NEWSLETTER

Issue 60 – August 2021

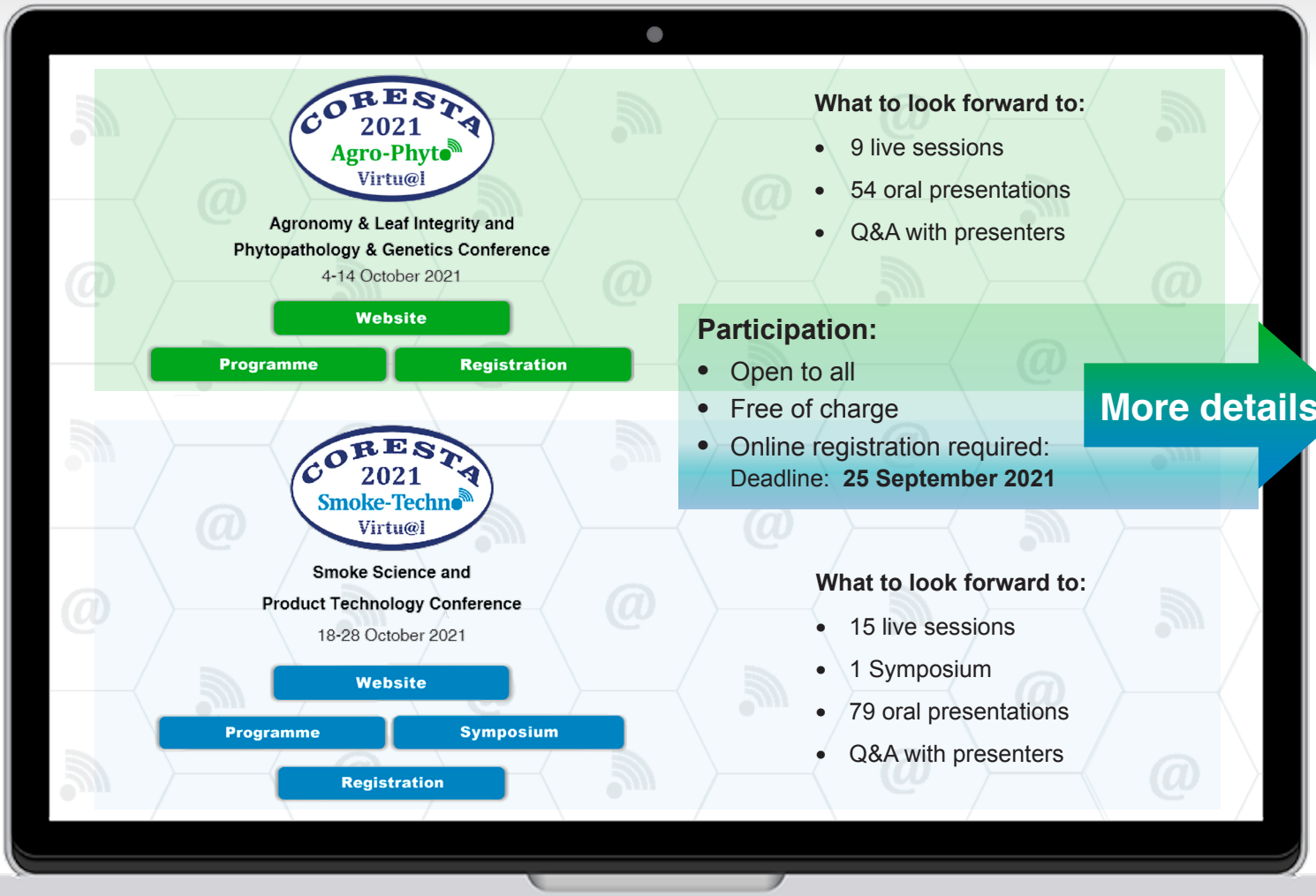
FOREWORD

The organisation of the 2021 CORESTA Conferences is in full swing. After the first online 2020 Congress, this will be the first time that the Joint Study Group Conferences are being hosted in a virtual format. Feedback from last year's event revealed that there was need for much more interaction between the participants. The CORESTA Secretariat, together with the Scientific Commission, has risen to the challenge. It is organising, as best it can with the tools at hand, a "live" event where presenters will be available online to answer questions during specific 5-minute Question & Answer sections after the broadcast of their pre-recorded presentation. Information on the Conferences can be found overleaf.

CORESTA has been working on rationalising the way it orients its strategy. Much time has been spent by the "Strategy Committee" of the Board, together with the Scientific Commission and the CORESTA Secretary General, in developing a "Strategy House" that will clearly define CORESTA's focus points with regards to the projects of its working groups. An introduction to the Strategy House can be found further on in this Newsletter.

Communication is an important part of any organisation. The structure of CORESTA, together with its workings and those of its groups, is not always immediately apparent to those not familiar with the association. A new brochure has been published that will clearly and easily explain different aspects of CORESTA's work. Do not hesitate to download the brochure from the CORESTA website!

For readers experiencing summer, CORESTA wishes you a cheerful and sunny break, and for all those in the southern hemisphere, we hope you are slowly easing out of winter and looking forward to warmer days.



2021 CORESTA CONFERENCES

PREPARATION

Travel and in-person meetings remaining difficult in 2021 due to the Covid-19 situation, the decision was taken to once again hold the CORESTA events online. It was also decided to adapt the virtual format so as to enable more interaction between participants and presenters. To this end, live sessions where pre-recorded presentations are followed by live Q&A with the presenters have been planned using the MS Teams live events platform.

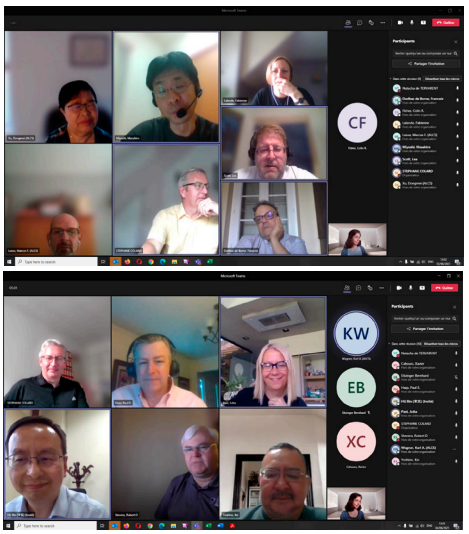
The usual Call for Papers was made in February and abstracts were submitted via the upgraded CORESTA abstract submission system (CASS) until the 21 May deadline.

The Scientific Commission Reading Committee met online during the first week of June to review and select the abstracts and set the programme.

Mid-June, authors were notified by email of the acceptance, or not, of their abstract, and sent a Booklet with information on the Conferences, practical and administrative requirements, and instructions for the preparation of their pre-recorded presentations.

Mid-June, the Conference programmes were also published on the CORESTA website and the online registration opened.

In July, presenters were convened to a series of rehearsals to be held in September to prepare for the live sessions. Presenters were also sent the invitation to their Conference session. Each email invitation contained a link to the practical instructions for joining and participating in the live events.



CURRENT WORK

Selected abstracts requiring clarifications and/or edits are being processed by the Scientific Commission in liaison with the authors and the CORESTA Secretariat and the final "Programme and Abstract Book" is being prepared for expected publication mid-September.

Authors are preparing their pre-recorded PowerPoint presentations and these are being sent to CORESTA via a Dropbox link. The presentations are being processed by CORESTA and converted to video format.

Authors are sending in their information for processing by CORESTA (bio, photo, publication permissions, etc.).

Replies to presenter rehearsal and Conference session invitations are being processed and queries answered.

Participant registrations are being received by the CORESTA Secretariat and listings are being prepared for the emailing of participant session invitations.

NEXT STEPS

Presenter pre-recorded videos will be made ready for broadcast during the October Conferences.

Session rehearsals will be held with all presenters to familiarise them with the MS Teams live events environment and to enable them to "meet" their session Chair and Co-Chair. The rehearsals will also be practice sessions to clearly inform all concerned of their different roles and responsibilities to ensure that all goes smoothly.

The "Programme and Abstract Book" for both the AP and SSPT Conferences will be published in PDF format on the CORESTA website mid-September.

Online registration will be closed on 25 September, and all participants will be emailed MS Teams links to join their selected session(s) in October.

AFTER THE EVENTS

The presentation videos, and, in addition, the pre-recorded presentations of the annual reports of the CORESTA Sub-Groups and Task Forces, will be uploaded to Vimeo, a secure online streaming platform, and available for viewing via the CORESTA website Member Section portal.

After a one-month viewing period, the videos will be taken down and the PDF versions of the PowerPoint presentations will be available on the CORESTA website together with the abstracts.

PROGRAMMES

All daily sessions will start at 1:30 pm CET.

Presentations will be in the form of videos with audio narration. Each presentation will be followed by a live Q&A session with the presenter.

AGRO-PHYTO (AP 2021)

Full programme:
https://www.coresta.org/sites/default/files/events/CORESTA_AP2021_Programme_web.pdf

Date	Mon, 4 Oct	Tues, 5 Oct	Wed, 6 Oct	Thurs, 7 Oct	Fri, 8 Oct
Session	Production impact of nutrition and herbicides	Genetics: tools for tobacco plant breeders	Biocontrol of tobacco pests and diseases	Nicotine impacts of genetics and production practices	Sustainability through production practices
Date	Mon, 11 Oct	Tues, 12 Oct	Wed, 13 Oct	Thurs, 14 Oct	
Session	Technology applications in genetics and physiology	Pests and diseases management	Cigar tobaccos and alternative uses and crops	TSNA impact of genetics and production practices	

SMOKE-TECHNO (SSPT 2021)

To accommodate the large number of presentations in the SSPT Programme, two daily sessions have been scheduled.

The SSPT programme also includes a Symposium on "Advancing New Alternative Methods (NAMs) for Tobacco Harm Reduction". External experts from regulatory agencies and research organizations will share insights on the current status, strengths, and opportunities in application of NAMs using case examples from safety assessments of chemicals and consumer products.

Full programme:
https://www.coresta.org/sites/default/files/events/CORESTA_SSPT2021_Programme_web.pdf

Date	Mon, 18 Oct	Tues, 19 Oct	Wed, 20 Oct	Thurs, 21 Oct	Fri, 22 Oct
Session 1	Perception and behaviour: understanding how nicotine products are perceived and used	**SYMPOSIUM** Advancing New Alternative Methods (NAMs) for Tobacco Harm Reduction	Heated tobacco products: modeling and numerical simulation	E-vapour: analytical methods	Cigarettes and water pipes: analytical methods
Session 2	Nicotine science: brain and body effects		Heated tobacco products: methods	E-vapour: product analyses	Aromas and flavours: analytical methods
Date	Mon, 25 Oct	Tues, 26 Oct	Wed, 27 Oct	Thurs, 28 Oct	
Session 1	Method for *in vitro* and *in vivo* toxicology testing: advancing methods in pre-clinical toxicology	Biomarkers in clinical science: human data for assessing tobacco harm reduction	Cigarettes: modeling and design	E-Vapour: product chemistry	
Session 2	-	Toxicological assessment: nonclinical toxicity assessment of nicotine products	Nicotine pouches: nonclinical toxicity assessment	Statistics and laboratory operations	

REGISTRATION

The Conference sessions are open to all **free of charge, but online registration is necessary.**

Registered participants will receive a link to attend the Conference a week before the event.

Registration deadline: **25 September 2021**

Registration:

AP Conference **https://www.coresta.org/coresta-ap2021-virtual-conference-34969.html**

SSPT Conference **https://www.coresta.org/coresta-sspt2021-virtual-conference-34996.html**

CORESTA Scientific Commission and Board Meetings

As in-person meetings are still not possible for most people, the CORESTA Board and Scientific Commission continued to meet virtually over the last months to administrate the association and to manage scientific activities, respectively.

The **BOARD** has met three times since the beginning of the year with the participation of Rob Stevens (President of the Scientific Commission) and Lea Scott (Vice-President of the Scientific Commission).

On 3 February 2021, the 66th Financial Year budget (2021/2022) and IT planning were approved. The decision was taken to initiate a review of the CORESTA Statutes in view of the forthcoming 2022 General Assembly. The virtual General Assembly and the online consultation experimented in 2020 due to the Covid-19 situation demonstrated the need for revised Statutes enabling more flexibility when required. Resolutions will be drafted following this review, and submitted to a vote in October 2022. Assuming that the Covid-19 pandemic will hopefully be behind us, exceptional authorisation for holding a virtual General Assembly will not be given by the French authorities as it is not possible according to the current version of the Statutes. **Official Delegates are invited to mark the date of 19 October 2022 in their calendar to physically attend the CORESTA General Assembly to be held during the 2022 CORESTA Congress in Washington DC (USA), to vote on the revision of the Statutes and to elect new Board and Scientific Commission members.**

The Board met again on 15 April 2021 which gave the four Committees (Administration/Finance/IT, Strategy, Events, Science Communication) the opportunity to report. Johan Lindholm (Chair of the Strategy Committee) reported significant progress in the preparation of a "Strategy Framework" with the close collaboration of the Scientific Commission and the CORESTA Secretary General *(see article on next page)*. Mauri Winegardner (Chair of the Events Committee) reported that after having completed in-person event guidelines, a guideline for virtual events will be formalised from the learnings of the 2020 Congress and 2021 Conferences. Hosts for the 2022 and 2023 events were announced, but there are no volunteers yet for 2024. **Please contact the Secretariat if your organisation wishes to consider hosting the 2024 CORESTA Congress.**

The Board also met on 1 July 2021. The budget forecast Q1 was reviewed and remained broadly in line with the initial budget. Significant progress was reported by the Secretary General on the execution of the IT planning with the development and implementation of a new CASS (CORESTA Abstract Submission System), and the migration of the Secretariat to Office 365. Steven Coburn (Chair of the Science Communication Committee) reported the completion of the guideline for external publication (available on the Member Section of the website), and the preparation of an "email compatible" Topline Newsletter destined for upper management of CORESTA Member organisations.

The **SCIENTIFIC COMMISSION** held four virtual meetings and several short videoconferences. Sub-Group and Task Force projects were reviewed on 11 & 12 January 2021. The planning for the preparation of the 2021 Conferences was finalised on 15 March 2021. The work of the Strategy Committee of the Board was discussed on 20 May 2021. And all Scientific Commission members took part in the Reading Committee sessions from 1-4 June 2021 to select the abstracts and build the 2021 Conference programmes. For the first time in CORESTA's history, the Scientific Commission members will have to chair virtual live sessions. In this context, several videoconferences have been organised by the Secretariat to present the live-events platform, to explain the roles and responsibilities (producer, co-producer, chairperson, co-chairperson, presenter, participants) and hold rehearsals.

CORESTA BROCHURE

To promote a better understanding of CORESTA, a new brochure is available for download from the CORESTA website under the tab

About Us/Who we are

The document outlines the vision and mission of CORESTA and illustrates its workings and those of its groups, together with the benefits of membership.

Anyone interested in a summary of the association and its activities is welcome to consult and distribute the brochure.

CORESTA STRATEGY HOUSE

Johan LINDHOLM
Board Strategy Chair
Committee

Rob STEVENS
President
Scientific Commission

An important responsibility of the CORESTA Board is to regularly identify, monitor, and set the top priorities for CORESTA as an Organization. The current priorities that have been identified by the Board include: Strategy, External Promotion, Resources, and Publications. To address strategy, a Strategy Committee was created to set the scope and limits of the scientific and technical activities for the current and future direction of CORESTA in a structured and "living" way.

The members of the Board Strategy Committee consist of members from the Board, the President and the Vice President of the Scientific Commission. This composition ensures close collaboration and open communication between the Board and the Scientific Commission. In addition, coordinators, and members of Sub-Groups (SG) and Task Forces (TF) are included in the scope of communication and collection of information inherently critical to ensure that the CORESTA strategy and planned deliverables are aligned.

One objective of the Board Strategy Committee is to provide strategic direction and establish a roadmap for CORESTA in line with its vision and mission. This has ultimately led to the creation of a CORESTA Strategy House, developed through excellent collaboration between the Board and the Scientific Commission. The Strategy House is a graphic model showing how the vision, mission, and the strategy come together. Upcoming SG and TF meetings will allow current and new scientific work to be identified and prioritized in line with the strategy set by the Board. This will result in a targeted pro-active approach by CORESTA that focuses the scientific work to be aligned with the highest interest of our members.

The scope and limits of the scientific and technical activities of CORESTA are defined by the Board, and these activities are placed under the authority of the Scientific Commission. In that context, the Board builds and maintains a Strategy House overarched by a vision and a mission, which is supported by four key strategic areas. The four strategic areas identified by the Board are: Conventional Products, Emerging Products, Regulatory Landscape and Sustainability, as illustrated in Figure 1.

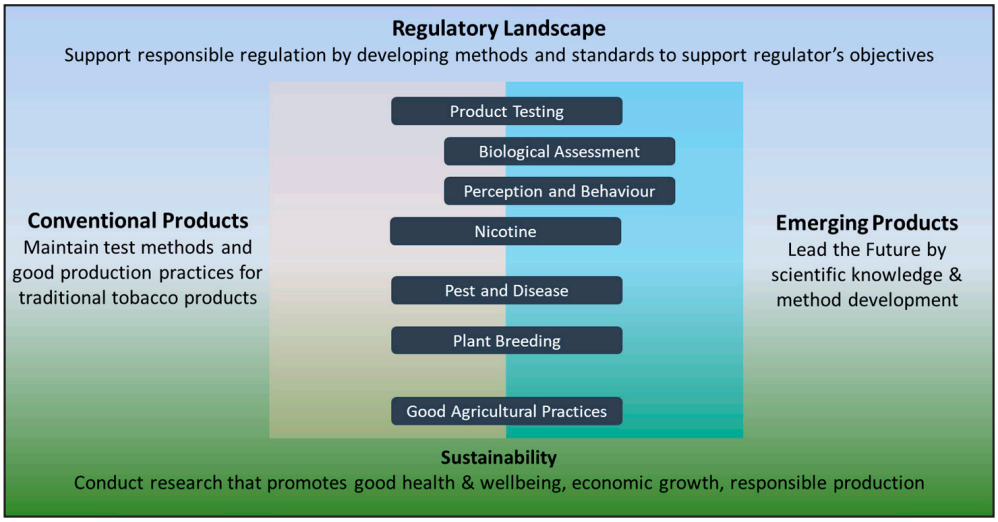


Figure 1 – Strategy Areas and Subjects

For each strategic area, strategic subjects are identified by the Board. These subjects are then mapped against the strategic areas as shown above in Figure 1. Additionally, work streams are defined by the Scientific Commission and managed, as projects, by Sub-Groups and Task Forces from which 2-year and 5-year plans are elaborated. Figure 2 provides a clear description of the keycomponents of the Strategy House that support the mission and vision of CORESTA.

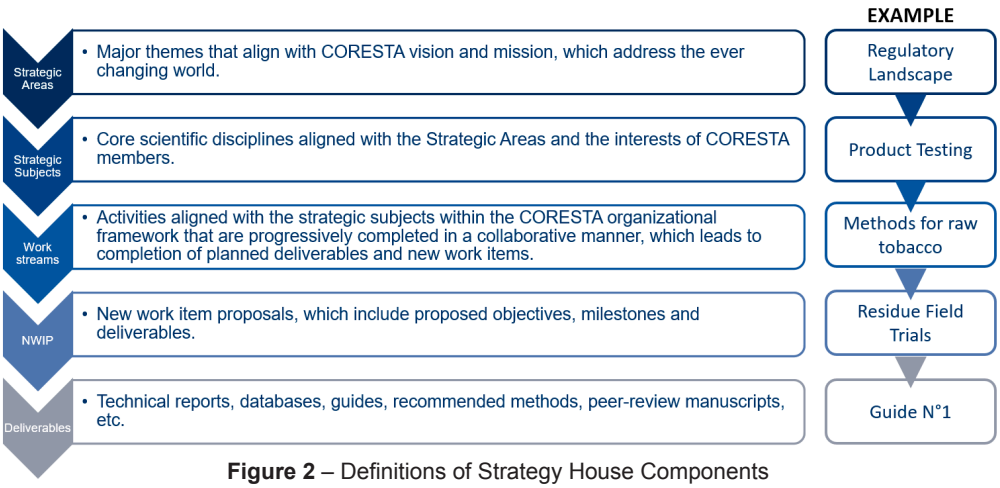


Figure 2 – Definitions of Strategy House Components

The Strategy House was approved at the Board meeting on 1st July 2021 and will be formally presented in a Newsletter later this year and posted on the CORESTA website following the CORESTA Conferences in October. This output will further illustrate the CORESTA Board and Scientific Commission's commitment to its membership to provide clear direction, open communication, and strong collaboration to ensure that the strategy for CORESTA is current and relevant during these ever-changing times.

CORESTA PROJECTS

The following projects were approved by the Scientific Commission and launched:

- **Project 301: Presentation at NASEM Meeting**
  SG CSM - Cigar Smoking Methods - Approved April 2021
- **Project 302: 2nd Collaborative Study on Air Permeability**
  SG PTM - Physical Testing Methods - Approved April 2021
- **Project 303: 14th Collaborative Study on Physical Parameters**
  SG PTM - Physical Testing Methods - Approved April 2021
- **Project 304: Determination of Tobacco-Specific Nitrosamines in E-Liquids by LC-MS/MS**
  SG EVAP - E-Vapour - Approved June 2021
- **Project 305: Study of CORESTA Ignition Propensity Monitor Test Piece CM IP 2**
  SG SA - Smoke Analysis - Approved May 2021
- **Project 306: CM9 Collaborative Study 2021**
  SG SA - Smoke Analysis - Approved May 2021
- **Project 307: Revision Guide No. 20 Biomarker Studies: Requirements for the Certification of Analytical Reference Standards**
  SG BMK - Biomarkers - Approved May 2021
- **Project 308: Poster at Tobacco Science Research Conference (TSRC), Aug/Sept 2021**
  TF CROM - Consumer Reported Outcome Measures Consortium - Approved May 2021
- **Project 309: Revision of Guidelines for writing CORESTA Proficiency Test Reports and for conducting a CORESTA Inter-Laboratory Study**
  CORESTA - Approved July 2021

CORESTA GUIDES

All CORESTA Guides may be downloaded in PDF format at www.coresta.org

Revisions

CORESTA Guide No. 13
Guidance for Sampling the Tobacco Leaf Supply Chain
(Second edition – April 2021) [COR-183-CTG-13]

Originally produced by the now disbanded CORESTA Tobacco Supply Chain Sampling Task Force in 2012, this Guide was reviewed and updated by a group of expert agronomists. The main objective of this Guide is to develop a common approach to sampling tobacco at different stages in the supply chain, starting with seed and ending with the packed, processed material.

CORESTA Guide No. 18
Sample Handling and Sample Collection of E-Cigarettes and E-Vapour Generating Products
(Second edition – July 2021) [EVAP-298-CTG-18]

This Guide describes the sample handling process after a sample has reached a laboratory and recommends general guidance for sample collection. The objective of sample handling is to minimise sample deterioration and to reduce variability in analytical results. The Guide covers sample storage, e-liquid extraction preparation and aerosol collection.

CORESTA Guide No. 20
Biomarker Studies - Requirements for the Certification of Analytical Reference Standards
(Second edition – July 2021) [BMK-307-CTG-20]

This Guide summarises the testing requirements for the certification of analytical reference standards used by the CORESTA Biomarkers Sub-Group. This is viewed as essential to reinforce the validity of the analytical and bioanalytical results generated by the industry and independent testing laboratories.

UPCOMING CORESTA MEETINGS / CONFERENCES 2021

CORESTA Sub-Groups and Task Forces continue to organise meetings online. Please visit the CORESTA website for the most up-to-date information (www.coresta.org/meetings/upcoming).

CORESTA REPORTS

The following reports have been published on the CORESTA website at **www.coresta.org**:

- **Joint Experiment Technical Study (JETS) Report 19/1 Matrix Effects from Dark Air-Cured Tobacco**
  Technical Report [AA-238-CTR] – April 2021 (Sub-Group Agrochemicals Analysis)

  The Sub-Group Agrochemicals Analysis (SG AA) has conducted numerous rounds of proficiency testing or JETS (Joint Experiment Technical Study) since 2005, however dark air-cured (DAC) or dark fire-cured (DFC) tobacco were never used as test materials in these tests. This JETS report describes a preliminary test to find out if there are any differences in matrix effects (MEs) between DAC and two tobacco types, Burley (BLY) or flue-cured Virginia (FCV). LC-MS/MS analysis gave ME differences on tested CPAs among three tobacco types, while GC-MS/MS analysis gave extremely strong MEs on tested CPAs for all three tobacco types but no significant differences were observed.

- **Collaborative Study on Handmade Cigars Smoke Analysis**
  Technical Report [CSM-148-CTR] – May 2021 (Sub-Group Cigar Smoking Methods)

  A collaborative study was conducted on handmade cigars smoke analysis to establish mean values for NFDPM, nicotine and carbon monoxide for cigar products and test pieces to provide a tool for participating laboratories to prove competence in cigar smoke analysis. Both the repeatability (r) and reproducibility (R) values were very high, but were relatively close meaning that only limited additional variation is found when testing the products in different laboratories. Further studies are required to determine what is driving the variability in handmade cigars, but at this stage it must be concluded that while the method appears robust it is not possible to discriminate smoke yields of handmade cigars unless these are very significantly different in weight.

- **Sampling Method for Testing TSNAs in Farmer Bales**
  Technical Report [TSNA-036-CTR] – July 2021 (Sub-Group TSNA in Air-Cured and Fire-Cured Tobacco)

  The Sub-Group TSNA in Air-Cured and Fire-Cured Tobacco (SG TSNA) was established to study the effect of any aspect of tobacco production that may affect the level of TSNA in cured leaf up to the point of sale and then suggest practices that growers could implement to reduce the accumulation at any stage prior to marketing their cured leaf. A critical part of this procedure is sampling of cured leaf marketing packages either at, or soon after, the point of sale. The Sub-Group was tasked with developing a standardized protocol for this sampling and the results of tests are presented in this report.

- **Sample Preparation for TSNA Analysis**
  Technical Report [TSNA-035-1-CTR] – July 2021 (Sub-Group TSNA in Air-Cured and Fire-Cured Tobacco)

  A study to obtain a better understanding of the best way to prepare samples for TSNA analysis in order to obtain reliable data. This study tested the effect on TSNAs of different drying regimes using high and low converter selections of TN 90. The study showed that the recommendation would be to dry samples for TSNA analysis with any of the following methods: (1) air-drying, (2) freeze-drying, (3) oven-drying at temperatures no higher than 30 °C in an oven with good airflow.

- **2020 Collaborative Study on Benzo[a]pyrene in Mainstream Cigarette Smoke**
  Technical Report [SA-223-CTR] – July 2021 (Sub-Group Smoke Analysis)

  In 2020 a Collaborative Study (CS) was carried out to support the development of an ISO standard for an analytical method for the measurement of B[a]P in mainstream cigarette smoke with the ISO 20778 smoking regime. Data from the two GC/MS methods for analysing B[a]P (methanol extraction and cyclohexane extraction) were compared. Statistical results demonstrated differences in the mean yields of B[a]P and the reproducibility (R) figures of the two methods, but these were small enough to be neglected. Therefore, it was concluded that the methods are fit for purpose for cigarette products of various designs and construction with the ISO 20778 smoking regime.

- **2020 Collaborative Study of CORESTA Monitor 9 (CM9) for the Determination of Test Piece Weight, TPM, Water, Nicotine, NFDPM, Carbon Monoxide and Puff Count Obtained under Mainstream 'Non Intense' and 'Intense' Smoking Regimes**
  Technical Report [RAC-SA-270-CTR] – August 2021 (Sub-Groups Routine Analytical Chemistry / Smoke Analysis)

  The Sub-Group Routine Analytical Chemistry (RAC) is responsible for organising the annual testing of the CORESTA Monitor test piece. The 2020 study was designed to measure mainstream non-intense (ISO 3308) and intense (ISO 20778) smoke yields of nicotine-free dry particulate matter (NFDPM or tar), nicotine and carbon monoxide to verify the current monitor test piece CM9; to determine intra- and inter-laboratory variability for the measured non-intense and intense smoke yields for the CM9; to verify the conditioned weight for the CM9. The performance of the monitor was quite similar to its historical performance and continues to be a suitable smoke analysis monitor.

CORESTA RECOMMENDED METHODS

New

- **CRM No. 97** – Determination of Menthol in Mainstream Cigarette Smoke with an Intense Smoking Regime by Gas Chromatography
  (April 2021) [RAC-SA-237-2-CRM-97]

The CRM is used to quantitatively determine the concentration of menthol in the total particulate matter (TPM) of mainstream cigarette smoke generated under ISO 20778 (intense) smoking conditions using gas chromatography (GC) with flame ionization detection (FID).

Revised

- **CRM No. 84** – Determination of Glycerin, Propylene Glycol, Water, and Nicotine in the Aerosol of E-Cigarettes by Gas Chromatographic Analysis
  (Third edition - April 2021) [EVAP-231-2-CRM-84]

This CRM was put through the systematic review process and updated by the E-Vapour Group with modifications made to the introduction and repeatability (r) and reproducibility (R) sections according to the results of the Technical Report *2019 Collaborative Study: Reference Device for e-Cigarette Aerosol* published in January 2021 [EVAP-231-1-CTR].

CORESTA COMMUNICATION AT EXTERNAL EVENTS

Electronic Nicotine Delivery Systems Conference (ENDS 2021)

A presentation on the "Scientific Cooperation for International Standard Developments Relative to E-vapour Products" was made by Stéphane Colard (CORESTA Secretary General) at the ENDS 2021 Conference held online on 20-21 April 2021.

National Academies of Sciences, Engineering, and Medicine (NASEM)

The Committee on Health Effects and Patterns of Use of Premium Cigars of the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine (NASEM), USA, is conducting a study to evaluate the available evidence of the health effects and patterns of use related to the use of premium cigars and identify future federally funded research needs.

A presentation "Introduction to CORESTA Work Related to Premium Cigars" was made by Thomas Lindegaard (Scandinavian Tobacco Group), Coordinator of the CORESTA Cigar Smoking Methods Sub-Group, at a meeting of the Committee on 23 April 2021 to inform them about CORESTA's work with premium cigars.

International Society for Pharmacoeconomics and Outcomes Research (ISPOR 2021)

A poster entitled "Development of Consumer-Reported Outcome Measure (CROM) Best Practices and Guidelines for the Tobacco Industry with Respect to Psychometric CROM Using a Consortium-Based Approach: Methodology and Scope" was presented on behalf of the Consumer Reported Outcomes Measures (CROM) Task Force at the Annual (Virtual) International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Conference, held from 17-20 May 2021.

The above presentations can be viewed in the Information/CORESTA Communication section of the CORESTA website.