**IEEE P2520.1 Working Group #24**
Draft Meeting Minutes
6 June 2023
WG Chair: James Covington
WG Secretary: H. Troy Nagle

**Call to Order**
Chair called meeting to order at 10:06 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 (10 of the 16 voting members were present).

2. **Approval of Agenda**
   The Chair asked for approval of the agenda. Troy Nagle made the motion; Susan Schiffman seconded. Without objection to unanimous consent, the motion was adopted.

3. **Approval of Previous Meeting Minutes**
   Minutes for WG#23 were considered. The Chair displayed the circulated minutes and described some recent edits. Susan Schiffman moved for approval of the amended minutes; 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 scoring system for Level 2**
   The Chair displayed the scoring systems for Level 2 in the latest version of the standard (version 17.8). A new definition has been added for a Measurement Period Set (**MPS**). A **measurement** is the process of exposing the EUT to a specific chemical at a specific temperature setting and specific humidity setting (pressure is assumed to be constant). During a measurement period (**MP**), the three chemicals are measured by the EUT in a specified order. During the tests, the EUT is exposed to three successive MPs, each with a different order of exposure. These three MPs form an **MPS**.

Level 2 testing can be described in four sublevels. A **Day Complete Set** combines the measurements in LVL2-2 and LVL2-3. The sublevel tests are specified here:

LVL2-1: Standard temperature and standard humidity settings (1 MPS).
LVL2-2: Three different temperature settings, all at standard humidity (3 MPSs).
LVL2-3: Three different humidity settings, all at standard temperature (3 MPSs).
LVL2-4: Three Day Complete Sets, 3 days over a 5-day period (18 MPSs).

To pass a MPS, the EUT must correctly identify 8 of the 9 measurements. To pass LVL2-1, the EUT must pass 1 MPS. For LVL2-2 and LVL2-3, the EUT should pass all 3 MPSs. For LVL2-4, the EUT must pass 17 of the 18 MPSs. Note that the MPS data for LVL2-1 can also be used in LVL2-2 and LVL2-3.

The Chair reminder the WG that certification of the standard can be for specific sublevels of achievement. For example, certification of the EUT can be for LVL2-1, LVL2-2, LVL2-3, LVL2-2&3, or LVL2-4.

6. **Discussion on testing of the standard**

The Chair then continued the Methods Testing Protocols discussion from our last session. Currently we have seven Methods. A brief description of each method is under development. The following primary and secondary assignments were made at out last WG meeting:

- Method 1: Syringe autosampler – JAC/Sandrine
- Method 2: Positive pressure gas flow – JAC/Saverio
- Method 3: Sample bags with negative pressure – Fengchun/Carlos
- Method 4: Sample bags with barrel – Krishna/JAC
- Method 5: Headspace collection – Saverio/JAC
- Method 6: Permeation tubes – JAC/Troy
- Method 7: Point source – Susan/Krishna

Each method description should have the following sections: Context of Method, Overview of Method, Sample Collection, Temperature Control, Humidity Control, and Preconcentration. To date, drafts are underway for all seven Methods. The difference between Methods 3 and 4 needs more clarification.

7. **New Business/Activities for the Next Meeting**

There was no New Business. More discussion of the Method descriptions will be undertaken at our next meeting. The Chair announced that the next meeting (WG#25) will take place on Tuesday, July 11, at 10:00 AM EDT.

8. **Adjourn**

The hour having passed and without objection to unanimous consent, the Chair adjourned the meeting at 11:00 AM.

## **Attachment A:** Participants (13)

| NAME | AFFILIATION |
|---|---|
| Carlos Diaz | Ambiente et Odora |
| Christopher Jenson | Self |
| Ciril Reiner-Rozman | Chirozan Φ Consulting |
| Ehsan Danesh | Adsentec Ltd |
| Fengchun Tian | Chongqing University |
| James Covington | University of Warwick |
| Krishna Persaud | University of Manchester |
| Palash Kaushik | NOZE, Canada |
| Patrik Aspermair | NOSI, Austria |
| Sandrine Isz | Alpha-MOS |
| Saverio De Vito | ENEA |
| Susan Schiffman | North Carolina State University |
| Troy Nagle | North Carolina State University |