Bureau International des Poids et Mesures

CCQM Workshop on Advances in Metrology in Chemistry and Biology
9-10 April 2019

Venue: Pavillon du Mail, BIPM, Sèvres, France.

Day 0: Tuesday 9 April 2019

Poster Session and Reception

17.00-19.30 Poster Session and Reception (32 posters)

Day 1: Wednesday 10 April 2019

CCQM Workshop on Advances in Metrology in Chemistry and Biology
Chair: *Willie E. May*

09.00-09.10 Opening Remarks *[Willie E. May]*

09.10-09.40 The History and achievements of CCQM *[Robert Kaarls]*
Link to YouTube (available later)

09.40-10.00 SI-traceable monoelemental solutions on the highest level of accuracy: from the foundation of CCQM to recent advances *[Anita Röthke, PTB]*
Link to YouTube (available later)

10.20-10.40 Determination of Absolute Isotope Amount Ratios of Lead Using a Primary Method of Full Gravimetric Isotope Mixture Mass Bias Correction Model by MC-ICPMS *[Lu Yang, NRC]*
Link to YouTube (available later)

10.40-11.20 Best Poster Award Presentation and Coffee Break

11.20-11.40 Potential Reference measurement procedures for Ferritin in human samples
[Claudia Swart, PTB]
Link to YouTube (available later)

11.40-12.00 Novel approaches for absolute determination of protein amount and active concentration by LC-CD and SPR *[Liqing Wu, NIM]*
Link to YouTube (available later)

12.00-12.20 Digital PCR for quantification of ganciclovir resistant human cytomegalovirus
[Mojca Milavec, NIB]
Link to YouTube (available later)

12.20-12.40 Quantification of genes by sequence-specific counting in capillary flowcytometry
[Inchul Yang, KRISS]
Link to YouTube (available later)

12.40-14.00 Lunch

14.00-14.20 Proliferative stem cell number per unit area (CCQM-197) *[Nilofar Faruqui, NPL]*
Link to YouTube (available later)

14.20-14.40 Absolute Thickness Measurement of nm Oxide Films by XPS and Length Unit Traceable Method *[Kyung Joong Kim, KRISS]*
Link to YouTube (available later)

14.40-15.00 Measurements of pH in strongly acidic media *[Narine Oganyan, VNIIFTRI]*
Link to YouTube (available later)

15.00-15.20 Recommendation of a consensus value of the ozone absorption cross-section at 253.65 nm based on literature review *[Joseph T. Hodges, NIST]*
Link to YouTube (available later)

15.20-16.00 Coffee Break

16.00-16.20 An FTIR method for accurate CO_2 concentration measurements with correction for differences in isotopic composition ($\delta^{13}C$ and $\delta^{18}O$) of gases *[Edgar Flores, BIPM]*
Link to YouTube (available later)

16.20-16.40 Gas metrology of the carbon isotopologues of carbon dioxide using accurate laser spectroscopy: Towards artifact-free absolute isotope amount ratios with traceability to the new SI *[Adam J. Fleisher, NIST]*
Link to YouTube (available later)

16.40-17.00 $\delta^{13}C$ assigned steroid hormone CRMs for anti-doping analysis *[Mark Lewin, NMIA]*
Link to YouTube (available later)

17.00-17.20 Development of nuclear magnetic resonance as a tool of quantitative analysis for organic materials *[Takeshi Saito, NMIJ/AIST]*
Link to YouTube (available later)

17.20-17.40 **Closing remarks**