

TDRM

TECHNICAL DIVISION ON
REFERENCE MATERIALS

Special points of interest:

- Virtual Meeting!
- EC Nominations!

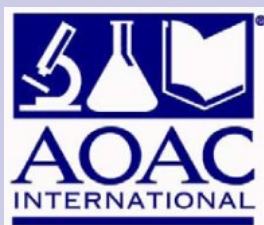
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Did you receive this
newsletter

from a colleague?

Interested in joining
TDRM?

Visit the [AOAC Website](#)
to learn more.



The Reference Standard

Issue 93

April 2026

Executive Committee's Message

Join us for an exciting opportunity to connect with TDRM! The TDRM Executive Committee is planning to hold a Virtual TDRM Members Meeting on **May 15, 2026 from 10:00 AM until 11 AM EDT**. TDRM members have been issued a registration invitation via Webex for this meeting. Please register as soon as possible. If you did not receive an invitation, please contact aoactdrm@proton.me.



TDRM Members circa 1992

This is will be our first large-scale online meeting, and we appreciate your patience as we navigate this new format together. This meeting will include updates from the elected officers and committee chairs, plus a featured presentation: "Vitamin B12 Measurement in Dietary Supplements by HPLC-ICP-MS" by Dr. Mesay M. Wolle, U.S. FDA Human Foods Program. See pages 2-3 for the presentation abstract and speaker biography.

To ensure clear audio quality, all attendees will be muted during presentations. During discussion periods, a host will unmute participants who wish to speak. You may also submit questions and comments via Chat, which a meeting host will read aloud to the group.

Meeting materials will be available for download during the presentation. For those unfamiliar with Webex, a 5-minute introduction to Webex tools used for this meeting will be covered before the meeting begins. For those unable to join early, please click on a brief list of [tips for using these tools](#).

This meeting represents an important step forward in how we can engage with our membership. We are working to make sure this meeting is a success, and with your support we expect that it will proceed smoothly. We hope that it will prove to be a useful tool for interaction with members in the future, such as for workshops or other meeting formats.

The invitation list will consist of members who have enrolled as of **April 1, 2026**. To confirm your TDRM division enrollment status, log into your AOAC account, select "My Participation" then scroll down to "Chapters and Sections" and look for TDRM.

Don't miss this chance to be part of our growing community. We look forward to your participation!

Abstract for the Virtual TDRM Members Meeting: Vitamin B12 Measurement in Dietary Supplements by HPLC-ICP-MS

Vitamin B₁₂ is comprised of multiple cobalt-containing tetrapyrrole complexes including cyano-, hydroxy-, methyl-, and adenosyl-cobalamin. It plays a key role in red blood cell formation and functioning of the brain and nervous system. Naturally occurring cobalamins are only found in animal-derived foods, including meat, eggs and dairy. Fortified foods and dietary supplements can be used to increase vitamin B₁₂ intake. Accurate quantification of all forms of vitamin B₁₂ is essential for verifying label claims and ensuring regulatory compliance. Traditional analytical techniques such as microbiological assays, radioisotopic methods, and spectrophotometry lack sufficient sensitivity and/or specificity to the different B₁₂ complexes. HPLC-ICP-MS provides both specific and independent measurement of each cobalamin structure, with robust elemental selectivity by quantifying the central cobalt atom. This presentation describes the development and single-laboratory validation of a HPLC-ICP-MS method for the specific, accurate, and reliable determination of vitamin B₁₂ in products marketed as dietary supplements.

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Guest Presenter for the Virtual TDRM Members Meeting: Dr. Mesay M. Wolle; U.S. FDA Human Foods Program

Dr. Mesay M. Wolle is a chemist within the Human Foods Program at the FDA. His expertise spans the areas of elemental and molecular speciation analysis and speciated isotope dilution mass spectrometry. In recent years, Dr. Wolle has focused primarily on development and validation of methods for measuring nutrients and species of toxic elements in infant formulas, foods and dietary supplements. He has authored several publications covering development, validation and application of analytical methods in a wide range of matrices. Additionally, Dr. Wolle serves as an editorial member and expert reviewer for several peer-reviewed journals. Dr. Wolle earned his PhD in Analytical Chemistry from the University of Oslo in Norway, and he holds an MSc in Analytical Chemistry from Addis Ababa University in Ethiopia. He completed his postdoctoral research at Duquesne University in Pittsburgh, PA.



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You may contact any member of the committee directly if you have questions. If you are interested in volunteering, or if you have any comments to share, please contact us.

Upcoming AOAC Meetings!

140th Annual Meeting & Exposition

Aug. 28 – Sept. 2, 2026
JW Marriott Indianapolis
Indianapolis, IN, USA

141st Annual Meeting & Exposition

Aug. 27 – Sept. 1, 2027
Sheraton Centre Toronto
Hotel
Toronto, Ontario Canada

Information Services Corner

Over the past year, the IS Committee has been focused on replacing Sharepoint as our primary tool for committee activity and member engagement. This transition has been slow and incremental, but we now have good file storage tools and interactive tools for members and publicly shared documents again. Wordpress has been updated for use by TDRM as an online interface. Documents that were presented publicly are now published or linked for access on the TDRM Wordpress site. The archival storage for TDRM documents has been organized and the majority of records have been transferred. Historical copies of records are maintained and public access records are linked for use in other documents or web pages.

Webex has been organized for TDRM Executive Committee meetings and for online meetings with the TDRM membership. Our first online meeting will be hosted in May. We hope to be able to use this service for other future online activities, such as workshops.

Without active participation and volunteered time and skills, we would not be able to fulfill our goals. I want to express great appreciation to the IS team for their willingness to dig into new efforts and the commitment to reach outcomes. Sean McClure has taken the lead role in organizing Wordpress, and Matilde Portnoy has taken the lead role in managing and utilizing Webex and Proton. We will introduce these tools to the membership during the May 15 virtual Members Meeting. To reach either Sean or Matilde, please send an email to aoactdrm@proton.me.

A database review committee has been initiated and will meet bimonthly beginning in April. The database has significant value, but without support for funding and volunteers with information management skills, this operation may be discontinued. Work to date, contributed by volunteers, will still be available to AOAC for organizing methods to interface with other databases. Clear, unambiguous identification of the specific attribute(s) being measured, along with assignment of a specific description of a matrix fitting with the scope of an OMA method, using a harmonized, well-organized trade reference, are the essential components of developing compatibility with other online sources of information.

If you have interest in volunteering to support any of these activities, please contact Donna Zink at dzink@aimresearchenterprises.com or at aoactdrm@proton.me. We offer a smile and gratitude as a paycheck, and we recognize that without volunteers, activities that support TDRM initiatives would not be possible.

Contributed by Donna Zink,
Information Services Chair

Nominations for 2026 TDRM Executive Committee Election

An AOAC TDRM Nominating Committee will soon be established to begin developing the slate for the 2026 Executive Committee election. The upcoming election will have three Elected Member positions to be filled. Please contact Sarah Aijaz at sarah.aijaz@milliporesigma.com if you would like to be considered for this or a future election, or to suggest a nominee; in the subject line of the email please state "2026 TDRM Nomination Request". The two Elected Members will serve three-year terms on the Executive Committee and vote on procedural matters. Executive Committee members also strive to uphold the mission statement of TDRM and advance the quality of analytical measurements through use of reference materials in validating or using analytical methods. Those who are interested in becoming

Executive Committee members through future elections are encouraged to attend the annual TDRM Member meeting and Executive Committee meetings to learn more about current goals and activities and to become better acquainted with other TDRM members. The last date to suggest a nominee for the current election is **Friday, May 15, 2026**. Once a slate is developed and presented to the Executive Committee, to be sure that the interests of TDRM are well-served, members will have the additional option of running by petition or as write-in candidates. Please see the AOAC TDRM Mission Statement and TDRM By-laws for more details.

Contributed by Sarah Aijaz,
Nominating Committee Chair

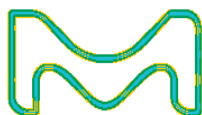
The last date to suggest a nominee for the current election is Friday, May 15, 2026

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The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the U.S. and Canada.

Inés Cereijo Student Award

TDRM sponsors a Student Award raising awareness of the need for method performance evaluation at an early point in a chemist's career. Because not all colleagues have research facilities or may only be involved in a short-term summer internship, nominees are evaluated based on a report describing either the use of a reference material for method performance evaluation or the development of a new reference material.

- Undergraduate and graduate students are eligible; award based on a report that evaluates the use of a reference material for a specific application; winner will receive in USD a \$1,000 prize; \$1,000 towards lodging; \$500 towards transportation; \$400 food, and a TDRM membership.
- Please visit the [AOAC Awards Program for TDRM](#).



TDRM Achievement Award

- Award recognizes an outstanding contribution to the use of reference materials in a unique or unusual manner or to the development of reference materials for laboratory use; nominations are based on a short statement describing the unique or significant contribution of the scientist or group of scientists using 150 words or less.
- Statements and up to 2 letters of support should be sent to sdbhandari1@gmail.com by **May 1, 2026**.



FREE ONLINE TRAINING COURSE

**EURM**
Estimation of uncertainties and the use of reference materials


European Commission

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The European Commission's Joint Research Centre launches a free interactive course on reference materials.

The Joint Research Centre is one of the leading global producers of reference materials in the fields of food and feed analysis, environmental analysis, engineering and health applications.

Quality of measurements is key in our daily life. Reference materials ensure useful, reliable and comparable results from different methods and laboratories.

Our new online training sessions will teach you how to use reference materials and how to estimate measurement uncertainties.

In this course, you will learn the basics why measurement uncertainties are important and how you can estimate them.

You will learn the role and importance of reference materials and how you can best select and use them.

Our interactive course will be complemented by practical exercises where you can apply and test your newly acquired knowledge.

You will be able to follow 8 modules:

Estimation of measurement uncertainty

This module explains what measurements uncertainty is and why is needed. You will learn how to estimate measurements uncertainty and will be get more details on the quantification procedure and whether it is a combination of uncertainty sources. At the end we show two options: the so-called bottom-up approach and the so-called top-down approach (use of validation data).

Use of CRMs to prove laboratory and method performance

This module provides the tools to understand how to make use of the added value of certified reference materials (CRMs) to prove laboratory and/or method performance.

Making the best use of RMs – This module presents how to get the best use out of reference materials and you will learn what sources of

information are available.

Use of CRMs in method validation – In this module, will be explained how to validate a new method and how to estimate the measurement uncertainty of its results.

Commutability of reference materials – After being acquainted with the validation of a new method and how to estimate the uncertainty of its measurements, in this module focus will be on the commutability of reference materials.

Selection of reference materials – In this module will be presented all the steps to consider when selecting a reference material.

Traceability of measurement results – In this module, will be explained the metrological traceability and its role for the comparability of measurement results. Furthermore will be described how certified reference materials or CRMs can be used to help you to make your results traceable.

The wrap-up – This last module provides an example of how this course can guide you through the processes in your laboratory practice.

This course is intended for practitioners working in laboratories that need to apply reference materials for statistical quality control, method validation and calibration and who need to assess measurement uncertainties on customer's demand or as requirement of the ISO/IEC 17025 standard. It can also be useful for ISO/IEC 17025 auditors who need to assess the estimation of measurement uncertainties and the correct application of certified reference materials.

Join EC-JRS's online course and boost your knowledge in reference materials and measurements!

Join freely the course wherever you are, whenever you want, and whatever device you want to use!

Register [here](#).

Enjoy the journey in the exciting world of measurement science!

Join the free interactive course on reference materials and measurement uncertainty!

Member Corner

Congratulations on your TDRM membership! Whether you are a new member or a returning member, we are happy to welcome you. As a member, you may be wondering how you can become more involved in the group. There are a number of ways to become involved with varying time commitments, please feel free to email any member of the board to discuss the opportunities (contact information on pages 9–10). A few examples include:

Attend our member meeting at the AOAC INTERNATIONAL Annual Meeting at the JW Marriott in Indianapolis, Indiana, USA, in August 2026. We will discuss our work from 2026 and our directions for 2027. This is a great opportunity to meet the TDRM leadership and make suggestions.

Donna Zink is looking for volunteers to help with the reference material database (<http://tdrmdb.aoac.org/>).

Propose a session for a national meeting or a local section meeting.

Run for office. Please contact Sarah Aijaz, Nominating Committee Chair, at sarah.ajiaz@milliporesigma.com, if you would like to be considered for a future election, or to suggest a nominee.

To learn more about TDRM and their [mission](#), please send an email to volunteer your ideas and skills or just to ask how you can be more involved.



Join TDRM on LinkedIn!
[Request Membership Here](#)

Reference Material Resources

Do you ever find yourself looking for basic information about reference materials? Look no further!

Ever wonder [how to compare a measurement result with a certified value](#) to determine if your method is appropriate? [What about how to use a reference material for calibration \(including examples\)?](#) Ever tried to figure out [how to use a reference material to establish traceability](#)? Wait, there's [more!](#) There is a discussion of using reference materials to quantify GMOs in [food and feed](#), and in [DNA copy number ratio](#). European Reference Materials (ERM) even provides a guide on [use of their certificates and materials](#), and the National Institute of Standards and Technology (NIST) has an excellent [Frequently Asked Questions](#) section where you can find a plethora of additional information. NIST also released [The ABCs of Using Standard Reference Materials in the Analysis of Foods and Dietary Supplements: A Practical Guide](#) in June 2014.

Additional RM Resources! The *Cooperation in publicly funded reference material production*, is a free, open access article available to download at <https://link.springer.com>. TDRM guidelines: Applications and Resources for Use of Reference Materials: [TDRM Guidelines](#).

Reference Materials in Analytical Chemistry

A recent topical collection on Reference Materials in Analytical Chemistry was published in May 2025 in the journal *Analytical and Bioanalytical Chemistry* (ABC), guest-edited by Kate Rimmer at National Institute of Standards and Technology (NIST), Gaithersburg, USA, and Håkan Emteborg at European Commission, Joint Research Centre, Geel, Belgium JRC. This comprehensive collection offers valuable insights for anyone interested in reference materials, with the editorial written by Emteborg providing an excellent summary of the contributing articles. The collection features numerous open access articles with graphical abstracts, making a wealth of information readily accessible to readers.

The [complete collection](#) and the [specific issue](#) provide comprehensive overviews of current developments in reference materials research and applications.

2025-2026 Executive Committee



Chair

2024-2026

Sneh Bhandari

Independent Contractor

sdbhandari1@gmail.com



Chair-Elect

2025-2026

Susan Audino

S. Audino @ Associates, LLC

Susan.audino@gmail.com



Treasurer

2025-2027

Sarah Aijaz

MilliporeSigma

aijazzarah@gmail.com



Secretary

2025-2027

Sean Giza

Eurofins

sean.giza@ft.eurofinsus.com



Elected Member

2026-2026

Patrick Low

Eurofins

Patrick.Low@eurofinsasia.com

ggutierrez@matrixsciences.com

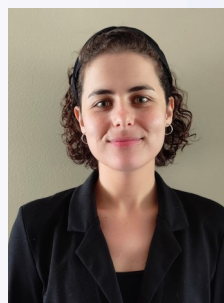
Elected Member

2024-2027

Elizabeth Mudge

NRC Canada

elizabeth.mudge@nrc-cnrc.gc.ca



Elected Member

2024-2027

Matilde Portnoy

USDA, AMS, Dairy Program

matilde.portnoy@dallasma.com

Elected Member

2025-2028

Sean McClure

Abbott Laboratories

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Elected Member

2025-2028

Toru Miura

Fuji Film Wako

Pure Chemical

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Appointed Member

Charles Barber

FDA HFP

(2024-2027)

charles.barber@fda.hhs.gov



Ancillary Appointed Positions**Information Services Chair**

Donna Zink, AIM Research Enterprises

ISO-REMCO Liaison

Pearse McCarron, NRC Canada

Advisor

Wayne Wolf, USDA (retired)

Newsletter Editor

Charles Barber, FDA HFP

Membership Chair

Vacant

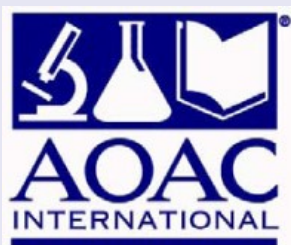
AOAC Support Positions

Deborah McKenzie

Email

sdbhandari@gmail.com

***if you are interested in becoming more
involved in the TDRM through the
Executive Committee.***



AOAC INTERNATIONAL expanded its mission statement "To promote quality measurements and method validation in the analytical sciences." Focus has increased on accuracy of analytical measurements generated by AOAC methods and the role of reference materials in verification of accuracy.

The Technical Division on Reference Materials (TDRM) further develops and maintains AOAC INTERNATIONAL's status as a recognized worldwide authority on methods validation and quality analytical measurements through facilitating the use of reference materials in collaborative validation, implementation, and routine use of AOAC methods.

AOAC INTERNATIONAL

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*Improving the Quality of Laboratory Measurements
through the use of Reference Materials*