



Scientific Workshop in Connection with Eurachem General Assembly 2022

**QUALITY ASSURANCE CHALLENGES OF MEASUREMENTS FROM FIELD TO LABORATORY WITH A FOCUS ON ISO/IEC 17025:2017 REQUIREMENTS**

**16-18 May 2022**

**Scientific Workshop Program**

Online Event

**Organized by Georgian Laboratory Association**



Supporting organisations:



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



Federal Department of Economic Affairs,  
Education and Research EAEK  
State Secretariat for Economic Affairs SSEO



Physikalisch-Technische Bundesanstalt  
National Metrology Institute



\*QUALITY & STATISTICS\*

## Scientific Workshop Program

**16 May 2022 - Monday**

Time	Lecture/Poster Title	Presenter
12:30 – 13:00 (GMT+4) 10:30 – 11:00 (CEST)	Entrance to the system/virtual conference room	
13:00 – 13:10 (GMT+4) 11:00 – 11:10 (CEST)	Opening remarks	<b>Nino Manvelidze</b> , Georgian Laboratory Association (GeLab)
<b>Session 1. Session Chair: <i>Isabelle Vercruyse (Belgium)</i></b>		
13:10 – 13:25 (GMT+4) 11:10 – 11:25 (CEST)	Eurachem – a focus for analytical chemistry in Europe	<b>Vicki Barwick (UK)</b> , Eurachem Chair
13:25 – 13:50 (GMT+4) 11:25 – 11:50 (CEST)	Activities of the Eurachem Education and Training Working Group	<b>David Milde</b> (Czech Republic)
13:50 – 14:15 (GMT+4) 11:50 – 12:15 (CEST)	Revision of Eurachem Guides in relation to ISO/IEC 17025 - Developments in the revision of ISO 15189	<b>Kyriacos Tsimillis</b> , <b>Sappho Michael</b> (Cyprus)
14:15 – 14:45 (GMT+4) 12:15 – 12:45 (CEST)	LUNCH BREAK	
<b>Session 2. Session Chair: <i>David Milde (Czech Republic)</i></b>		
14:45 – 15:10 (GMT+4) 12:45 – 13:10 (CEST)	Proficiency Testing (PT) – a tool to improve laboratory performance	<b>Brian Brookman (UK)</b>
15:10 – 15:30 (GMT+4) 13:10 – 13:30 (CEST)	Quality control activities in microbiological food testing including PT tests and the relevant interpretations	<b>Turkan Abbasova</b> (Azerbaijan)
15:30 – 15:45 (GMT+4) 13:30 – 13:45 (CEST)	<b>POSTER SESSION</b>	
	Poster 01. Total risk assessment in oil spill source identification using normalised methods requirements	<b>Ana Catarina Rocha</b> (Portugal)
	Poster 02. Sampling plan impact on the microbiological assessment of raw milk cheese	<b>Sophi Meladze</b> (Georgia)
	Poster 03. Sampling rules for the determination of organic compounds in water (drinking, underground and surface water)	<b>Natalia Niniashvili</b> (Georgia)
15:45 – 16:45 (GMT+4) 13:45 – 14:45 (CEST)	<b>PARALLEL BREAKOUT SESSIONS</b>	
	WG 1.1. Selection and use of certified reference materials	<b>Marina Patriarca (Italy)</b>
	WG 1.2. Proficiency Testing	<b>Brian Brookman (UK)</b>
16:45 – 16:50 (GMT+4) 14:45 – 14:50 (CEST)	SHORT BREAK	
16:50 – 17:10 (GMT+4) 14:50 – 15:10 (CEST)	Feedback from breakout sessions	
17:10 – 17:15 (GMT+4) 15:10 – 15:15 (CEST)	Closing of Day 1	

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**17 May 2022 - Tuesday**

Time	Lecture/Poster Title	Presenter
12:30 – 13:00 (GMT+4) 10:30 – 11:00 (CEST)	Entrance to the system/virtual conference room	
<b>Session 3. Session Chair: Vicki Barwick (UK)</b>		
13:00 – 13:25 (GMT+4) 11:00 – 11:25 (CEST)	Assessment of performance and uncertainty in qualitative chemical analysis: The Eurachem/CITAC Guide	<b>Ricardo Bettencourt da Silva</b> (Portugal)
13:25 – 13:50 (GMT+4) 11:25 – 11:50 (CEST)	Use of measurement uncertainty in compliance assessment	<b>Stephen Ellison</b> (UK)
13:50 – 14:15 (GMT+4) 11:50 – 12:15 (CEST)	Evaluating uncertainty for microbiological methods (approach in ISO 29201:2012 Water quality – The variability of test results and the uncertainty of measurement of microbiological enumeration methods)	<b>Bertil Magnusson</b> (Sweden)
14:15 – 14:40 (GMT+4) 12:15 – 12:40 (CEST)	Method validation - overview of accreditation requirements	<b>Lorens Sibbesen</b> (Denmark)
14:40 – 15:10 (GMT+4) 12:40 – 13:10 (CEST)	LUNCH BREAK	
<b>Session 4. Session Chair: Tamar Sachaneli (Georgia)</b>		
	<b>POSTER SESSION</b>	
15:10 – 15:25 (GMT+4) 13:10 – 13:25 (CEST)	Poster 04. Evaluation of the correlation of oceanic water parameters unmasked by representative sampling and sample analysis uncertainty	<b>Carlos Borges</b> (Portugal)
	Poster 05. Evaluation of the uncertainty of microplastics quantification in sediments: a bottom-up assessment	<b>Vanessa Morgado</b> (Portugal)
	Poster 06. Evaluation of measurement uncertainty by sampling on the example of determination of an active phosphorus compound in the soil in accordance with the requirements of ISO/IEC 17025:2017	<b>Ketevan Jibladze</b> (Georgia)
15:25 – 15:50 (GMT+4) 13:25 – 13:50 (CEST)	Planning method validation studies	<b>Vicki Barwick</b> (UK)
15:50 – 16:10 (GMT+4) 13:50 – 14:10 (CEST)	Validation and uncertainty estimation of HPLC method combined with ultrasound-assisted extraction procedure for quantitative determination of hesperidin obtained from citrus peel	<b>Imeda Rubashvili</b> (Georgia)
16:10 – 16:30 (GMT+4) 14:10 – 14:30 (CEST)	ISO/IEC 17025:2017 requirements for in-house methods and sampling errors during the validation process by GC-MS	<b>Ani Grigoryan</b> (Armenia)
16:30 – 16:50 (GMT+4) 14:30 – 14:50 (CEST)	From field to laboratory for scientific research (Challenges related to sampling and transportation)	<b>Nikoloz Shakulashvili</b> (Georgia)
16:50 – 16:55 (GMT+4) 14:50 – 14:55 (CEST)	Closing of Day 2	
16:55 – 17:10 (GMT+4) 14:55 – 15:10 (CEST)	How <b>QuoData – Quality &amp; Statistics</b> improves your measurement processes (Sponsor of the Scientific Workshop)	
17:10 – 17:40 (GMT+4) 15:10 – 15:40 (CEST)	<b>VIRTUAL NETWORKING SESSION</b> (sponsored by QuoData GmbH)	

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**18 May 2022 – Wednesday**

Time	Lecture/Poster Title	Presenter
12:30 – 13:00 (GMT+4) 10:30 – 11:00 (CEST)	Entrance to the system/virtual conference room	
<b>Session 5. Session Chair: Eugenia Totu (Romania)</b>		
13:00 – 13:25 (GMT+4) 11:00 – 11:25 (CEST)	Evaluation of the measurement uncertainty based on in-house validation data	<b>Ricardo Bettencourt da Silva</b> (Portugal)
13:25 – 13:50 (GMT+4) 11:25 – 11:50 (CEST)	Overview of uncertainty from sampling	<b>Mike Ramsey</b> (UK)
13:50 – 14:10 (GMT+4) 11:50 – 12:10 (CEST)	Difficulties of sampling petroleum products in non-standard conditions	<b>Teo Khuchua</b> (Georgia)
14:10 – 14:30 (GMT+4) 12:10 – 12:30 (CEST)	Sampling technique of graphene oxide-based nano metal composites and their influence on pathogenic microorganisms	<b>Giorgi Kvartskhava, Tamar Sachaneli</b> (Georgia)
14:30 – 14:50 (GMT+4) 12:30 – 12:50 (CEST)	Impact of soil sampling on results of laboratory analysis	<b>Giorgi Ghambashidze</b> (Georgia)
14:50 – 15:20 (GMT+4) 12:50 – 13:20 (CEST)	LUNCH BREAK	
<b>Session 6. Session Chair: Elina Bakradze (Georgia)</b>		
<b>POSTER SESSION</b>		
15:20 – 15:40 (GMT+4) 13:20 – 13:40 (CEST)	<u>Poster 07.</u> Water sampling process at city of Batumi Chaisubani water supply headwork from surface sources and centralized water supply system, quality research and evaluation of results (from water supply source to customer)	<b>Rusudan Tsintsadze</b> (Georgia)
	<u>Poster 08.</u> Surface water and soil sampling for arsenic content determination	<b>Sophio Khmiadashvili</b> (Georgia)
	<u>Poster 09.</u> Impact of soil sampling on phosphorus determination results	<b>Nino Shagidze</b> (Georgia)
	<u>Poster 10.</u> Assuring the quality on field and laboratory measurements in the context of the risk-based approach of ISO17025:2017	<b>Aristos Loucaides</b> (Cyprus)
<b>PARALLEL BREAKOUT SESSIONS</b>		
15:40 – 16:40 (GMT+4) 13:40 – 14:40 (CEST)	WG 2.1. Uncertainty & compliance assessment	<b>Stephen Ellison</b> (UK), <b>Bertil Magnusson</b> (Sweden)
	WG 2.2. Validation of sampling procedures	<b>Lorens Sibbesen</b> (Denmark), <b>Mike Ramsey</b> (UK)
16:40 – 16:45 (GMT+4) 14:40 – 14:45 (CEST)	SHORT BREAK	
16:45 – 17:05 (GMT+4) 14:45 – 15:05 (CEST)	Feedback from breakout sessions	
17:05 – 17:20 (GMT+4) 15:05 – 15:20 (CEST)	Closing of Day 3 Closing of the Scientific Workshop	

## POSTERS

Poster N	Poster Title	Country
01	<p><b>Total risk assessment in oil spill source identification using normalised methods requirements</b></p> <p><u>Ana Catarina Rocha</u>, Carla Palma, Ricardo J.N. Bettencourt da Silva            Contact e-mail: <a href="mailto:catarina.rocha@hidrografico.pt">catarina.rocha@hidrografico.pt</a></p>	Portugal
02	<p><b>Sampling plan impact on the microbiological assessment of raw milk cheese</b></p> <p><u>Sophi Meladze</u>, Tamar Sachaneli            Contact e-mail: <a href="mailto:sophi.meladze@gmail.com">sophi.meladze@gmail.com</a></p>	Georgia
03	<p><b>Sampling rules for the determination of organic compounds in water (drinking, underground and surface water)</b></p> <p><u>Natalia Niniashvili</u>            Contact e-mail: <a href="mailto:nniniashvili@gwp.ge">nniniashvili@gwp.ge</a></p>	Georgia
04	<p><b>Evaluation of the correlation of oceanic water parameters unmasked by representative sampling and sample analysis uncertainty</b></p> <p><u>Carlos Borges</u>, Carla Palma, Ricardo Silva            Contact e-mail: <a href="mailto:carlos.borges65@sapo.pt">carlos.borges65@sapo.pt</a></p>	Portugal
05	<p><b>Evaluation of the uncertainty of microplastics quantification in sediments: a bottom up assessment</b></p> <p><u>Vanessa Morgado</u>, Carla Palma, Ricardo Bettencourt da Silva            Contact e-mail: <a href="mailto:vmorgado@fc.ul.pt">vmorgado@fc.ul.pt</a></p>	Portugal
06	<p><b>Evaluation of measurement uncertainty by sampling on the example of determination of an active phosphorus compound in the soil In accordance with the requirements of ISO/IEC 17025:2017</b></p> <p><u>Ketevan Jibladze</u>            Contact e-mail: <a href="mailto:ketevanjibladze56@gmail.com">ketevanjibladze56@gmail.com</a>; <a href="mailto:samebalab@gmail.com">samebalab@gmail.com</a></p>	Georgia
07	<p><b>Water sampling process at city of Batumi Chaisubani water supply headwork from surface sources and centralized water supply system, quality research and evaluation of results (from water supply source to customer)</b></p> <p>Manana Grdzelishvili, Marina Lashkhauri, Ketevan Kiknadze, Nino Shubitidze, Nino Khevsuriani, Natia Odikadze, Ina Kavtaradze, <u>Rusudan Tsintsadze</u>            Contact e-mail: <a href="mailto:manana_1956@yahoo.com">manana_1956@yahoo.com</a></p>	Georgia
08	<p><b>Surface water and soil sampling for arsenic content determination</b></p> <p><u>Sophio Khmiadashvili</u>, Nodar Poporadze, Marine Arabidze, Elina Bakradze, Gulchina Kuchava, Gela Sandodze, Lia Aptsiauri            Contact e-mail: <a href="mailto:sofoars77@yahoo.com">sofoars77@yahoo.com</a></p>	Georgia

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09	<b>Impact of soil sampling on phosphorus determination results</b> <u>Nino Shagidze</u> , Elene Sordia Contact e-mail: <a href="mailto:sordiaelene10@gtu.ge">sordiaelene10@gtu.ge</a>	Georgia
10	<b>Assuring the quality on field and laboratory measurements in the context of the risk-based approach of ISO17025:2017</b> <u>Aristos Loucaides</u> , Christie Stylianou, Niki Wilkinson, Louisa Christodoulou Contact e-mail: <a href="mailto:info@arislabs.com">info@arislabs.com</a>	Cyprus