class No. 5291
NIST/Gaithersburg, MD

June 25 - 26 (2 days)
HB 130 - Price Verification
Class No. 5325
Hartford, CT

July 13 - 17 (5 days)
National Conference on Weights and Measures - Annual Meeting
Detroit, MI
Contact: info@ncwm.net

July 28 - 31 (4 days)
NCSLI Conference 2014
Orlando, FL
Contact: info@ncsli.org

August 11 - 15 (5 days)
HB 133, Basic - Checking the Net Contents
of Packaged Goods
Class No. 5313
Little Rock, AR

August 14
Webinar - Calibration Certificate Evaluation
2:00 p.m. - 4 p.m.
Class No. 5292

August 18 - 22 (5 days)
Volume Metrology Seminar
Class No. 5293
NIST/Gaithersburg, MD

August 20 - 21 (2 days)
NTEP Grain Analyzer Sector Meeting
Kansas City, MO
Contact: info@ncwm.net

August 21
Webinar - Contract Review
2:00 p.m. - 4 p.m.
Class No. 5301

August 26 - 28 (3 days)
NTEP Joint Meeting of: Weighing Sector
(Aug. 26 - 27) (2 days) & Software Sector
(Aug. 27 - 28) (2 days) - Atlanta, GA
Contact: info@ncwm.net *(cont'd on pg 4)*

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WEEK OF WEBINARS SCHEDULE

Date	Start Time (ET)	Webinar Title	Course Number	Instructor
06/02/2014	10:00 a.m.	NISTIR 6969 SOP8, Part 1	5315	Val Miller
06/02/2014	2:00 p.m.	Calibration Method Validation	5317	Georgia Harris
06/03/2014	10:00 a.m.	NISTIR 7383 SOP18/19, Part 1	5319	Val Miller
06/03/2014	2:00 p.m.	Software Verification Application	5318	Georgia Harris
06/04/2014	10:00 a.m.	OWM and NVLAP Application (Submission) Processes *NOT available for non-weights and measures participants	5330	Georgia Harris
06/04/2014	2:00 p.m.	NISTIR 6969 SOP 8, Part 2	5316	Val Miller
06/05/2014	10:00 a.m.	Conducting an Effective Management Review	5321	Elizabeth Gentry
06/05/2014	2:00 p.m.	NISTIR 7383 SOP 18/19, Part 2	5320	Val Miller
06/06/2014	10:00 a.m.	Uncertainty Budgets for SOP 14 (Gravimetric Volume Calibrations)	5322	Georgia Harris
06/06/2014	2:00 p.m.	Traceability Assessments for Weights and Measures *NOT available for non-weights and measures participants	5331	Carol Hockett

OWM Training Coordinator: Yvonne Branden at Yvonne.Branden@nist.gov, (301) 975-3272.

OWM Contact System: Isabel Chavez at Isabel.Chavez@nist.gov, (301) 975-2128

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mass. He elaborated on the work that was being done in the field of electricity to have a standard for measuring electricity. He stated:

As you know, the work carried on in the various departments here depends very much on the standards of length and mass, with which you are chiefly concerned. As, for example, in electrical work we do not have a standard ampere, in the same way that you have a standard meter, to measure electric current, but our electrical measurements depend fundamentally upon these same units of length and mass, with which you are concerned, in addition to that of time, so that when you fix a standard for measurement of electrical resistance, or other units, we are really basing them directly upon the unit of length and the unit of mass as well as the unit of time.

Your work, so far as I understand it, is concerned almost entirely with the measurement of length, mass, and volume, but there may come a time, in the not distant future, when it will be otherwise, possibly looking out also for electrical measurement. It does not seem to be practicable at once, but the testing of electrical measuring instruments is something of very great importance. The work before you is of interest and very great value. There is no doubt whatever that the States ought to get together in the matter of laws concerning weights and measures. It is not a credit to this country that trade should be carried on according to different standards in different States, and this body has within it the power to accomplish a great deal of good in securing uniformity in the laws throughout the country, if they are not observed, and this body has within it the power to stir up public sentiment to the end that the laws may be respected and observed, and enforced, when necessary, by penalties.

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August 28
Webinar - Document Control and Record Keeping
2:00 p.m. - 4 00 p.m.
Class No. 5299

September 8 - 11
Central Weights and Measures Association (CWMA) Interim Meeting
St. Charles, Missouri
Contact: info@ncwm.net

September 8 - 19 (2 weeks)
Mass Metrology Seminar
Class No. 5297
NIST/Gaithersburg, MD

September 14 - 18 (5 days)
Western Weights and Measures Association (WWMA) Annual Meeting
Portland, OR
Contact: Brett Saum at bsaum@co.slo.ca.us

NIST Training at the Western Weights and Measures Association (WWMA) Annual Meeting - Evaluating Performance, Learning Objectives, and Training Effectiveness for Managers
Class No. 5328
Portland, OR

October 3 - 4 (2 days)
NTEP Measuring Sector Meeting
Raleigh, NC
Contact: info@ncwm.net

October 4 - 8 (5 days)
Southern Weights and Measures Association (SWMA) Annual Meeting
Raleigh, NC
Contact: info@ncwm.net (cont'd on pg 5)

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Dr. Rosa continued to speak and this statement is noteworthy, "... it seems to me that this body can bring about measures which should result in great good throughout the country. We are behind other countries in this respect, and it ought not to be many years before the United States should be fully up to the advance made by the leading nations of the world in this particular." The desire and need to bring our Nation up to the standards of other countries was very much in Dr. Rosa's mind. He was well aware of the impact weights and measurement standards had on the ability to trade with other countries as well as on interstate commerce. So, you can see, the mission and the foundation for today's weights and measures programs were set at a very early point in the Conference's history. We continue to build on the foundation and expand the mission as technology that was once only a small glimmer has emerged. We continually arise to the challenges set before us with mutual cooperation from these United States.

Thank you for reading this "Historical Moment."

Linda Crown, Editor

In the Field

Is there a W&M topic that you would like to have appear in the *Weights and Measures Connection*?

How can we better serve our W&M community?

Do you have a safety tidbit to share?

Do you have a W&M event that you wish to post in the *Connection's* calendar?

Submissions can be sent to the Editor, Linda Crown at
Linda.Crown@nist.gov

WEIGHTS AND MEASURES IN THE NEWS

WANE-TV

Woman says gas station sold her water, not fuel

<http://wane.com/2014/04/23/woman-says-gas-station-sold-her-water-not-fuel/>

Aol.Autos.

This Gas Pump Malfunction May Be Costing You

<http://autos.aol.com/article/gas-pump-malfunction-pump-jump/?icid=maing-grid7|aim|d19|sec1.Ink3%26pLid%3D467287>

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October 5
NIST Training at the Southern Weights and Measures Association (SWMA) Annual Meeting

Evaluating Performance, Learning Objectives, and Training Effectiveness for Managers
Class # 5327
Raleigh, NC

October 15 - 16 (2 days)
Northeastern Weights and Measures Association (NEWMA) Interim Meeting
TBD
Contact: info@ncwm.net

October 19 - 23 (5 days)
Combined Regional Measurement Assurance Program*
Class No. 5157
St. Louis, MO

October 22 - 24 (3 days)
HB 130 - Packaging and Labeling
Class No. 5323
Fort Worth, TX

November 3 - 7 (5 days)
Fundamentals of Metrology
Class No. 5309
NIST/Gaithersburg, MD

November 4 - 7 (4 days)
HB 130 - Packing and Labeling
Class No. 5324
Lake Mary, FL

2015

January 18 - 21
National Conference on Weights and Measures Interim Meeting
Daytona Beach, FL
Contact: info@ncwm.net

January 26 - 30 (5 days)
Fundamentals of Metrology
Class No. 5329
NIST/Gaithersburg, MD

February 12
Webinar - Conducting an Effective Management Review
2:00 p.m. to 4:00 p.m.
Class No. 5295

February 26
Webinar - Internal Auditing Best Practices
2:00 p.m. to 4:00 p.m.
Class No. 5296

*Invitation Only

**Limited to State Laboratory Program Participants