



CCQM Workshop on Particle Metrology

ACTION ITEMS

29 March 2023

The CCQM Workshop on Particle Metrology was held virtually 25 through 27 October 2022. For each of the three days, there were approximately 130 attendees, including those giving presentations and leading discussions, with a good mix of representation from the CCQM and stakeholders. The workshop agenda, presentations, and other information from the workshop can be found on the workshop website at

<https://www.bipm.org/en/committees/cc/ccqm/wg/ccqm-ws/2022-10-25>.

To summarize, the workshop comprised a plenary session on the first day, three breakout sessions on the second day, and a second plenary session on the third day. The breakout sessions focused on three matrix types in which particles are often measured:

1. Particles suspended in air or other gases
2. Particles suspended in water or other liquids
3. Particles in biological materials and pharmaceuticals

No restrictions were placed on the types, sizes, or measurands of particles to be considered.

During the second plenary session, each of the breakout groups reported on their discussion held on the second day. These reports are found on the workshop website, clearly labeled as “Report from Breakout Group X.” The purpose of the present document is to provide the precise actions that are recommended based on these breakout reports and the workshop discussions. The recommended actions that follow have been developed in consultation with the CCQM Executive Secretary and workshop steering group:

- **ACTION ITEM #1:** Create a task group within the CCQM Gas Analysis Working Group (GAWG) to engage with stakeholders and address focused challenges. Details about potential engagements, challenges, and activities are found in CCQM-WS/2022-19 (Particles in Gas – Report from Breakout Group 1) on the workshop website.

- **ACTION ITEM #2:** Create a task group within the CCQM to foster communication between communities, consider interlaboratory comparisons, harmonize protocols, and provide sample preparation guidance, among other tasks. Engagement with VAMAS should be useful. Details regarding measurement gaps and other topics are found in CCQM-WS/2022-20 (Particles in Liquids – Report from Breakout Group 2) on the workshop website. Because most of the CCQM activity for particles suspended in liquids will likely remain within the Inorganic Analysis Working Group (IAWG) and the Surface Analysis Working Group (SAWG), it is recommended that this task group be set up as a joint IAWG/SAWG task group. If other CCQM working groups need to become involved, adjustments can be made.

- **ACTION ITEM #3:** Create a task group within the CCQM Cell Analysis Working Group (CAWG) to engage with stakeholders, improve communication and knowledge sharing, and encourage development of documentary standards. Details about possible directions are found in CCQM-WS/2022-21 (Bioparticles – Report from Breakout Group 3) on the workshop website.