

IEEE P2520.1 Working Group #26

Draft Meeting Minutes

18 September 2023

WG Chair: James Covington

WG Secretary: H. Troy Nagle

Call to Order

Chair called meeting to order at 10:03 AM EDT. He announced that the meeting was being recorded for the purpose of preparing minutes.

1. Roll Call and Disclosure of Affiliation

Affiliation FAQs: <http://standards.ieee.org/faqs/affiliation.html>

The Chair announced that participants can sign-in at this link:

https://docs.google.com/spreadsheets/d/1x3Le7jd_5h3bgiNcYMZIfjIbzE2XdE0U8Daon00O8Ks/edit#gid=0.

The Chair asked the Secretary to check for a quorum. The List of Participants is shown in **Attachment A**. A quorum was achieved (12 of the 16 voting members were present).

2. Approval of Agenda

The Chair asked for approval of the agenda. Troy Nagle made the motion; Fengchun Tian seconded. Without objection to unanimous consent, the motion was adopted.

3. Approval of Previous Meeting Minutes

Minutes for WG#25 were considered. The Chair asked for approval of the recently circulated minutes. Duke Oeba moved for approval; Fengchun Tian seconded. Without objection to unanimous consent, the motion was approved.

4. IEEE-SA Patent & Copyright Policies

a. Call for Patents

<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>

Per standard IEEE SA WG meeting practice, the Chair displayed the required policy regarding potentially essential patents. No one raised concerns for consideration.

b. Copyright Policy <https://standards.ieee.org/ipr/copyright-materials.html>

Per standard IEEE-SA WG meeting practice, the Chair displayed the required policy regarding copyrights. There were no questions or concerns.

5. Discussion on next steps for the standard and identifying tasks

The Chair opened the discussion on next steps and reviewed these tasks:

NEXT STEPS

- What tasks are left to complete the first draft?
 1. Completion of the methods section
 2. Completion/detailing of the reporting of testing
 3. Checking aspects of the standard for error
 4. Testing of the standard
 5. Editing and final submission
- **Ideally complete point 1-3 in 2023**
- **Some funds have been secured from IEEE – though the paperwork is considerable...**

The Chair will update the latest version of the standard and send us that document to review at the next meeting.

The Chair then summarized priorities for our testing protocols:

TESTING PROTOCOLS

- Need to generate testing protocol to allow evaluation of the standard
- May not be included in the P2520.1 standard
- Likely to be classified as a “Test Suite Specification” under the IEEE
- However, included comments in the main standard
- Six methods proposed

The Chair and the Secretary agreed to discuss the preparation of the needed Test Suite Specification (TSS) with IEEE-SA Staff before our next meeting. We need to resolve how the TSS will relate to our existing Standard and Methods Documents.

6. Discussion on methods of the standard

Next the Chair continued our ongoing discussion of our six Method descriptions. Concerns have been expressed about the variations in terminology used in the different Methods (written by different authors). Also, techniques to ensuring compliance with gas concentrations, humidity, and temperatures specifications are needed. To address these issues, the following outline of the Methods Document was suggested:

EXAMPLE METHODS TO BE INCLUDED

- Introduction
- Verification of Testing Conditions
- Method 1: Syringe autosampler
- Method 2: Positive pressure gas flow
- Method 3: Sample bags with barrel & negative pressure
- Method 4: Headspace collection
- Method 5: Permeation tubes
- Method 6: Point source

The WG then led a discussion of the elements needed for Verification of Testing Conditions. The Chair documented the discussion and generated this summary:

VERIFICATION OF TESTING CONDITIONS

- Existing Standards
 - Previous work related to this and review papers
- Environmental
 - Temperature/Humidity in the general environment
 - Measurements next to the EUT?
 - Calibrated unit? What do we accept as “calibrated”? Do we need to provide specification for this unit?
- Sample Concentration
 - Aliquot of sample before connection and introduction to the EUT.
 - Methods? GC-FID, GCMS, PID, SIFT-MS, FTIR,
 - Only ‘calibrated devices’ as a reference meter. Certified certificate?
- Temperature and Humidity
 - This is the temperature and/or humidity as it eludes from the experimental setup and before it enters the EUT. This should be monitored within the flow path (where applicable) or the method sample temperature should be checked before starting the experimental procedure.
 - Be aware that the humidity maybe affected by the concentrations of chemicals within the sample.
- Testing conditions
 - Depending on the test chemical heated transfer lines or elevated environmental conditions will be needed. However, it is recommended that transfer lines are kept as short as possible.

7. Any further updates on the standard

Stabilization was another topic that was proposed for inclusion somewhere in the Standard. This will be a topic at a future meeting. It was also announced that there is a new German standard for measuring indoor air quality that employs a methodology that might be helpful in some of our future P2520 odor monitoring standard series. They are testing 20 odorants.

8. New Business/Activities for the Next Meeting

There was no New Business. Actions items to be reviewed at the next meeting were summarized.

- a. The Chair will write the Introduction for the Methods Document, update the Methods descriptions based on our feedback, and circulate the revised Methods Document to the WG for discussion at our next meeting.
- b. The Chair and Secretary will clarify, with IEEE-SA staff, the requirements for the TSS document needed to secure the feasibility funding that has been promised.

9. Future Meetings

The Chair announced that the next meeting (WG#27) will take place on Monday, October 9, at 10:00 AM EDT.

10. Adjourn

The meeting time having ended, the Chair adjourned the meeting at 11:02 AM.

Attachment A: Participants (13)

NAME	AFFILIATION
Carlos Diaz	Ambiente et Odora
Christopher Jenson	Self
Duke Oeba	Egerton University, Kenya
Ehsan Danesh	Adsentec Ltd
Fengchun Tian	Chongqing University
Ettore Massera	ENEA
James Covington	University of Warwick
Krishna Persaud	University of Manchester
Radislav Potyrailo	GE Research
Saverio De Vito	ENEA
Susan Schiffman	North Carolina State University
Susana Palma	NOVA University of Lisbon
Troy Nagle	North Carolina State University