

NEWSLETTER

Issue 56 - April 2020

The world is facing an unprecedented crisis as it attempts to combat the coronavirus. Lives have been lost, and millions of others have been changed overnight as humanity seeks ways and means to protect itself and eradicate the threat. But the virus will be defeated, and plans for the future continue to be made. Although physical CORESTA meetings have been cancelled, alternative ways of continuing the work have been found. The situation continues to be monitored closely and organisation of the 2020 CORESTA Congress remains on track. This post-virus event is expected to be well attended, with renewed enthusiasm and energy to face and overcome challenges with sound scientific tools.

CORESTA CONGRESS Vienna, Austria, 11-15 October 2020

Japan Tobacco hosted the 2004 Congress in Kyoto, the 2012 Congress in Sapporo, and after eight years it is proud to be hosting the 2020 Congress in Vienna, Austria, together with its world affiliates united under Japan Tobacco Inc.

The theme of the Congress is:

"Integrated Science: Opportunities and Challenges"

Addressing the needs of CORESTA's diverse stakeholders is critical to having an integrated and sustainable tobacco sector. The forthcoming Congress is an opportunity for delegates to share their experiences and advancements in science, with a focus on opportunities and challenges now and in the future. The rapidly changing industry dynamics and regulatory environment provide a chance to guide CORESTA strategy for scientific research to better serve stakeholders' needs. Scientific evidence must be the basis for product regulation and standards development through international collaboration and open exchange of knowledge. CORESTA continues to offer a unique forum to achieve this goal.

Vienna

Vienna, the capital city of Austria, spans both sides of the Danube River flowing through the northwest of the country. The city's long and eventful history uniquely blends tradition and modernity, both in its way of life and its architecture. Vienna is famous for its "cultural events, imperial sights, coffee houses, cosy wine taverns, and the very special Viennese charm"[1]. Vienna has long been rated one of the world's ten most liveable cities and is a prime destination for congresses and conventions.

Venue

Hilton Vienna Hotel, not to be confused with the other two Hilton hotels in the city, has recently been completely refurbished and offers guests the comfort and amenities of world class accommodation and meeting facilities. The hotel is ideally located on the edge of the city centre making it easily accessible via Vienna's extensive public transport systems.

Important Dates:

Working Programme: available end of June 2020
Earlybird registration until 5 August 2020

https://congress2020.coresta.org

Online Abstract Submission

Online submission is available for authors wishing to present papers at the Congress.

The "Call for Papers" and "Abstract Guidelines and Submission" can be found on the CORESTA website at www.coresta.org under the Meetings section.

It will also be available on the official Congress website when it goes online shortly.

Presenters are encouraged to submit papers related to the Congress theme with focus on the needs of scientists and stakeholders that are critical to maintaining a sustainable tobacco sector. Presenters should keep in mind the broad context of potential regulatory requirements affecting both conventional combustible and emerging products.

Abstract submission deadline:

15 May 2020

Authors will be contacted end of June.



CORESTA Scientific Commission and Board Meetings

The **SCIENTIFIC COMMISSION** (SC*) met in Louisville, Kentucky, USA, on 23-24 January, hosted by CORESTA, in conjunction with the 49th Tobacco Workers' Conference.

Regulations: Comprehensive review presented on the worldwide regulatory landscape and standardisation developments so that all participants have the information at hand to discuss scientific activities in the current international context.

Board: Discussion on work conducted by the Board Strategy Committee and interactions with the SC. Committee is developing a score card for mapping strategic subjects according to "Reward/Attractivity" and "Risk/Difficulty" dimensions, subdivided into work items to be scored. A circular process associating Board and SC, and facilitating communication is being tested – implementation expected at the next General Assembly (October 2020).

Agronomy Study Group: AA SG - Resolution ISO/TC126 No. 94 on maleic hydrazide closed following answer sent by CORESTA to ISO. ■ RFT SG - Field trials for the second list of CPA GRL candidates progressing well and trials for the first list of CPA GRL candidates nearly completed. ■ GMO SG - Significant contributions were provided to the ACAC Agri-Biotech Dossier, and new contributors now expected to add information on new breeding techniques. ■ LNTP TF - Massive study under preparation and due to start this year; many parties willing to contribute to the study.

Phytopathology Study Group: BIO SG - Consensus on an appropriate study protocol, but challenging to keep it sufficiently simple to be executable by all participants. Discussions in progress. ■ XDES SG − Development of "VigiPlant" project stopped due to lack of resources making implementation difficult.

Smoke Science Study Group: CROM TF - Objectives slightly revised. Ambition of TF is to be a cooperation platform involving tobacco industry with guidance from academia and regulatory agency stakeholders. New operating model for project funding via CORESTA is currently being discussed. ■ IVT SG - Current Coordinator and Secretary stepping down and replacements being sought. ■ PUB SG - Some discussions underway about an open platform to collect information from connected e-cigarettes. A new project could be launched.

Product Technology Study Group: RAC SG - Urgent discussions on estimated date for CM9 to be out of stock and future production of CM10. ■ CVAR TF - Decision taken to disband the group once external publication of its work is accepted.

Sub-Groups & Task Forces: Opportunities identified to enhance SGTF efficiency and productivity and SC liaison members were asked to cascade recommendations to their groups.

CORESTA Website: The SC agreed that use of the dedicated webpages by Coordinators and Secretaries would be made mandatory.

Congress 2020: Preparation discussed, Call for Papers defined and possible workshops identified.

The **BOARD** met on 12-13 February in Montevideo, Uruguay, co-hosted by Alternative Ingredients and Cia. Industrial de Tabacos Monte Paz S.A.

Regulations: Regulatory, technology and standardisation updates presented, similarly to the SC.

SC Report: The President of the SC and President of the Product Technology Study Group reported on the scientific activities. Board recommendations:

- Importance for the LNTP TF to find a single testing laboratory for analysing nicotine and minor alkaloids in tobacco.
- Need for the CROM TF to consider the potential risk of exposing CORESTA to financial liability should one or several financial contributors decide to step down.
- The need for the HTP TF to align its timeframe with ISO/TC126/WG22 activities.
- Urgent need to find a manufacturer for the CM10.

Publications and Projects Report: Since the last Board meeting, documents published included: six CRMs, seven Guides, 11 Technical Reports, two Technical Guides, one Technical Note, eight sets of presentations uploaded (including TSRC), two Newsletters; 25 new projects launched. The Board acknowledged the impressive amount and quality of materials produced by CORESTA, and thanked the SC and SGTF for their work.

Board Internal Committees:

• Finance & Administration Committee

Budgets FY64 (2019-20) on track and FY65 (2020-21) approved. ■ Importance to accelerate the implementation of the last phase of the website project.

Events Committee

Preparation of CORESTA Events Hosting Guidelines progressing well. ■ Congress 2020 in Vienna, Austria; AP2021 Conference hosted by Premium Tobacco; SSPT2021 Conference hosted by Alternative Ingredients; Congress 2022 hosted by Altria. Locations to be confirmed.

• Strategy Committee

Project to develop scoring of strategic topics according to the "Reward/Attractivity" and "Risk/Difficulty" dimensions progressing well. Should be ready by Congress 2020 General Assembly. ■ A modification of the CORESTA Statutes may be required as some changes were suggested to the purpose of the association. This would need approval by CORESTA members at an Extraordinary General Assembly at the 2020 Congress in October. ■ The creation of a Science for Sustainability Committee was discussed. A questionnaire to gauge interest of CORESTA members will be circulated.

• Science Communication Committee

A range of opportunities for CORESTA communication was identified, including a newsletter for "members' top management", and use of social media.

The Board meeting was followed by presentations by the co-host, Cia. Industrial de Tabacos Monte Paz S.A., covering the company history and its values, past and current projects of its Technical Department, laboratory activities and cooperation with CORESTA. Presentations were followed by a much appreciated tour of the laboratory.

CORESTA SUB-GROUPS & TASK FORCES

SMOKE SCIENCE Study Group

Revised Objectives: Task Force Consumer Reported Outcome Measures Consortium (CROM)

Updated Objective:



- To provide guidance on how to develop, validate, select, access and use consumer-reported outcome measures to evaluate tobacco and nicotine-containing products for pre-market and post-market purposes:
 - By reviewing existing information on measures
 - By developing guidance on the development and validation of measures
 - By creating a knowledge repository to store measures and facilitate identification and access

Through a cooperation platform involving tobacco industry and the guidance of academia and regulatory agency stakeholders.

The objective of the group was revised by its members in order to better conform with its main purpose, and was approved by the Scientific Commission at its January 2020 meeting.

PHYTOPATHOLOGY & GENETICS Study Group

Disbanded: Sub-Group Virus Diseases (VIR)



The Sub-Group, formed in 2007, was formally disbanded by the Scientific Commission. Its main objective to collate and draw conclusions from viral data had been completed and its second objective to publish an article in a peer reviewed journal cancelled.

CORESTA Administration

Disbanded: Task Force Project Management Office (PMO)



The Task Force formed in 2017, was also disbanded. The objectives to review existing processes and tools for project management and to propose and implement improvements to ensure that projects are run efficiently and delivered successfully were achieved. The current process of project management was considered to be efficient for the needs of the association.

CORESTA PROJECTS

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

- Project 248: ACAC Agri-Biotech Dossier
 ACAC Agrochemical Advisory Committee Approved December 2019
- Project 249: Meta-analysis of Cigarette Smoke Exposure Biomarkers Urinary Total NNAL SG BMK - Biomarkers - Approved January 2020
- Project 250: Presentation at next scheduled Electronic Nicotine Delivery Systems (ENDS) Conference CORESTA Approved January 2020
- Project 251: Presentation at next scheduled Global Forum on Nicotine TF HTP Heated Tobacco Products Approved January 2020
- Project 252: Presentation at next scheduled Global Forum on Nicotine
 TF CROM Consumer Reported Outcome Measures Consortium Approved January 2020
- Project 253: Article in "Tobacco Reporter" Magazine CORESTA - Approved January 2020
- Project 254: Update Guide No. 12 on Controlled Atmosphere Parameters SG PSMST - Pest and Sanitation Management in Stored Tobacco - Approved February 2020
- Project 255: CORESTA Report at CEN/TC 437, Brussels, Belgium CORESTA - Approved March 2020
- Project 256: 6th Proficiency Test for Detection of Transgenic Tobacco
 GMO SG Proficiency Testing for Detection of Transgenic Tobacco Approved April 2020

CORESTA REPORTS

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

• Meta-Analysis Study to Establish Baseline Levels of COHb and NEQs in Smokers and Non-Smokers Technical Report [BMK-186-1-CTR] – December 2019 (Sub-Group Biomarkers)

The purpose of the study was to establish population level estimates for biomarkers of cigarette smoke exposure to serve as a baseline against potential changes in exposure upon switching to a potentially modified risk tobacco product. The population level estimates for smokers was found to be significantly different from non-smokers and former smokers while that for non-smokers were not significantly different from former smokers.

• Long-Term Variability of Commercial Cigarettes through Select Cigarette Constituent Testing Technical Report [CVAR-083-CTR] – December 2019 (Task Force Cigarette Variability)

Scientists measure tobacco and smoke constituents for a variety of reasons. In order to make science-based decisions, the scientific community needs to fully understand all aspects of the variability associated with these measurements, including those due to agricultural factors or due to factors related to commercial cigarette production. To meet this need, the Cigarette Variability (CVAR) Task Force developed a three-phase study: Phase 1 examined the short-term (1 week) variability of commercial cigarette products, Phases 2 the medium-term (1 year), and Phase 3 the long-term (3 years). This report focuses on the results for Phase 3 of the study.

• 12th Collaborative Study (2019) on Physical Parameters of Cigarettes and Filter Rods

Technical Report [PTM-204-CTR] – *January 2020* (Sub-Group Physical Test Methods)

The CORESTA Physical Test Methods (PTM) Sub-Group carries out a normally annual inter-laboratory study on physical parameters of cigarettes and filter rods. This collaborative study monitors the repeatability and reproducibility of the test methods used to measure certain physical parameters of cigarettes and filters, such as weight, diameter, pressure drop, draw resistance and ventilation. The study results allow each laboratory to fulfil accreditation requirements, evaluate its performance in comparison to other laboratories, to derive actions for improvement and to fulfil accreditation requirements. This report covers the results of the 12th collaborative study on physical parameters conducted in 2019.

• 14th Round Robin Test for Multi-Capillary Pressure Drop Calibration Standards (2018/2019) Technical Report [PTM-197-CTR] – *January 2020* (Sub-Group Physical Test Methods)

The CORESTA Physical Test Methods (PTM) Sub-Group organises a nominally annual cross-check that is open to calibration laboratories to compare their capability to calibrate standards used in physical test instrumentation. The testing provides a baseline of pressure drop instrument performance across the industry, since this standard type is used in the pressure drop instrumentation of each supplier. Each laboratory is also able to use the result set in internal and external audit assessments. The results of this 14th round robin test continue to conform to the historical performance of the method presented in ISO 6565:2015 and to the results of previous round robin tests.

• 7th Round Robin Test for Multi-Capillary Ventilation Calibration Standards (2018/2019) Technical Report [PTM-191-CTR] – *January 2020* (Sub-Group Physical Test Methods)

The CORESTA Physical Test Methods (PTM) Sub-Group organises a nominally annual series of round robin tests to establish the capability to calibrate standards used in physical test instrumentation. This report covers the results of the 7th ventilation standards test conducted between October 2018 and May 2019. This testing provides a baseline of ventilation instrument performance across the industry since this standard type is used in the pressure drop/ventilation instrumentation of each supplier. Each laboratory is also able to use the result set in internal and external audit assessments. The results are broadly in line with the historical performance of the method.

• CORESTA Agri-Biotech Dossier

Technical Report [ACAC-248-CTR] – January 2020 (Agrochemical Advisory Committee)

The CORESTA Agrochemical Advisory Committee, with assistance from the CORESTA Sub-Group Proficiency Testing for Detection of Transgenic Tobacco, had compiled a dossier of publicly available information on worldwide regulatory references on biotechnology (e.g. genetic modified organisms - GMO). The Dossier is being made available to CORESTA Member Organisations (qualified companies and their respective designated users) via the Members Section of the CORESTA website. The Dossier allows CORESTA Members to have access to useful references on policy, scope and other relevant information related to GMO.

CORESTA REPORTS (continued)

- CORESTA Reference Products 2019 Analysis
 - Technical Report [TTPA-220-CTR] March 2020 (Sub-Group Tobacco and Tobacco Products Analytes)
 - In April 2019, the CORESTA Tobacco and Tobacco Products Analytes Sub-Group (TTPA SG) initiated an interlaboratory study designed to assess the stability of the four CORESTA Reference Products (CRPs) manufactured in 2016, and to provide repeatability (r) and reproducibility (R) results and z-scores to support laboratory accreditation. The results from this 2019 stability analysis generally compared well to the 2016 stability analyses. The only statistically significant difference from the 2016 results was an increase in moisture in CRP3.1, similar to what had been previously observed with CRP3 from the 2009 CRPs
- **2019** Collaborative Study for the Determination of Nicotine in Tobacco and Tobacco Products Technical Report [TTPA-193-1-CTR] *April 2020* (Sub-Group Tobacco and Tobacco Products Analytes)
 - In October 2018, the CORESTA Tobacco and Tobacco Products Analytes Sub-Group (TTPA) initiated a collaborative study for the determination of nicotine in traditional and very low nicotine (VLN) tobacco and tobacco products. The intent of this study was to lower the calibration range for two CORESTA Recommended Methods, CRM 62 and CRM 87, for the analysis of VLN tobaccos and tobacco products. This project was important to ensure these two CRMs are relevant for emerging regulations to reduce nicotine for combusted tobacco products. The results of the study demonstrate that, with modifications, CRM 62 and CRM 87 are suitable and the TTPA SG recommended that the calibration ranges of the two CRMs be lowered to include VLN tobacco and tobacco products.

CORESTA RECOMMENDED METHODS

Updated

- **CRM No. 66** Determination of Nicotine in the Mainstream Smoke of Cigars by Gas Chromatographic Analysis (Second edition March 2020) [CSM-121-4-CRM-66]
- **CRM No. 67** Determination of Water in the Mainstream Smoke of Cigars by Gas Chromatographic Analysis (Second edition March 2020) [CSM-121-5-CRM-67]
- **CRM No. 68** Determination of Carbon Monoxide in The Mainstream Smoke of Cigars by Non-Dispersive Infrared Analysis

 (Second edition March 2020) [CSM-121-6-CRM-68]

CRMs 66, 67 and 68 were subject to a periodic technical and editorial review by the CORESTA Cigar Smoking Methods Sub-Group and updated accordingly. They include new technologies and improve the applicability to laboratory operations.

- **CRM No. 62** Determination of Nicotine in Tobacco and Tobacco Products by Gas Chromatographic Analysis (Second edition April 2020) [TTPA-193-2-CRM-62]
- **CRM No. 87** Determination of Nicotine in Tobacco Products By GC-MS (Second edition April 2020) [TTPA-193-3-CRM-87]

CRMs 62 and 87 were updated and their scope extended to include very low nicotine (VLN) content tobacco and tobacco products. The modifications are based on the Technical Report 2019 Collaborative Study for the Determination of Nicotine in Tobacco and Tobacco Products also published in April 2020 [TTPA-193-1-CTR].

All CORESTA Recommended Methods can be downloaded in PDF format at www.coresta.org

CORESTA GUIDES

CORESTA Guide No. 6

All CORESTA Guides may be downloaded in PDF format at

www.coresta.org

Revision

A User Guideline for the Use of Balances for Cigarettes and Cigarette Related Products (*Third edition – January 2020*) [PTM-213-CTG-06]

The amount of tobacco in cigarettes and of filtertow in filter rods have a direct effect on the smoking performance of the assembled cigarette and are a principal measure for the quality control of cigarette manufacture. The same applies to the use of heated tobacco products (HTPs). This guideline is intended as a reference for manufacturers of cigarettes and cigarette filter rods as to the best practice for weighing, so as to obtain consistently the most accurate and most reliable measurements despite the many external influences that can affect the measured value.

CORESTA Guide No. 7

A Scale for Coding Growth Stages in Tobacco Crops (Second edition – December 2019) [COR-241-CTG-07]

For a number of purposes, including traceability, crop management, experimentation, implementing Good Agricultural Practice (GAP), and for applications such as agro-meteorology and crop insurance, a clear, universally adaptable means of identifying growth stages is very important. The scale described in the CORESTA Guide No. 7 was developed for tobacco and based on the extended BBCH-scale that is universally adopted for uniformly coding phenologically similar growth stages of plants. It covers the full life of the crop from seed germination to harvesting and curing and is applicable to tobacco grown for its leaves as well as that for seed production.

CORESTA Guide No. 10

A User Guideline for the Measurement of Diameter of Tobacco Products and Filter Rods (Sixth edition – March 2020) [PTM-239-CTG-10]

The diameter of cigarettes and filter rods has a direct effect on the pressure drop and the ventilation and therefore on the smoking performance or user experience of the assembled product. Furthermore differences in the diameter of tobacco rod, and all internal segments more generally, might cause assembly problems and also influence the packing. The diameter is a principal measure for the quality control of tobacco product manufacture. This guideline is intended as a reference for manufacturers of tobacco products and filter rods as to the best practice for the measurement of diameter, so as to consistently obtain the most accurate and most reliable measurements despite the many external influences that can affect the measured value.

New

CORESTA Guide No. 27

Identification and Elimination of Highly Hazardous Pesticides (HHPs) in Leaf Tobacco Production (*January 2020*) [ACAC-242-CTG-27]

Highly Hazardous Pesticides (HHPs) are those Crop Protection Agents (CPAs) or pesticides acknowledged to present particularly high levels of acute or chronic hazards to health and the environment. Accordingly, there are relevant binding International Agreements and Conventions to promote awareness of the risks of using HHPs. This Guide, produced by the CORESTA Agrochemicals Advisory Committee (ACAC), promotes these awareness actions in tobacco leaf production. The Guide's purpose is to facilitate the access to key basic information on HHPs. It is directed towards all stakeholders in the tobacco leaf production and supply sectors and is based on published documents available in the public domain.

CORESTA IN THE PRESS

Tobacco Reporter

The **January issue** featured an article by Stefanie Rossel entitled "Efficient Elimination - Proper pest infestation control remains essential in tobacco warehousing and logistics". In the article, CORESTA's guidelines for controlling insects in stored tobacco, including fumigation and controlled atmosphere, were mentioned.

The **March issue** included an interview with the new CORESTA Secretary General, Stéphane Colard, on his vision for the association in the coming years. Also included were a few words by his predecessor, Pierre-Marie Guitton, on his CORESTA experiences over the last ten years.



CORESTA COMMUNICATION AT EXTERNAL EVENTS

Congresso Internacional de Investigaciones del Tabaco (INVESTA 2019)



The Cuban Tobacco Research Institute (Instituto Investigaciones del Tabaco del Cuba) organised its first international congress "INVESTA" in Havana, from 9-12 December 2019. The main themes discussed were plant breeding, agricultural practices, tobacco processing and socio-cultural aspects of tobacco production and marketing. In total, 275 scientists participated - among these three CORESTA representatives were kindly invited to give a 30-minute talk at each plenary session.

Stéphane Colard (Secretary General) made a comprehensive presentation on CORESTA, showing how effective the non-profit organisation was in promoting cooperation for scientific research and for delivering high quality consensual guides, methods and technical reports.

François Dorlhac (coordinator of GMO SG, and Scientific Commission member) presented the agro-phyto activities with special focus on current and new breeding techniques. He illustrated how these techniques could potentially be used to address the challenging issue of nicotine reduction in tobacco leaves as advocated by some regulatory bodies.



Left-to-right: Stéphane Colard, François Dorlhac, Ana Yansy Cuellar Gonzalez (General Director of the Cuban Tobacco Research Institute), Linda Crumpler, Eumelio Espino Marrero (outstanding breeder in Cuba), Amaury Borges Miranda (Scientific Director of the Cuban Tobacco Research Institute)

Linda Crumpler (former SG coordinator and Scientific Commission member, and still much involved in CORESTA activities) described her experiences working with several of CORESTA's working groups, including RAC, TTPA and SMA SGs. Linda concluded by saying that "beyond the excellence of the scientific work, CORESTA has enabled me to build friendships all over the world and a terrific network of technical experts I can always count on for help".

The presentations were well received, and CORESTA was acknowledged as an important association with which to cooperate. This was confirmed by the participation at a meeting held aside from the Congress, where Linda, François and Stéphane discussed cooperation opportunities. Heavy metals in cigar tobacco were identified as a priority ... good news: the TTPA SG has already started working on this topic!

The next INVESTA Congress is already planned for the end of 2022, which leaves plenty of time to prepare and submit an abstract!

Electronic Nicotine Delivery Systems Conference (ENDS US 2019)

ENDS 2019, the Electronic Nicotine Delivery Systems Conference US, was held in Arlington, Virginia, in the USA, from 10-11 December 2019. Eduardo Berea, member of the E-Vapour Sub-Group (EVA SG), made a presentation on "The History and Challenges Faced by the CORESTA EVAP SG in Developing Testing Standards for E-liquids and E-aerosols", highlighting the process for the development of Recommended Methods, the activities of the EVAP SG and brief comments on the Metals Study currently underway.



ENDS US 2019 was a small conference, with about 100 delegates ranging from large and small e-cigarette manufacturers, suppliers of services, industry stakeholders, laboratories and consultants. The conference content was balanced between the USA current regulatory situation and threats and the EU Tobacco Product Directive 2 (TPD2). Speakers included industry representatives, contract laboratories, academia, consultants and market analysts.

External presentations can be viewed in the Information/CORESTA Communication section of the CORESTA website

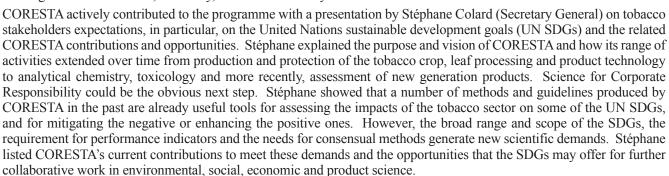
External communication opportunities and perspectives identified to date:

- Report of CORESTA activities on e-cigarettes (EVAP SG) by Stéphane Colard at the CEN/TC427 plenary meeting
- Presentation on international standard developments by Stéphane Colard at the ENDS EU Conference
- Presentations on CROM TF and HTP TF activities at the GFN Conference

CORESTA COMMUNICATION AT EXTERNAL EVENTS (continued)

49th Tobacco Workers' Conference (TWC 2020)

The Tobacco Workers' Conference (TWC) is a two-and-a-half-day event held every two years in the USA and is mainly dedicated to tobacco leaf production related topics. This year, the TWC was organised in Louisville, Kentucky, from 20-23 January.



Presentations made at the TWC have been uploaded in PDF format on the CORESTA website (www.coresta.org).



UPCOMING CORESTA MEETINGS (2020)

Due to the current coronavirus situation, CORESTA Sub-Group and Task Force meetings have been disrupted and many have been cancelled or rescheduled as web meetings. Please visit the CORESTA website for the latest updates (www.coresta.org/meetings/upcoming).

Acronyms / Abbreviations used in the Newsletter

Agrochemicals Analysis (CORESTA) CORESTA Agrochemical Advisory Committee Agronomy & Leaf Integrity and Phytopathology & Genetics
Biologische Bundesanstalt, Bundessortenamt and Chemical industry
Efficacy of Biological and Eco-Friendly CPAs (CORESTA)
Comité Européen de Normalisation Carboxyhemoglobin
Cooperation Centre for Scientific Research Relative to Tobacco
CORESTA Monitor
Crop Protection Agent
Consumer Reported Outcome Measures (CORESTA)
CORESTA Recommended Method
CORESTA Reference Product
Collaborative Study
CORESTA Technical Guide
CORESTA Technical Report
Cigarette Variability (CORESTA)
Electronic Nicotine Delivery Systems
E-Vapour (CORESTA)
Financial Year
Gas chromatography–mass spectrometry
Global Forum on Nicotine
Proficiency Testing for Detection of Transgenic
Tobacco (CORESTA)
Guidance Residue Level
Highly Hazardous Pesticides

HTP	Heated Tobacco Product
	In Vitro Toxicity Testing (CORESTA)
	International Organization for Standardization
LNTP	
LINII	Agronomic Production Practices (CORESTA)
NEOs	Nicotine Equivalents
NNAL	
	Portable Document Format
	Product Use Behaviour (CORESTA)
	Routine Analytical Chemistry (CORESTA)
	Residue Field Trials (CORESTA)
	Scientific Commission (CORESTA)
	Sustainable Development Goals
SG	· · · · · · · · · · · · · · · · · · ·
	Sub-Group and Task Force
	Smoke Analytes (CORESTA)
SSPT	Smoke Science and Product Technology
TC	Technical Committee
TF	Task Force
TPD	Tobacco Product Directive
TSRC	Tobacco Science and Research Conference
TTPA	Tobacco and Tobacco Products Analytes
	(CORESTA)
TWC	Tobacco Workers' Conference
	United Nations
	United States of America
	Working Group
VIR	5 1
	Very Low Nicotine
	Extended Diagnostic Expert System (CORESTA)
ADLJ	Exteriord Diagnostic Expert System (CONESTA)