



COMMISSION II - « OENOLOGY »

SUB-COMMISSION “METHODS OF ANALYSIS”

Proceedings report of the 67th session

Date: 05/04/2024 – 06/04/2024

Place: Salle de Flore, Palais des Ducs de Bourgogne, 1 Rue Rameau,
21000 Dijon, France and video conference Kudo

**AGENDA¹**67th SessionFriday 5th April 2024

9:00 – 13:00 and 14:30 – 18:30 (UTC+1) (Paris Time)

and Saturday 6th April 2024:

9:00 – 13:00 and 14:30 – 16:30 (UTC+1) (Paris Time)

Place : Salle de Flore, Palais des Ducs de Bourgogne, 1 Rue Rameau, 21000 Dijon, France

and video conference platform Kudo

5 th April 2024				
No.	Topic	Reference Document	Ref. OIV WP	Time available ²
1.	Adoption of the agenda	CII-SCMA 2024-04 OJ		2 min 9:00-9:02
2.	Approval of the proceedings report for the 66 th session	CII-SCMA 2023-09 CR		2 min 9:02-9:04
3.	Information from the OIV Secretariat	CII-SCMA 2024-04 03		3 min 9:04-9:07

¹ Topics that delegations wish to add in accordance with the 2023 work programme, will be discussed under the item "proposals for future work". In that regard, the filled project presentation document must be returned to the OIV Secretariat with the working documents on the topic in question at least **15 days** before the date of the OIV meetings, therefore before **Monday March 18, 2024**, so that the delegates and experts may read them carefully. Failing this, the subject will not be presented during the meeting.

Warning: Taking into account the logistical and technical imperatives linked to the organisation of videoconferences, delegates and experts who plan to provide a document or make a presentation in accordance with the agenda are requested to do so **no later than Monday March 18, 2024**. Otherwise, it will be technically impossible to share their document or presentation via the videoconference system.

² The time available for each point will be evaluated taking into account the number of official comments submitted by **March 9, 2024** and the accompanying documents submitted by **March 18, 2024**.



4.	Information presented to the Group by the Commission and/or other OIV commissions, sub-commissions, or expert groups	CII-SCMA 2024-04 04		3 min 9:07-9:10
Review of preliminary draft resolutions in step 5				
5.	Determination of the ethanol in grape juice, reconstituted grape juice, concentrated grape juice and nectar - Observations at step 5	OENO-SCMA 19-662B OENO-SCMA 19-662B add1	87.02	40 min 9:10-9:50
6.	Determination of total acidity in grape juice, reconstituted grape juice, concentrated grape juice and nectar - Observations at step 5	OENO-SCMA 19-662G OENO-SCMA 19-662G add1	87.07	40 min 9:50-10:30
7.	Determination by isotope ratio mass spectrometry ¹³ C/ ¹² C of ethanol obtained through the fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar - Observations at step 5	OENO-SCMA 19-662J OENO-SCMA 19-662J add1	87.10	40 min 10:30-11:10
20 min Coffee break 11:10-11:30				
8.	Analysis of mineral elements in grape juices, reconstituted grape juice, concentrated grape juices and nectars using ICP-AES (inductively coupled plasma / atomic emission spectrometry) - Observations at step 5	OENO-SCMA 19-662K OENO-SCMA 19-662K add1	87.11	40 min 11:30-12:10
9.	Certificates of Analysis - Observations at step 5	OENO-SCMA 21-712A OENO-SCMA 21-712A add1	176.1	60 min 12:10-13:10
10.	Certificates of Analysis Part 2 - Observations at step 3 - Presentation of a study related to nutritional information	OENO-SCMA 21-712B OENO-SCMA 21-712B add1 CII-SCMA 2024-04 10	176.2	
80 min Lunch break 13:10-14:30				
11.	OIV Research Grant Development of an analytical NMR method for spectroscopy of 2H-nuclei for quantification of isotopic composition of water in grape musts and wines, taking into	CII-SCMA 2024-04 11		30 min 14:30-15:00



	account the reasonable impact of climatic factors as well as the effect of modern technologies of alcohol reduction allowed for use in wine production - <i>Communication by Ivlev Vasily</i>			
Review of preliminary draft resolutions in step 3				
12.	Determination of total sulfur dioxide in concentrated grape juice - <i>Observations at step 3</i>	OENO-SCMA 19-662D OENO-SCMA 19-662D add1	87.04	40 min 15:00-15:40
13.	Determination of Density and Specific gravity at 20°C in grape juice, reconstituted grape juice, concentrated grape juice and nectar - <i>Observations at step 3</i>	OENO-SCMA 19-662E OENO-SCMA 19-662E add1	87.05	30 min 15:40-16:10
20 min Coffee break 16:10-16:30				
14.	Determination of the deuterium distribution in ethanol derived from fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar by application of nuclear magnetic resonance (SNIF-NMR/RMN-FINS) - <i>Observations at step 3</i>	OENO-SCMA 19-662I OENO-SCMA 19-662I add1	87.09	40 min 16:30-17:10
15.	Wine – determination of relative ratio of non-exchangeable hydrogen and deuterium atoms in ethanol obtained through the fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar by means of instrumental technique EIM – IRMS - <i>Observations at step 3</i>	OENO-SCMA 21-688 OENO-SCMA 21-688 add1	82	50 min 17:10-18:00
16.	Protocol for the method for the determination of the addition of water in wine <i>Information by the working group</i>	CII-SCMA 2024-04 16	214	
17.	Update “Determination of residual alcohol content in vinegars” <i>Observations at step 3</i>	OENO-SCMA 23-724 OENO-SCMA 23-724 add1	85.1	40 min 18:00-18:40
6th April 2024				



18.	Method “Determination of D(-) tartaric acid in wine by 2D-LC” <i>Observations at step 3</i>	OENO-SCMA 23-725 OENO-SCMA 23-725 add1	215.2	40 min 9:00-9:40
19.	Enzymatic method for the analysis of fumaric acid in wine <i>Observations at step 5</i>	OENO-SCMA 22-719 OENO-SCMA 22-719 add1	244	20 min 9:40-10:00
Work underway				
20.	Principle of 'green analytical chemistry' for the adoption and the classification of methods of analysis - <i>Communication by Portugal</i>	CII-SCMA 2024-04 20	80	20 min 10:00-10:20
21.	Method for the determination of polydimethylsiloxane - <i>Communication by Portugal</i>	CII-SCMA 2024-04 21	90.1	20 min 10:20-10:40
22.	Practical guide for method validation, quality control and uncertainty assessment Protocol for the design, conducts and interpretation of collaborative studies <i>Information by the working group</i>	CII-SCMA 2024-04 22	84 and 78	20 min 10:40-11:00
20 min Coffee break 11:00-11:20				
23.	Principles of good regulatory practice for the application of compositional limits and requirements for laboratory analysis of wine - <i>Information by the working group</i>	CII-SCMA 2024-04 23	85.2 and 76	20 min 11:20-11:40
24.	Determination of free and conjugated quercetin content in wines - <i>Communication by Italy</i>	CII-SCMA 2024-04 24	298	10 min 11:40-11:50
25.	OIV LABWORK project <i>Update from OIV Secretariat</i>	CII-SCMA 2024-04 25	144	20 min 11:50-12:10
26.	Speciation of Arsenic, Lead and Mercury <i>Communication by France</i>	CII-SCMA 2024-04 26	83	20 min 12:10-12:30
27.	Analytical method for the determination of strontium isotopic ratio ($^{87}\text{Sr}/^{86}\text{Sr}$) in wines (Method type IV) <i>Communication by Portugal</i>	CII-SCMA 2024-04 27	299	20 min 12:30-12:50
90 min Lunch break 12:50-14:20				
28.	OIV Definition and General principles on the concept of De minimis <i>Observations at step 3</i>	OIV-CST 23-742 OIV-CST 23-742 add1	181.1	20 min 14:20-14:40



29.	A guideline for establishing and managing Type IV analytical methods - <i>Communication by France</i>	CII-SCMA 2024-04 29	300	20 min 14:40-15:00
30.	Determination of sorbic and benzoic acid content in grape juice, reconstituted grape juice, concentrated grape juice, and grape nectar by the use of high-performance liquid chromatography - <i>Communication by Brazil</i>	CII-SCMA 2024-04 30	301	20 min 15:00-15:20
31.	Method for determination of volatile compounds in spirituous beverages of vitivinicultural origin using contained ethanol as a reference substance - <i>Communication by Russia</i>	CII-SCMA 2024-04 31	308	20 min 15:20-15:40
32.	Update “Determination of density and specific gravity of wine” (OIV-MA-AS2-01) <i>Information by the working group</i>	CII-SCMA 2024-04 32	302	20 min 15:40-16:00
Proposals for future work				
33.	Assay of pesticide residues in wine without extraction <i>Proposal by Brazil</i>	CII-SCMA 2024-04 33		15 min 16:00-16:15
Any other business				
34.	Data & Analysis <i>Communication by France</i>	CII-SCMA 2024-04 34		15 min 16:15-16:30



SUMMARY SHEET OF THE WORK OF THE SUB-COMMISSIONS AND EXPERT GROUPS

Sub-commission: « Methods of Analysis »

Date: 05/04/2024

Number of experts: 19 (present) + 79 (KUDO) = 98

Number of countries: 9 (present) + 23 (KUDO)

Number of observers: 1 (present) + 1 (KUDO)

Number of people invited: 1(KUDO)

Date: 06/04/2024

Number of experts present: 21 (present) + 56 (KUDO) = 77

Number of countries: 12 (present) + 23 (KUDO)

Number of observers: 1 (present)

Number of people invited: 0

I/ Resolutions

Document	Step	Subject	Follow up (step of the procedure)
OENO-SCMA 19-662B	5	Determination of the ethanol in grape juice, reconstituted grape juice, concentrated grape juice and nectar	The resolution remained at step 5 , taking into consideration the comments of Member States. An interlaboratory trial will be made to validate the method, Italy will coordinate the work, Brazil, Spain, Germany and Austria will participate. The SCMA requested clarification on definitions of grape must and grape juice by CST and DROCON, as recommended by Germany.
OENO-SCMA 19-662G	5	Determination of total acidity in grape juice, reconstituted grape juice, concentrated grape juice and nectar	The resolution remained at step 5 , taking into consideration the comments of Member States. The validation will be made on the same matrix. Italian delegation will contribute to the work.
OENO-SCMA 19-662J	5	Determination by isotope ratio mass spectrometry $^{13}\text{C}/^{12}\text{C}$ of ethanol obtained through the fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar	The resolution remained at step 5 , taking into consideration the comments of Member States.



OENO-SCMA 19-662K	5	Analysis of mineral elements in grape juices, reconstituted grape juice, concentrated grape juices and nectars using ICP-AES (inductively coupled plasma / atomic emission spectrometry)	The resolution moved to step 7 , taking into consideration the comments of Member States.
OENO-SCMA 21-712A	5	Commonly used Analytical Parameters for Wines and Sparkling Wines	The draft resolution was amended during the meeting, taking into consideration the comments of Member States. The resolution moved to step 7 .
OENO-SCMA 22-719	5	Enzymatic method for the analysis of fumaric acid in wine	The resolution remained at step 5 , taking into consideration the comments of Member States.
OENO-SCMA 21-712B	3	Use of analytical parameters in the certification of compliance of wines and sparkling wines – Certificates 2 and 3	The Group decided to withdraw the resolution . The Spanish delegation made a presentation about nutritional values of wines. SCMA recommends that The parameters regarding nutritional information and microbial safety will be discussed with competent experts in C-III, and the Micro expert group and C-IV.
OENO-SCMA 19-662D	3	Determination of total sulfur dioxide in concentrated grape juice	The resolution moved at step 5 , taking into consideration the comments of Member States.
OENO-SCMA 19-662E	3	Determination of Density and Specific gravity at 20°C in grape juice, reconstituted grape juice, concentrated grape juice and nectar	The resolution remained at step 3 , taking into consideration the comments of Member States.
OENO-SCMA 19-662I	3	Determination of the deuterium distribution in ethanol derived from fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar by application of nuclear magnetic resonance (SNIF-NMR/RMN-FINS)	The resolution remained at step 3 , taking into consideration the comments of Member States. A survey of NMR capabilities by members' laboratories was developed, it will be reviewed by the eWG and sent out to SCMA members.
OENO-SCMA 21-688	3	Wine – determination of relative ratio of non-exchangeable hydrogen and deuterium atoms in ethanol obtained through the fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar by means of instrumental technique EIM – IRMS	The resolution remained at step 3 , taking into consideration the comments of Member States.



OENO-SCMA 23-724	3	Update “Determination of residual alcohol content in vinegars”	The resolution moved to step 5 , taking into consideration the comments of Member States.
OENO-SCMA 23-725	3	Method “Determination of D(-) tartaric acid in wine by 2D-LC”	The resolution moved to step 5 , taking into consideration the comments of Member States.
OIV-CST 23-742	3	OIV Definition and General principles on the concept of De minimis	The resolution remained at step 3 , taking into consideration the comments of Member States and the pending discussions at CST.

II/ Questions from the Strategic Plan

Ref SP	Theme and treatment	Follow up
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III/ Request for additional information or opinion (statistics, economy, legal, technical, health)

Information	Source
Definitions	SCMA
Request	Recipient
SCMA request clarification on definitions of grape must and grape juice.	CST and DROCON

IV Presentations other than point II

Document	Country/W G	Subject	Follow up
CII-SCMA 2024-04 11	OIV Research Grant	Development of an analytical NMR method for spectroscopy of 2H-nuclei for quantification of isotopic composition of water in grape musts and wines, taking into account the reasonable impact of climatic factors as well as the effect of modern technologies of alcohol reduction allowed for use in wine production	The research grant work has been completed.
CII-SCMA 2024-04 16	eWG	Protocol for the method for the determination of the addition of water in wine	The Serbian delegation who coordinates the coordinates the eWG made a presentation. The eWG was closed and the item was withdrawn from the working programme .



CII-SCMA 2024-04 20	Portugal	Principle of 'green analytical chemistry' for the adoption and the classification of methods of analysis	<p>The Portuguese delegation made a presentation. The Group reviewed the possibility to amend OIV-MA-INT 04 to include green analytical chemistry principles. The topic was kept in the agenda for 2025.</p> <p>The SCMA Vice -President recommended to consider including analytical sustainability principles in the new OIV Strategic Plan, and/or to amend in the Compendium OIV-MA-INT 04 'Principles Layout and wording of OIV method of analysis' to include green analytical chemistry principles.</p>
CII-SCMA 2024-04 21	Portugal	Method for the determination of polydimethylsiloxane	<p>The Portuguese informed the Group about the method which was proposed in 2019. This method needs validation, a call will be sent out to potentially interested laboratories.</p> <p>OIV Secretariat will reach out to the experts working on NMR techniques, and Oenoppia and cork producers.</p>
CII-SCMA 2024-04 22	eWG	Practical guide for method validation, quality control and uncertainty assessment Protocol for the design, conducts and interpretation of collaborative studies	<p>The French delegation who coordinates the coordinates the eWG made a presentation.</p> <p>The eWG will continue their work.</p>
CII-SCMA 2024-04 23	eWG	Principles of good regulatory practice for the application of compositional limits and requirements for laboratory analysis of wine	<p>The French delegation who coordinates the coordinates the eWG made a presentation.</p> <p>The Group drafted a document on the topic that will be presented in the next meeting with a project presentation document.</p>
CII-SCMA 2024-04 24	Italy	Determination of free and conjugated quercetin content in wines	No presentation was made. The topic was kept in the agenda for 2025.
CII-SCMA 2024-04 25	eWG	OIV LABWORK project	The OIV Secretariat presented the topic. A trial round will be made for the inter-laboratory validation of determination of the ethanol in grape juice.
CII-SCMA 2024-04 26	France	Speciation of Arsenic, Lead and Mercury	No presentation was made. The topic was withdrawn from the working programme .
CII-SCMA 2024-04 27	Portugal	Analytical method for the determination of strontium isotopic ratio ($^{87}\text{Sr}/^{86}\text{Sr}$) in wines (Method type IV)	The resolution moved to step 3 .
CII-SCMA 2024-04 29	France	A guideline for establishing and managing Type IV analytical methods	<p>The French delegation who coordinates the coordinates the eWG made a presentation.</p> <p>The eWG will continue their work. The topic was kept in the agenda for 2025.</p>
CII-SCMA 2024-04 30	Brazil	Determination of sorbic and benzoic acid content in grape juice,	The resolution moved to step 3 .



		reconstituted grape juice, concentrated grape juice, and grape nectar by the use of high-performance liquid chromatography	
CII-SCMA 2024-04 31	Russia	Method for determination of volatile compounds in spirituous beverages of vitivinicultural origin using contained ethanol as a reference substance	The resolution moved to step 3 .
CII-SCMA 2024-04 32	eWG	Update “Determination of density and specific gravity of wine” (OIV-MA-AS2-01)	There was no progress. The eWG will continue their work.

V/ Items on the agenda for the next session (without prejudice to subjects which may be added later)

Document	Country	Subject	Follow up
CII-SCMA 2024-04 33	Brazil	Assay of pesticide residues in wine without extraction	Brazilian delegation presented the topic. The topic is added to the work programme.
CII-SCMA 2024-04 34	France	Data & Analysis	French delegation presented the topic. The OIV Secretariat will consult Member States to identify experts in data science, AI and chemometrics who might be interested in working on the topic.

VI/ Other items

Reference	Country	Subject	Follow up
OENO-MICRO 22-713	MICRO	Yeast cell counting using flow cytometry in oenological matrices	<p>MICRO group asked the opinion of SCMA Group. The Group reviewed the method and identified the need for a more detailed review and editing. SCMA experts were identified to support the reformatting, experts from the French delegation volunteered. The resolution remained at step 5.</p> <p>SCMA discussed the need for a holistic approach to analytical methods beyond traditional physical-chemical approaches and consider reviewing the</p>



			competencies for analysis of environmental parameters and biological diagnostics.
OENO-SPECIF 23-728	SPECIF	Determination of the ¹³ C / ¹² C and ¹⁵ N/ ¹⁴ N isotope ratios of chitosan by isotope ratio mass spectrometry	The Group discussed the topic. The Group pointed out that the methods of analysis for oenological products are the competence of SPECIF Group.

Date	Name and signature of the author of the proposal
06/04/2024	Humberto Manzano, President of the "Methods of Analysis" Sub-Commission [via Kudo] [signature] Markus Herderich, Vice President of the "Methods of Analysis" Sub-Commission [signature] Ana Maria Ruano Ramos, Scientific Secretary of the "Methods of Analysis" Sub-Commission [signature] Neslihan Ivit Head of Unit « Oenology Methods of Analysis » [signature]



INTRODUCTION

The 67th session of the “Methods of Analysis” Sub-Commission was held on 05/04/2024 and 06/04/2024 in Salle de Flore in Dijon, France and online via video conference platform Kudo with attendance of the official delegates and experts representing Member States and Observers. The meeting was opened by Markus Herderich (Australia), the Sub-Commission Vice President in presence and Humberto Manzano (Argentina), the Sub-Commission President via KUDO, who both welcomed the experts.

1. Adoption of the agenda (CII-SCMA 2024-04 0J)

- 1.1. The Group adopted the agenda as the meeting’s agenda.

2. Approval of the Proceedings Report for the 66th session (CII-SCMA 2023-09 CR)

- 2.1. The Vice President asked the Group if there are any amendment proposals on the document.
- 2.2. The proceedings Report for the 66th session was unanimously approved.

3. Information from the OIV Secretariat (CII-SCMA 2024-04 03)

- 3.1. The OIV Secretariat reminded the Group about the deadlines for submitting draft resolutions under the step procedure. The submission date for the draft resolutions which will pass to step 7 is 14 June 2024.

4. Information presented to the Sub-Commission by the Commission and/or other OIV Commissions, Sub-commissions or expert groups (CII-SCMA 2024-04 04)

- 4.1. The MICRO group asked the opinion of the SCMA on the draft resolution titled “Yeast cell counting using flow cytometry in oenological matrices” (OENO-MICRO 22-713). The SCMA experts reviewed the method and identified the need for a more detailed review and editing.

- 4.2. SCMA discussed the need for a holistic approach to analytical methods beyond traditional physical-chemical approaches and considered reviewing the competencies for analysis of environmental parameters and biological diagnostics.
- 4.3. **Conclusion:** The draft resolution remained at step 5. The SCMA experts were identified to support the reformatting.
- 4.4. The SPECIF group asked the opinion of the SCMA on the draft resolution titled “Determination of the $^{13}\text{C}/^{12}\text{C}$ and $^{15}\text{N}/^{14}\text{N}$ isotope ratios of chitosan by isotope ratio mass spectrometry”.
- 4.5. The SCMA discussed the topic and pointed out that the methods of analysis for oenological products are the competence of SPECIF Group.
- 4.6. The SECUAL Group informed the SCMA that they are working on a safety assessment on aflatoxins in vitivinicultural products including wine, raisins, fresh grapes, and grape juice. The work will include methods of determination of aflatoxins in these products. The SCMA experts are invited to join the electronic working group to contribute to this aspect.

5. Determination of the ethanol in grape juice, reconstituted grape juice, concentrated grape juice and nectar (OENO-SCMA 19-662B)

- 5.1. The Brazilian delegation presented an amended version of the draft resolution which took into attention the official comments submitted by the Member States.
- 5.2. The Group reviewed the amendments.
- 5.3. Each delegation presented their own comments.
- 5.4. The German delegation stated that they have submitted only their editorial comments, and not their substantial comments. They indicated that this method is based on an AOAC method for orange juice, and asked if the validations were made for grape juice.
- 5.5. The Brazilian delegation explained that this method is also used for grape juice by IFU with some modifications in sample preparation. However, it was not possible to find the validation data from the laboratories which use this method.
- 5.6. An expert from the Italian delegation proposed to put in place an inter-laboratory trial within their laboratories to validate the method.
- 5.7. The French delegation asked if this is a Type-IV method and whether an inter-laboratory trial is needed. The Group decided to aim for a Type-IV method to begin with, and upgrade to Type-II method depending on the inter-laboratory trial.
- 5.8. The OIV Secretariat confirmed that the LABWORK platform is ready to be used to facilitate the method validation process.
- 5.9. **Conclusion:** The draft resolution is kept in step 5, taking into consideration the discussions made during the meeting.
- 5.10. An interlaboratory trial will be made to validate the method, Italian delegation will participate in the work, as well as Brazil, Spain, Germany, and Austria.

6. Determination of total acidity in grape juice, reconstituted grape juice, concentrated grape juice and nectar (OENO-SCMA 19-662G)

- 6.1. The Brazilian delegation presented an amended version of the draft resolution which took into attention the official comments submitted by the Member States.

- 6.2. The Group reviewed the amendments.
- 6.3. Each delegation presented their own comments.
- 6.4. The German delegation stated that their substantial comments were not received. They indicated that there is an existing method in the Compendium of International Methods of Wine and Must Analysis and that this method will create duplication. They suggested that from an analytical point of view, must and grape juice are the same.
- 6.5. The Italian delegation indicated that these methods will be different types than the existing methods (type IV for grape juice and type II for must), therefore it is not a total duplication. The Secretary of SCMA indicated that it is also possible to classify as a Type III method.
- 6.6. The Brazilian delegation highlighted that this project has been started in 2018 to develop and validate the grape juice methods. In the beginning of the work, the Group discussed whether to add this matrix to the existing methods, or create separate methods for grape juice, and it was decided to create separate methods. Therefore, it was unexpected to receive structural concerns at this level.
- 6.7. The Vice President pointed out that the draft method also includes other matrices such as reconstituted grape juice, concentrated grape juice and nectar.
- 6.8. The Spanish delegation asked for clarity about the validation data. The Brazilian delegation informed the Group that the repeatability and intermediate precision were obtained from the analysis of a synthetic tartaric acid solution with an intra-laboratory trial, while reproducibility was obtained from the grape juice analysis of an inter-laboratory trial of 19 laboratories. The Group edited section 8.2 of the draft method to reflect these differences.
- 6.9. It was requested from the Brazilian delegation to perform validation on grape juice to obtain the results of the repeatability and intermediate precision. The expert from the Italian delegation proposed to include this validation to the inter-laboratory trial that was discussed under point 5.10 of the proceedings report.
- 6.10. **Conclusion:** The draft resolution is kept in step 5, taking into consideration the comments of Member States and those made during the meeting.
- 6.11. The validation will be made on the same matrix. The Brazilian and Italian delegations, and other interested delegations will contribute to the work.

7. Determination by isotope ratio mass spectrometry $^{13}\text{C}/^{12}\text{C}$ of ethanol obtained through the fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar (OENO-SCMA 19-662J)

- 7.1. The Brazilian delegation presented an amended version of the draft resolution which took into attention the official comments submitted by the Member States.
- 7.2. The Group reviewed the amendments.
- 7.3. The German delegation stated that there were numerous modifications requested at this step which requires time to review. Moreover, they have repeated their comment that from an analytical point of view, must and grape juice are the same.
- 7.4. The Spanish delegation presented their comments and requests of amendment.
- 7.5. **Conclusion:** The draft resolution is kept in step 5, taking into consideration the comments of Member States and those made during the meeting.
- 7.6. The Brazilian delegation will provide the revised version.

8. Analysis of mineral elements in grape juices, reconstituted grape juice, concentrated grape juices and nectars using ICP-AES (inductively coupled plasma / atomic emission spectrometry) (OENO-SCMA 19-662K)

- 8.1. The Brazilian delegation presented an amended version of the draft resolution which took into attention the official comments submitted by the Member States.
- 8.2. The Group reviewed the amendments.
- 8.3. Each delegation presented their own comments.
- 8.4. The Spanish delegation asked for clarification on the validation data, as some of the results in precision shows 0.0. They also pointed out that synthetic solutions were used for validation, and not grape juice as a matrix.
- 8.5. The French delegation who provided the validation results confirmed that the 0 values were a mistake due to transfer from the Excel file. This will be corrected. They also mentioned that for analysis of mineral elements, it is not possible to find a natural matrix without any minerals. That is why a synthetic solution has been used, and mixing synthetic material with natural matrices demonstrated the robustness of the method, as the performance of the method was explored in the low values, but synthetic matrices can be eliminated if necessary.
- 8.6. **Conclusion:** The draft resolution moved to step 7, taking into consideration the comments of Member States.
- 8.7. The Brazilian delegation will provide the revised version.
- 8.8. Following the discussions brought by the German delegation, the SCMA decided to ask the opinion of DROCON and CST on definitions of “grape must” and “grape juice”.

9. Commonly used Analytical Parameters for Wines and Sparkling Wines (OENO-SCMA 21-712A)

- 9.1. The OIV Secretariat presented an amended version of the draft resolution which took into attention the official comments submitted by the Member States.
- 9.2. The Group reviewed the amendments.
- 9.3. Each delegation presented their own comments.
- 9.4. The draft resolution was amended during the meeting and made it available to the Member States to review the edited version over the evening through the second day of the meeting.
- 9.5. As there were numerous official comments received to remove the certificate number 2 and 3, it was requested to remove these certificates from the Compendium. After reviews and consultations, there were no objections to remove these certificates.
- 9.6. The title of the draft resolution was amended as “Commonly used Analytical Parameters for Wines and Sparkling Wines”.
- 9.7. At the final point of section B, the reference to methods “developed by other bodies” was removed.
- 9.8. The final paragraph in section C of the draft resolution was amended as “Other parameters can be used by Member States according to their own requirements.” The reference to public health authorities were removed.
- 9.9. The French delegation requested adding “acetic acid” to the parameter of “volatile acidity”, as they pointed out currently many laboratories around the world are measuring the acetic acid in wine, instead of volatile acidity. The Group agreed to

add a footnote in the draft resolution the definition of volatile acidity, derived from the acetic series, which will clarify the parameter.

- 9.10. The Group reviewed the final version of the listed parameters and reached a consensus.
- 9.11. **Conclusion:** Taking into consideration the comments of Member States, the resolution moved to step 7.
- 9.12. The draft resolution will be submitted to step 7 with the amendments made during the meeting.
- 9.13. It is proposed to work on a new resolution to study volatile acidity versus acetic acid.

10. Use of analytical parameters in the certification of compliance of wines and sparkling wines – Certificates 2 and 3 (OENO-SCMA 21-712B)

- 10.1. The OIV Secretariat presented an amended version of the draft resolution which took into attention the official comments submitted by the Member States.
- 10.2. As discussed at the point 9 of the agenda, the certificates 2 and 3 were removed from the Compendium.
- 10.3. The second part of the draft resolution is the analytical parameters that are not applicable for certificates of analysis for wines and sparkling wines, which includes parameters for nutritional information and health parameters, such as presence of various bacteria.
- 10.4. The French delegation stated that it is important to list the parameters that should not be requested in certificates.
- 10.5. The South African delegation proposed that the scope of this list needs to be clearly defined, and the wines of different styles, including dealcoholised wines, needs to be taken into account.
- 10.6. It was proposed to consult for microbiological parameters MICRO group, for nutritional information CIII, while for health parameters CIV.
- 10.7. The Spanish delegation made a presentation about the nutritional values of wines. The presentation included the results of a study done which analysed 58 samples of different types of wines and developed an equation to calculate the energy value of wines. The results showed that no fat was detected in the samples, salt content was below 0.025 g/100 mL, sum of major organic acids were between 0.22 and 0.60 g/100 mL, and protein content was below 0,3 g/100 mL.
- 10.8. **Conclusion:** The Group decided to withdraw the resolution.
- 10.9. The SCMA recommended that the required parameters regarding nutritional information and microbial safety will be discussed with competent experts in CIII, and the MICRO expert group and CIV.

11. OIV Research Grant Development of an analytical NMR method for spectroscopy of 2H-nuclei for quantification of isotopic composition of water in grape musts and wines, taking into account the reasonable impact of climatic factors as well as the effect of modern technologies of alcohol reduction allowed for use in wine production - Communication by Ivlev Vasily (CII-SCMA 2024-04 11)

- 11.1. The project results that were carried out in the framework of the OIV research grant were presented.



- 11.2. The study included the development of a ^2H -NMR method for deuterium measurements in must, wine and water samples and collection, registration, and maintenance of a database with results of experimental measurements.
- 11.3. The study was concluded with the proposal of a new methodical approach for the study of isotope ratio in water of grapes and products of their processing - musts and wines.
- 11.4. The Serbian delegation proposed to make a comparison study with the EIM - IRMS method.
- 11.5. The Italian delegation proposed a collaboration to implement this method to wines from different geographic origins. They also proposed a comparison test with the $^{18}\text{O}/^{16}\text{O}$ isotope ratio method.
- 11.6. **Conclusion:** The research grant work has been completed.

12. Determination of total sulfur dioxide in concentrated grape juice (OENO-SCMA 19-662D)

- 12.1. The Brazilian delegation presented an amended version of the draft resolution which took into attention the official comments submitted by the Member States.
- 12.2. The Group reviewed the amendments.
- 12.3. Each delegation presented their own comments.
- 12.4. The Portuguese delegation asked for clarification on the point 8.2 of the draft resolution about blank determination. The Brazilian delegation will add a new point 8.3 to include the calculations.
- 12.5. The German delegation asked for clarification about the tables on point 9 of the draft resolution. The values on Table 1 come from the literature, and those of table 2 come from the intra-laboratory validation. Therefore, table 1 will be deleted.
- 12.6. **Conclusion:** The resolution moved at step 5, taking into consideration the comments of Member States.
- 12.7. The Brazilian delegation will provide the revised version.

13. Determination of Density and Specific gravity at 20°C in grape juice, reconstituted grape juice, concentrated grape juice and nectar (OENO-SCMA 19-662E)

- 13.1. The OIV secretariat reminded the Group that last year it was decided to start a new action item to amend the method for determination of density and specific gravity at 20°C (OIV-MA-AS2-01A), before moving forward with this draft resolution.
- 13.2. The electronic working group did not have any updates yet on this action.
- 13.3. **Conclusion:** The draft resolution was kept in step 3.
- 13.4. The electronic working group will work on the amendment of OIV-MA-AS2-01A and
- 13.5. Taking into account the outcomes of this work, the Brazilian delegation will provide the revised version of OENO-SCMA 19-662E.

14. Determination of the deuterium distribution in ethanol derived from fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar by application of nuclear magnetic resonance (SNIF-NMR/RMN-FINS) (OENO-SCMA 19-662I)

- 14.1. The Mexican delegation who leads the work and coordinates the electronic working group presented the topic.
- 14.2. A survey has been developed to create a database of the Magnetic Resonance instrumentation that OIV Member States currently possess, the type of 2H NMR acquisition routines they develop and the interest of Member States to receive a 2H NMR training for developing both OIV-MA-AS311-05 and OENO-SCMA 19-662I routines and novelties in their facilities.
- 14.3. **Conclusion:** The draft resolution was kept in step 3, taking into consideration the comments of Member States and those made during the meeting.
- 14.4. The survey will be reviewed by the eWG and sent out to SCMA members.

15. Wine – determination of relative ratio of non-exchangeable hydrogen and deuterium atoms in ethanol obtained through the fermentation of grape juice, concentrated grape juice, reconstituted grape juice, and nectar by means of instrumental technique EIM – IRMS (OENO-SCMA 21-688)

- 15.1. Last year, a potential conflict of interest was noted, as the Serbian expert is co-owner of a company which manufactures and sells the proprietary EIM technology. (CII-SCMA 2023-03 CR)
- 15.2. The Serbian expert presented an amended version of the draft resolution which took into attention the official comments submitted by the member states.
- 15.3. The Brazilian delegation reinforced their concern regarding the Afusali Authentic Wine Ethanol Standard (AAWES) in terms of its availability. They suggested the possibility of using other standards, particularly reference materials for stable isotopes standardized by recognized institutions.
- 15.4. The French delegation maintained their doubt about the interest of this method for wine and about its applicability because of the availability of the equipment and the calibration.
- 15.5. The Serbian expert provided a certificate of analysis of the AAWES which is issued by a laboratory co-founded by himself.
- 15.6. The German, Spanish and Italian delegations questioned the certificate of analysis of AAWES since it is not provided by an internationally recognised or an acknowledged institution in isotope analysis. The German delegation asserted the necessity of having an internationally recognised reference material regardless of the type of the method.
- 15.7. The Italian delegation raised their concerns as AAWES is an internal reference material which is not calibrated according to the international standards. They suggested to the Serbian expert to contact the International Atomic Energy Agency to make AAWES an international standard.
- 15.8. The Serbian delegation raised their concerns that the draft resolution cannot move forward due to various reasons in the last years. They referred to some anecdotal evidence of perceived problems in certain markets, pointing out a specific country name. The SCMA Vice President suggested limiting the discussions the analytical technologies, and not making unsubstantiated claims regarding products, companies or markets.
- 15.9. **Conclusion:** The draft resolution is kept in step 3, taking into consideration the comments of Member States and those made during the meeting.



16. Protocol for the method for the determination of the addition of water in wine (CII-SCMA 2024-04 16)

- 16.1. The electronic working group did not progress on the topic during the last year.
- 16.2. The Serbian expert made a presentation about results of analyses conducted with the analytical method discussed on agenda item 15.
- 16.3. The Serbian expert used the names of certain countries while presenting the results. The SCMA Vice President and the South African delegation iterate the importance of using anonymous names and not identifying countries or companies while sharing the results of research which only analysed a limited number of samples and cannot independently verify the label integrity of the samples. Under these circumstances, the results do not reflect the entire industry and it can cause undesired implications.
- 16.4. Since there were no advancements in the electronic working group, as in the case of last year, it was proposed to close the group.
- 16.5. **Conclusion:** The electronic working group will be closed and removed from the working programme.

17. Update “Determination of residual alcohol content in vinegars” (OENO-SCMA 23-724)

- 17.1. The Group reviewed the official comments submitted by the Member States.
- 17.2. The recommended amendments are in editorial nature, and they will be integrated into the draft resolution.
- 17.3. **Conclusion:** The resolution moved to step 5, taking into consideration the comments of Member States.
- 17.4. The Portuguese delegation will provide the revised version.

18. Method “Determination of D(-) tartaric acid in wine by 2D-LC” (OENO-SCMA 23-725)

- 18.1. The Group reviewed the official comments submitted by the Member States.
- 18.2. The recommended amendments are in editorial nature, and they will be integrated into the draft resolution.
- 18.3. **Conclusion:** The resolution moved to step 5, taking into consideration the comments of Member States.
- 18.4. The French delegation will provide the revised version.

19. Enzymatic method for the analysis of fumaric acid in wine (OENO-SCMA 22-719)

- 19.1. The Spanish delegation informed the Group that it was not possible to advance on this project.
- 19.2. **Conclusion:** The resolution remained at step 5, taking into consideration the comments of Member States.
- 19.3. The Spanish delegation will provide the revised version of the draft resolution.

20. Principle of 'green analytical chemistry' for the adoption and the classification of methods of analysis (CII-SCMA 2024-04 20)

- 20.1. The Portuguese delegation made a presentation to share the updates on the project.

- 20.2. The project is based on the green analytical chemistry concept which consists of 12 principles. The goal is to create a metrics for the evaluation of analytical methods' greenness, applying it for assessing the greenness of routine analysis of wine and must and creating an evaluation tool.
- 20.3. Currently, the metric "Green Wine Analytical Procedure Evaluation" is under scientific validation. After this step it will be submitted for review by the SCMA.
- 20.4. The Group discussed the possibility to amend OIV-MA-INT 04 to include green analytical chemistry principles.
- 20.5. The SCMA Vice President recommended including sustainability principles in the new OIV Strategic Plan. Alternatively the group could consider amending in the Compendium OIV-MA-INT 04 'Principles Layout and wording of OIV method of analysis' to include green analytical chemistry principles.
- 20.6. **Conclusion:** The topic was kept on the agenda for 2025.

21. Method for the determination of polydimethylsiloxane (SPME-GC/MS) (CII-SCMA 2024-04 21)

- 21.1. The Portuguese delegation presented a method which was proposed in 2019, however the method does not have validation data, and the laboratory that worked on the method cannot provide it.
- 21.2. The Group pointed out the alternative NMR method which was presented by the Mexican delegation in the OIV Congress.
- 21.3. **Conclusion:** The topic was kept on the agenda for 2025.
- 21.4. OIV Secretariat will reach out to potentially interested laboratories for validation of the method proposed by the Portuguese delegation.
- 21.5. OIV Secretariat will reach out to the experts working on NMR techniques, and OENOPPIA and cork producers to identify existing methods.

22. Practical guide for method validation, quality control and uncertainty assessment (CII-SCMA 2023-03 23) OIV MA AS1 09 Protocol for the design, conducts and interpretation of collaborative studies (CII-SCMA 2024-04 22)

- 22.1. The French delegation who coordinates the eWG made a presentation.
- 22.2. The presentation included modelling of measurement errors, two documents were presented "Uncertainty functions, a compact way of summarising or specifying the behaviour of analytical systems" and "Modelling measurement uncertainty".
- 22.3. The electronic working group discussed Excel sheets used for collaborative studies to respect the protocol and make the calculations in an automated system that minimizes the mistakes. The group decided to review and edit, if necessary, this Excel sheet. After this review, it can be used for the interlaboratory testing via LABWORK. Following this step, the group will decide if to add this sheet as an annex to the protocol guideline for collaborative studies.
- 22.4. The electronic working group decided to review the OIV-MA-AS1-09 "Protocol for the design, conduct and interpretation of collaborative studies" and decide if any edits are necessary.

- 22.5. The electronic working group decided to review the OIV-MA-AS1-12 “Practical guide for the validation, quality control, and uncertainty assessment of an alternative oenological analysis method” and decide if any edits are necessary.
- 22.6. The Italian delegation asked for clarification on how to move forward with the existing methods which raise questions in terms of quantification especially if the resolution regarding uncertainty assessment is being amended, and whether the existing methods will be reviewed accordingly.
- 22.7. The French delegation expressed that these documents include good practices as in the format of guide, and the question raised in point 22.6 will be decided after they are amended.
- 22.8. The electronic working group decided to propose removal of the guide OIV-MA-AS1-10 “Estimation of the detection and quantification limits of a method of analysis” from the Compendium. This point will be further studied to identify if there are consequences of removing this guide.
- 22.9. **Conclusion:** Having taken note of the comments and in agreement with the experts, the point is kept for the agenda 2025.
- 22.10. The electronic working group will continue to work on the identified documents.

23. Principles of good regulatory practice for the application of compositional limits and requirements for laboratory analysis of wine (CII-SCMA 2024-04 23)

- 23.1. The French delegation who coordinates the eWG made a presentation.
- 23.2. This project started in 2017 as a part of the de-minimis project. It was separated and the remaining text includes 10 principles including a common system of scientific units, principles of contradiction, accredited labs, measurement of uncertainty among others.
- 23.3. **Conclusion:** Having taken note of the comments and in agreement with the experts, the point is kept for the agenda 2025.
- 23.4. A project presentation document will be prepared by France to include these principles to the step-by-step procedure.

24. Determination of free and conjugated quercetin content in wines (CII-SCMA 2024-04 24)

- 24.1. The Italian delegation informed the Group that several experimental tests were carried out comparing methods already published in the literature. However, the results obtained so far cannot be considered definitive and they intend to continue with the comparison between methods and carry out further validation experiments submitting the method proposal to the SCMA.
- 24.2. **Conclusion:** Having taken note of the comments and in agreement with the experts, the point is kept for the agenda 2025.

25. OIV LABWORK project (CII-SCMA 2024-04 25)

- 25.1. The OIV Secretariat provided a brief background and the updates of the project.
- 25.2. This project was developed in accordance with the strategic plan 2020-2024. Two main goals of the project were to create a network of laboratories around the world

which are specialised in wine analysis and facilitate the work of SCMA developing and validating methods.

- 25.3. A digital platform has been developed to achieve the goals of the project. The OIV Secretariat shared the platform with the Group and explained its features.
- 25.4. The OIV LABWORK is accessible from the existing digital workplace, from a new icon. The difference of this icon from the others already existing is that it will allow the external users to be able to join the platform, without having the ability to access the other OIV documents which are reserved to OIV Member States and Observers.
- 25.5. For the ring tests, it will be possible to form groups, which will have access to Teams groups.
- 25.6. The next steps are identified as getting SCMA's feedback on the platform by setting up a trial run of a ring test and launching the platform to the external laboratories to join the network. The second step requires a significant amount of administrative work which needs to be internally evaluated by the OIV Secretariat.
- 25.7. **Conclusion:** The point is kept for the agenda 2025.
- 25.8. The electronic working group coordinated by the OIV Secretariat will work on the project.

26. Speciation of Arsenic, Lead and Mercury (CII-SCMA 2024-04 26)

- 26.1. The French delegation informed the group that there were no updates on the subject and proposed to withdraw the topic from the agenda and work programme.
- 26.2. **Conclusion:** The Group reached a consensus to withdraw the topic.

27. Analytical method for the determination of strontium isotopic ratio ($^{87}\text{Sr}/^{86}\text{Sr}$) in wines (Method type IV) (CII-SCMA 2024-04 27)

- 27.1. The item was presented, and the draft method was introduced to the Group by the Portuguese delegation.
- 27.2. **Conclusion:** Having taken note of the comments and in agreement with the experts, the draft resolution moved to step 3.

28. OIV Definition and General principles on the concept of De-minimis (OIV-CST 23-742)

- 28.1. The item was presented, and the draft resolution was introduced to the Group by the French delegation.
- 28.2. The Australian delegation presented their official comments, they expressed that the principle of de minimis and threshold values for individual parameters need to be agreed upon globally before this draft resolution can advance any further.
- 28.3. The French delegation informed the Group that the task force on de-minimis is nearly finalised and will be reviewed in the CST meeting. They expressed that currently the goal is to work on a document in a consensual and collective way via CST to develop a document which will define the areas where de-minimis can be applied to.
- 28.4. **Conclusion:** The resolution was kept at step 3, taking into consideration the comments of Member States.

- 28.5. The draft resolution will be amended considering the comments made during the SCMA and CST meetings.

29. A guideline for establishing and managing Type IV analytical methods (CII-SCMA 2024-04 29)

- 29.1. The French delegation who coordinates the eWG made a presentation.
- 29.2. The Compendium includes classification of analytical methods OIV-MA-AS1-03 with four types of methods.
- 29.3. The French delegation identified that SCMA produces numerous Type IV methods, these methods have a heterogeneous format especially on the performance data presentation. Therefore, SCMA and delegations spend a great deal of time on the format of texts. Moreover, they identified a confusion over the actual status of type IV methods among users, supervisory authorities, and ISO 17025 accreditation bodies.
- 29.4. When a new method is proposed, the first question is whether there is a scientific interest. The second question is whether there is a legal or regulatory interest. If the answers are no, the step-by-step procedure is blocked. If the answers are yes, the inter-laboratory validation is considered. If the performance data is internal, the method becomes type IV.
- 29.5. The electronic working group discussed whether to remove Type IV methods from the Compendium and decided to retain them. However, they agreed that it would be beneficial to create a dedicated section for Type IV methods, distinct from Types I, II, and III. This separation would allow showing their unique characteristics from a scientific perspective in a distinct chapter or section, without removing them from the Compendium.
- 29.6. The electronic working group discussed the innovative methods of interest that are being developed which do not reach a consensus or do not fit any of the method types.
- 29.7. The South African delegation proposed to clearly identify criteria for each method type.
- 29.8. The Group discussed the revision of the existing methods. The Annex 8 of the internal rules, Evaluation of OIV resolutions, outlines the procedure of the revision of the methods published in the Compendium.
- 29.9. **Conclusion:** The topic was kept on the agenda for 2025.
- 29.10. The eWG will continue their work analysing the topic.

30. Determination of sorbic and benzoic acid content in grape juice, reconstituted grape juice, concentrated grape juice, and grape nectar by the use of high-performance liquid chromatography (CII-SCMA 2024-04 30)

- 30.1. This point was presented, and the draft method introduced to the Group by the Brazilian delegation.
- 30.2. The delegations shared their opinions regarding the proposed method.
- 30.3. **Conclusion:** Having taken note of the comments and in agreement with the experts, the draft resolution moved to step 3.



31. Method for determination of volatile compounds in spirituous beverages of vitivinicultural origin using contained ethanol as a reference substance Communication by Russia (CII-SCMA 2024-04 31)

- 31.1. This point was presented, and the draft method introduced to the Group by the Russian delegation.
- 31.2. The delegations shared their opinions regarding the proposed method.
- 31.3. **Conclusion:** Having taken note of the comments and in agreement with the experts, the draft resolution moved to step 3.

32. Update “Determination of density and specific gravity of wine” (OIV-MA-AS2-01) (CII-SCMA 2024-04 32)

- 32.1. The electronic working group did not have any updates on this action yet.
- 32.2. **Conclusion:** The point is kept for the agenda 2025.
- 32.3. The electronic working group will work on the amendment of OIV-MA-AS2-01A.

33. Assay of pesticide residues in wine without extraction Proposal by Brazil (CII-SCMA 2024-04 33)

- 33.1. The Brazilian delegation proposed a method which serves as a complement or option to the method that is approved OIV-MA-AS323-08 “Assay of pesticide residues in wine following extraction using the Quechers method”.
- 33.2. The Brazilian delegation informed the Group that for this work, wine and grape juice samples were selected to develop an analytical method for the analysis of 71 pesticides by direct injection in LC-MS/MS. The advantages and disadvantages of the method have been outlined.
- 33.3. **Conclusion:** Having taken note of the comments and in agreement with the experts, the work proposal was accepted, and the draft resolution entered the step-by-step procedure at step 2.

34. Data & Analysis Communication by France (CII-SCMA 2024-04 34)

- 34.1. The French delegation made a presentation.
- 34.2. The traditional vision of analysis includes creation of a classical calibration curve, with concentration and signal. When there is a method which is defined in the OIV Compendium, an internal validation is undertaken in the laboratory, a casual point is chosen in the calibration curve to make predictions. In the last 20 years, there have been chemometric calibration models with a lot more data, used in the technologies such as FTIR and NIR.
- 34.3. The new generation of methods currently emerging are based on high computational power and artificial intelligence. Thanks to that, chemometric models will be able to be produced each time there is a new sample.
- 34.4. A simple example was provided about measuring the length of a pen. Classically, it is measured with a ruler. Today, there is a different approach, instead of measuring the pen, it is compared to a reference database of pens. In this reference database, the similar pens will be found, and exact length will be provided. This supermodel can achieve to be more accurate than direct measurements, in a faster way.



- 34.5. This advancement comes with numerous questions to be answered, such as the economic distribution of added value, model validation or database validation, uncertainty calculations, accreditation, legal principles, standardisation among others.
- 34.6. The Group decided to evaluate the interest among Member States to start working on this topic, to evaluate available tools and techniques, opportunities and drawbacks.
- 34.7. **Conclusion:** The point was kept for the agenda 2025.
- 34.8. The OIV Secretariat will consult Member States to identify experts in data science, AI and chemometrics who might be interested in working on the topic.