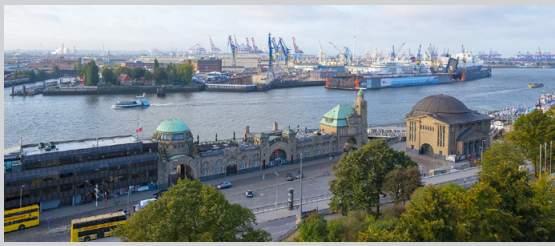
NEWSLETTER

Issue 55 – December 2019

2019 CORESTA Conferences in Europe and Africa



"The organisers build the frame and the delegates paint the picture", declared Nils Rose, Managing Director of Borgwaldt and SSPT2019 Organising Committee Chairman. This is true for every CORESTA conference and congress. While frame building can be challenging, it is always satisfying to see a smoothly running, high level scientific conference as 'a collaborative ensemble' within a carefully crafted framework.

The 2019 CORESTA events took place on different continents: the Smoke Science and Product Technology Conference (SSPT2019) hosted by Borgwaldt and Sodim in Germany and Agronomy & Leaf Integrity and Phytopathology & Genetics (AP2019) hosted by the Tobacco Research Board in Zimbabwe. Nevertheless, this does not mean that these two groups are to be considered as separate. The President of the CORESTA Board, Huub Vizée, who participated to both events, underlined the fact that "the AP and SSPT groups should not be seen as two different entities as they cannot exist without each other". Taking low nicotine as an example, he showed how "CORESTA overarches both sides of the research spectrum".

An "overarching" topic for both AP and SSPT was also the Sustainability Forum that sparked much interest. Although different United Nations sustainable development goals were covered in the Forum at both events, and approached from different perspectives, the outline was similar on each occasion. It was clearly identified that the combination of science, skills, knowledge, creativity, initiative and most of all collaboration were the prerequisites for finding sustainable solutions. However, as actions often speak louder than words, Huub Vizée suggested that a questionnaire could be sent to CORESTA members in order to ascertain the interest in creating a new working group and define a future line of work on sustainability.

Judging by the attendance at both meetings, CORESTA members are more determined than ever to ensure that the challenges of the future, "the big picture", is addressed in a collaborative, science-based framework.

CORESTA
SSPT CONFERENCE
HAMBURG 2019

SSPT2019 at a glance:

- Hosted by Borgwaldt KC GmbH and Sodim SAS, France
- Held at the Hotel Hafen Hamburg, Germany
- 318 delegates (plus 34 attending SGTF meetings only), 13 accompanying persons
- 25 nations represented
- Sessions: 17; Workshops: 2; Forums: 1; SGTF meetings: 11
- Presentations: 61 oral, 67 posters, 13 SGTF reports

Abstracts, available presentations and full texts, published on the CORESTA website www.coresta.org

Smoke Science and Product Technology
Hamburg, Germany / 6-10 October 2019

Hamburg is a renowned port city on the shores of the River Elbe that links it to the North Sea. Ports inevitably conjure up scenes of ships and trade, and where there is trade, one of the commodities is usually tobacco. This has been the case for hundreds of years, and Hamburg is no exception. It is against this maritime and tobacco trade backdrop that the organisers greeted the record breaking 365 participants (including accompanying persons) to the CORESTA SSPT2019 Conference held at the sailing-themed Hotel Hafen Hamburg.

SGTF Meetings

Almost 150 CORESTA delegates were already in Hamburg the weekend prior to the Conference in order to participate in the 11 Sub-Group and Task Force (SGTF) meetings. Much work was achieved over the weekend before the start of the four-day Conference. Participants at SGTF meetings all contribute on a voluntary basis, in a collaborative spirit, as they are aware that these meetings are an invaluable opportunity for each to interact, share ideas and move forward.

Welcome Cocktail

The Sunday evening Welcome Cocktail was held on the historic "Rickmer Rickmers", a famous 19th century sailing ship converted into a floating museum. From the deck, there was a far-reaching view over the Hamburg port and its modern freight ships – the contrast between the 19th and 21st centuries showed just how much maritime trade has changed over the past hundred years.


Nils Rose


Rob Stevens

The sailing ship was the starting point of a four-day CORESTA scientific 'journey' to which Nils Rose, Managing Director of Borgwaldt KC GmbH, welcomed all the participants on behalf of his company who had organised the conference with assistance from Sodim SAS, France. Borgwaldt and Sodim having set up the "frame", he invited delegates to complete the "picture" with science.

"By working together we can do great science", stated Rob Stevens, Vice President of the Scientific Commission, speaking to delegates on behalf of the CORESTA Scientific Commission. "Our goal is to do everything in our power to advance the science in the ever changing and evolving framework of our industry and to do it in the right way", he added.

Working Programme

The Conference working programme began and concluded with the topic of sustainability. A presentation by Stéphane Colard on the United Nations sustainable development goals and impacts of the tobacco and alternative product sectors, opened the first session of the conference. This was part of his MBA project supported by CORESTA. His methodological approach served as an interesting introduction to the Sustainability Forum later on in the week.

A multitude of other scientific and technical presentations were made on current topics. One such area of high activity is heated tobacco products (HTPs). More and more of these products are available for consumers, and possibility of product assessment harmonisation is being investigated. One of the presenters observed that "the use of standardised conditions is key for the comparison of products" and a number of presentations went on to focus on this area of research . Another topic related to HTPs and gaining momentum is consumer behaviour. This has led to the formation of the Consumer Reported Outcome Measures (CROM) Consortium Task Force, which presented its first annual report. CROM related items were covered, notably the ABOUT™ Toolbox (Assessment of Behavioral OUtcomes related to Tobacco and nicotine products) that contains self-report instruments developed to support population perception and behaviour assessment of reduced-risk products (RRPs).

The first Workshop of the Conference was Next Generation Tobacco and Nicotine Products on Monday afternoon. Four panellists discussed different methods and technologies, such as the feasibility of *in vitro* methods for next generation products and high-content screening (HCS) technology to assess the biological impact of single compounds and complex mixtures i*n vitro*. Two other presenters focused on organotypic *in vitro* models and the possibilities these offer in terms of applicability to next generation tobacco and nicotine product assessment.


SMA SG meeting

Day two of the Conference began with the second Workshop. Many participants were interested in understanding the meaning of the not-so-self-explanatory term "Population modelling". Specialists on the subject were able to explain not only the basic concepts of population modelling but also how to convey modelling projections in a manner that best addresses regulatory application requirements. One of the panellists underlined the importance of understanding the population impacts after actually introducing RRPs into a market as a replacement for cigarettes. A vivid discussion and many questions ensued. "How does the population modelling improve the quality of life?" - the answers given by the experts highlighted the challenges in establishing exactly what really influences results as predictions change and many parameters need to be taken into consideration.

The Tuesday presentation schedule also included the first of three e-vapour sessions, another hot topic being addressed by tobacco stakeholders. Another session focused on highly specialised *in vitro* toxicity testing themes. The day ended with the **Poster Session** which featured an impressive number of posters, 67 in all, on a wide variety of subjects with authors in attendance to present their work and answer questions.


Population Modelling Workshop – Curtin, Baker, Black, Shiffman


Next Generation Products Workshop
– Frentzel, Thorne, Simms, Trelles Sticken, Ito, Gaca

Although emerging topics such as HTPs, NGTX and CROM generate much interest and are given the limelight, the more usual sessions on product design, biomarkers, tobacco analyses and cigars are essential to tobacco stakeholders and continue to form an integral part of CORESTA Conferences. The six parallel sessions on the Wednesday morning were full of enthusiastic delegates eager to ask questions and interact with presenters.

Networking Cruise

On Wednesday afternoon, delegates were allowed a well-deserved break and shortened their working day to find their way to the St Pauli Pier and board the MS Hamburg cruise boat for a guided tour of the harbour. This was the opportunity to breathe in some fresh sea air and enjoy the mesmerising atmosphere of the harbour and the generous buffet spread over the two levels of the boat. These breaks in the working session schedule are always much appreciated by delegates as they enable networking in a relaxed atmosphere - it is here that new contacts with peers are established and where it is possible to catch up with old friends whilst admiring the scenery. The enormous container ships and effervescence of the docks left a lasting impression, as did the city lights and the new landmark of Hamburg, the Elbphilharmonie building. This impressive concert hall was one of the places visited by the 13 accompanying persons during their guided tour of the Hamburg and its World Heritage sites. Their programme also included a gourmet visit of the Hanseatic city of Lübeck and its famous marzipan factory.

Working Programme (continued)

Thursday, the last day of the Conference, contained a session on smokeless tobacco that dealt mainly with harmful or potentially harmful components and described different analysis methods and techniques. This session also included a presentation on the impact of very low nicotine content on cigarette use patterns – this is an overaching topic with agro-phyto and very much on the research radar at the moment. Another session featured biomarker presentations and the day culminated with the Forum on Sustainability.

Sustainability Forum

Stéphane Colard opened the Sustainability Forum by introducing two topics: risk continuum and the carbon footprint. These are subjects that cannot be ignored, whatever one's area of expertise.

Risk continuum was introduced by the first panellist, Christopher Russell from the Centre for Substance Use Research (CSUR), Scotland. He talked about how to estimate the population health impact of e-cigarettes and explained that this was tricky because the potential net benefit of e-cigarettes to population health depends on how they are used in relation to traditional smoked tobacco products. Media and anecdotal reports were powerful drivers of public policy and public sentiment towards vaping, he added.

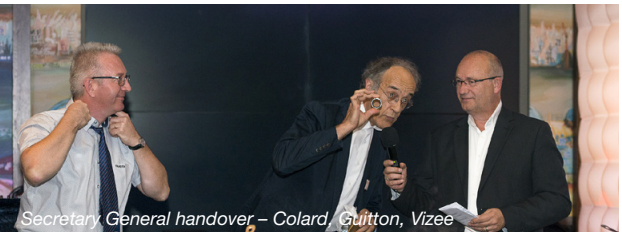
Joseph Thompson from Imperial Brands, U.K., speaking on the same subject, said that “seeing what is happening right now around the world, it is absolutely right to talk about innovation and trust”. He stressed the importance of safety assessments, the regulators’ role, and pointed out that population benefits and risks should be a holistic assessment. Product impacts on the environment were also evoked in his presentation.

Discussions that followed concluded that a framework for assessing and positioning tobacco and alternative products against a risk continuum is needed.

The second topic, quite different from the first, covered the carbon footprint and Green House Gas (GHG) emissions. One of the CORESTA Board executives, Diane Raverdy-Lambert from SWM Intl, a paper manufacturer, gave the industry perspective of GHG emissions and many concrete examples of what her company has done so far to avoid or reduce its carbon footprint. She also described the Carbon Disclosure Project (CDP), which is the global disclosure system that enables companies, cities, states, and regions to measure and manage their environmental impacts.

It was clear from the Forum discussions that CORESTA has a role to play in the area of sustainability and impact assessment as science underpins credibility. “The priority is to develop guidelines and methods”, Stéphane declared, adding that he was convinced that the time has come to create a sustainability platform where all participants would contribute positively and transparently. This vision of positive action for the future was a fitting end to the Conference’s working sessions.

Sustainability Forum SSPT – Russell, Colard, Thompson, Raverdy-Lambert (seated)



Secretary General handover – Colard, Guitton, Vizee

Closing Dinner

When the delegates arrived at the Blockbräu Brewery in Hamburg's port on the last evening of the Conference, it was immediately clear that the time had come to relax. The atmosphere was set by an accordion player walking around the tables, a magician performing tricks for those who wanted to be amazed, and a photobox for those who wished to bring back a souvenir of a memorable evening with colleagues. The cheerful mood in the brewery increased with the delicious aromas of German specialities served with freshly brewed beer.

Huub Vizée, President of the CORESTA Board, warmly thanked the organising committee for their hard work, and all attendees for the excellent presentations and willingness to collaborate within a non-competitive environment. He also announced that Pierre-Marie Guitton would be stepping down as Secretary General of CORESTA. He praised the tremendous work accomplished during his years in office, and his enthusiasm, new ideas and his success in actively increasing CORESTA's visibility. Pierre-Marie in turn thanked the CORESTA Board for the trust placed in him and as a handover ritual, he offered his CORESTA-branded tie to Stéphane Colard who was taking over the position. Accepting the gift, Stéphane said he was proud to take on this new role and was looking forward to working with all the CORESTA members.

The Conference "frame" had been solidly built by the organisers … but what about the picture inside the frame? The intrinsic value of each Conference is its scientific level and how it is experienced by the participants. If their needs are met then it is up to standard. Delegates' feedback indicated that the Hamburg SSPT2019 Conference was far above the mark in every respect - high level presentations, remarkable meeting site and efficient organisation. No-one knows if the future will be plain sailing, but participants can look to the horizon with confidence and take home with them a great picture of scientific excellence. "Vielen dank"!

Agronomy & Leaf Integrity and Phytopathology & Genetics Conference
Victoria Falls, Zimbabwe / 13-17 October 2019

CORESTA AP 2019
Victoria Falls - Zimbabwe

AP2019 at a glance:

- Hosted by the Tobacco Research Board of Zimbabwe
- Held at the Elephant Hills Hotel, Victoria Falls, Zimbabwe
- 140 delegates, 10 accompanying persons
- 22 nations represented
- Sessions: 14; Forums: 1; SGTF/Cttee meetings: 8
- Presentations: 52 oral, 16 posters, 11 SGTF reports

Abstracts, available presentations and full texts, published on the CORESTA website www.coresta.org

If you woke up at six in the morning and opened the balcony door of your hotel room, you might have seen a majestic baobab tree outside and a few warthogs on their knees in search of food. You probably rubbed your eyes twice believing you were still asleep. But the warthogs were still there and in addition a small monkey or two suddenly appeared from out of nowhere and if you were not quick enough they entered your room in search of sugar. It certainly woke you up and made you realise that you were not asleep but in Africa.

This was a usual morning scenery for many CORESTA delegates who attended the AP2019 Conference at the Elephant Hills Hotel, Victoria Falls, Zimbabwe. Here you could feel the wilderness in the air, the breath of invigorating energy and the strength of 'the mighty and awe inspiring' Victoria Falls.

Yet there was something else you could observe when looking outside - the dry landscape. This year Zimbabwe is experiencing a very severe drought. One can easily understand how the dry land mirrors the effect of global warming on the environment, wildlife and, of course on human beings.

Climate change affects humanity and the biosphere as a whole, and this subject was a background theme for this conference. Out of the 52 papers and 16 posters that were presented, over 30 % were linked in some way to environmental protection and sustainability. Tobacco scientists were able to use the CORESTA event as a connecting platform to share their views on these and other topics. CORESTA Conferences also offer an opportunity for Sub-Groups and Task Forces to organise their meetings and, as usual, the Agrochemical Advisory Committee (ACAC) and seven other SGTF meetings took place prior to the Conference in Victoria Falls.

Welcome Reception

In her opening speech, Dahlia Garwe, Chief Executive Officer at the Tobacco Research Board (TRB), paved the way for the coming week's core topics by mentioning the world's awareness of the impact of humanity on our magnificent planet.

Dahlia welcomed 140 participants from 22 different countries who had travelled to Zimbabwe to take part in the four-day CORESTA event. She praised the tradition of excellence for which CORESTA is well-known and stated that the TRB was committed to continue playing its role in sustainable tobacco production, especially since the commodity is the cornerstone of Zimbabwe's economy.

"We look forward to lively, enthusiastic and thought provoking discussions", said Dahlia and hoped that during the Conference old ideas would be challenged or changed if necessary and new ideas and solutions brought in for the benefit of all. By all reports received after the event, it is certain that the scientific level of the presentations will have met both Dahlia's and the delegates' expectations!

Working Programme

The Monday morning Opening Session was chaired by two CORESTA executives, Lea Scott (President of the Scientific Commission) and Huub Vizée (President of the Board). They both underscored the fact that the success of CORESTA depends on its members and their hard work. On behalf of the CORESTA Board, Huub also warmly thanked the TRB for hosting the Conference. As at the SSPT2019 Conference in Hamburg, he mentioned the proactive planning of the Scientific Commission together with CORESTA Board and the five-year road map, and was very pleased to see that issues such as plant breeding and low nicotine were being covered in the Conference programme.

The Monday morning presentations gave a general overview of tobacco production in Zimbabwe, its history and landmarks, as well as growers' roles and problems. Deforestation attributed to tobacco curing was explained together with the efforts by the Sustainable Afforestation Association to mitigate the effects.

United Nations sustainable development goals were presented by Stéphane Colard, and again, similarly to SSPT2019, formed an introduction to the Sustainability Forum scheduled on the following day. Many other presentations covered sustainability and the environment in the tobacco growing context. Subjects included leaf production, drought tolerance, extracting value from tobacco waste and pollution control. As an example, one of the presentations proposed a solution to reduce pollutant emissions in tobacco bulk curing barns in China where coal is still widely used as fuel.

Huub Vizée, Lea Scott

Dahlia Garwe

The following session on genetics featured, amongst others, papers on tobacco mutants with fewer suckers and the development of codominant markers related to powdery mildew resistance. The nutrition session, as it name implies, included papers on soil nutrients, organic nitrogen fertilizer sources, potassium application, organic Burley tobacco production, rotation effects and organic fertilisers.

Different techniques linked to production and post-harvest methods were part of the programme on Tuesday morning. Presentations dealt with varied issues such as the evaluation of crop protection agent (CPA) application and the lethal effects on the cigarette beetle of low pressure in stored tobacco.

Wednesday morning's programme covered further genetics related topics and disease management. One session was devoted to genotypes, genetic mapping, mutations, metabolics and transgenic tobacco. On the disease side, a report was given on a pepper potato virus Y isolate and on integrated pest management (IPM). The pre-lunch **Poster Session** addressed various aspects of tobacco growing and related areas, such as yield, quality, disease resistance, TSNA accumulation and fertilisers. The issue of sustainability appeared again in particular with regards to forestry in Malawi and with a tool for optimising the carbon footprint of international meetings.

Delegates once more filled the Conference room on Thursday to listen to papers on breeding and biocontrol in disease management, evaluation of biological control agents, use of crop rotation, and blue mould control. Moreover, existing eco-friendly CPA solutions for the future were evoked. Two important aspects in tobacco cultivation such as the role of analytical chemistry and nitrogen fertilisation were also part of the programme.

The last working session of the Conference afternoon was dedicated to low nicotine. From the regulators side, standards are needed to enable the determination of maximum nicotine levels in cigarettes. In response, the tobacco industry has undertaken several studies to investigate how to effectively reduce nicotine in tobacco whilst maintaining quality. These studies will have a major impact on meeting regulatory standards.

Sustainability Forum - The strength of dialogue

Several tools are needed to prevent potential problems or solve others. The strength of CORESTA workshops and forums is that they can bring together different specialists to discuss and seek solutions to achieve common goals.

The Sustainability Forum was moderated by Huub Vizée and Stéphane Colard. As Stéphane's MBA project was the starting point for both the SSPT2019 and AP2019 Sustainability Forums, he introduced the four speakers.

The first presenter was Luke Wilde, Chief Executive at twentyfifty ltd, who spoke about social expectations, risk identification and management along supply chains. Luke also commented on the main human rights issues in the tobacco sector and particularly on the role of women, gender segregation and forced labour. "In some countries women are the substantial part of the workforce but may not see any money for cultural reasons", Luke pointed out.

Warwick Evans, Senior Manager Leaf Agronomy & Sustainability at Imperial Tobacco Limited, and member of the Sustainable Tobacco Programme (STP) Steering Committee, outlined the STP's current actions and anticipated future initiatives.

The third speaker, Eduardo Royo, in charge of all PMI Water Sanitation and Hygiene (WASH) initiatives in Africa, presented on water scarcity and how PMI's project was aimed at generating a positive impact in people's lives. Eduardo presented some of the initiatives launched and how their impact was assessed and monitored over time.

The fourth presenter was Enrica Bargiacchi, Research Agronomist at the Interuniversity Consortium for Science and Technology of Materials in Florence, Italy. Joining the panel of experts at the last moment, she was able to present the multiple initiatives to support a more sustainable tobacco crop production in Italy.

An open and constructive discussion followed the presentations. It was impressive to see participant's interest and enthusiasm when they suggested new ideas and solutions. For example, concerning cooperation between CORESTA and STP. Warwick emphasised that CORESTA not only "should" but rather "must" support STP by encouraging highly qualified experts to contribute. Commenting on STP participation, Dahlia Garwe hoped to see a holistic approach to contributions, to which Warwick reiterated an invitation to all concerned stakeholders to get involved in the programme.

In response to a question on whether he would be willing to contribute as a project leader to establish similar "WASH" programmes in other countries, Eduardo's immediate response was "Yes". Within the audience, there was consensus that more collaboration was needed, companies need to work together and common priorities and common approaches need to be defined. The important point was to identify as many stakeholders as possible.

"CORESTA is looking for scientific contributions to sustainability programmes", concluded Huub Vizée. Similarly to the SSPT2019 in Hamburg, he made it clear that sustainability was a topic of vital importance and to move forward, there was need to gauge CORESTA members' interest in the topic and then establish a working group.

Listening to the Forum, delegates were able to appreciate the importance of CORESTA as an institution. It not only offers its members a unique scientific platform, but also intangible benefits such as networking, a sense of community and common goals, and also an opportunity for volunteers to take leadership of projects.

Sustainability Forum AP – Vizée, Evans, Colard, Bargiacchi, Wilde, Royo

Excursion

A break in order to go on an excursion was most welcome by delegates. On Wednesday afternoon delegates were privileged to visit the famous Victoria Falls, "Mosi oa tunya", "the smoke that thunders", and admire the breath-taking scenery of this natural wonder. Delegates were also given the opportunity to enjoy the spectacular Zambezi River panorama during a sunset cruise. Networking was interrupted by an exceptional nature show as a herd of elephants came to the river bank for refreshment. This was an unexpected and unforgettable moment to all enthusiastic participants.

Closing Dinner out in the Bush – Keep the pace

The imagination and creativity of the delegates was put to the test as they were invited to come to dinner dressed with an African touch. Everybody joined in and the atmosphere was casual and relaxed. A typical and delicious Zimbabwean dinner was served outside in the bush while Imbuwe music was played and the Ubuntu WoBuntu group performed Makeshi dances. Pierre-Marie Guitton, attending his last Conference as outgoing CORESTA Secretary General, was presented with a gift by Huub Vizée. Huub bade him farewell on behalf of the Board and the Scientific Commission and wished him a happy retirement. This was met with warm applause by all the delegates.

To the surprise of all participants a final working session had been planned for dinner. It was an interactive, hard working session for all participants. A djembe drum was given to each guest and training started immediately. With an intense feeling of concentration, all tried to keep the pace, but amazingly quickly, powerful and rhythmic drumming echoed in the African night. The AP2019 Conference closed on a high note, and special thanks go to the TRB Organising Committee for their magnificent job!

CORESTA IN THE PRESS

Tobacco Reporter

The November issue of *Tobacco Reporter* featured a full report on the recent Global Tobacco & Nicotine Forum (GTNF) held in Washington DC, USA. One of the sections was entitled "Toward a Sustainable Future" and included a paragraph on the talk made by Stéphane Colard that examined "whether the United Nations (UN) Sustainable Development Goals (SDGs) were a threat or an opportunity for creating value collectively and sustainably in the tobacco industry".

CORESTA STAFF

OUTGOING SECRETARY GENERAL

Pierre-Marie GUITTON

Ten years already! Such great times and the pleasure of accompanying CORESTA through the changes that occurred during this period and are still coming up and foreseen. Many times I had comments from newcomers at conferences and congresses telling me how amazed they were with the hearty spirit of CORESTA. And this is thanks to all the members, contributing and sharing, collaboratively for science. Despite distance between so many individuals, a real community is alive, real friendship is possible that often remains true aside the sole context of CORESTA work.

Over the past ten years, activities at the Paris Secretariat have tremendously increased, due to new regulations and new needs, with the strong will from the Board and Scientific Commission to be more visible, address challenges, provide, present and publish robust scientific work. The number of working groups has almost doubled, that of published documents more than tripled. A new generation of scientists brought rejuvenated enthusiasm and, after a somewhat stable period, membership increased by 8 % last year, with more labs engaging in collaborative work and understanding that CORESTA is not the voice of an industry but that of sound science. And because of that, CORESTA is here to stay and grow.

During my tenure, with the tireless help of the Secretariat team, we tried to bring our contribution to what has been built with the commitment of all to meet the vision of CORESTA: “be recognized by our members and relevant external bodies as an authoritative source of publicly available, credible science and best practices related to tobacco and its derived products”. This will continue and I am happy to leave the Association in excellent hands!

INCOMING SECRETARY GENERAL

Stéphane COLARD

Over the past 20 years I have worked as a research scientist for the tobacco industry. Over time, I had the opportunity to deploy quality systems, to manage testing laboratories and to lead scientific research programmes. I have been also involved in CORESTA activities since 2000. I remember my first oral presentation at the Congress held in Lisbon. My talk was about the assessment of the hardness of soft materials. Apparently it was not eligible for the Nobel prize … but nevertheless, 19 years later, I am proud to have been the author or co-author of 72 presentations at past CORESTA congresses and conferences. In parallel, I was involved in several working groups as contributor and coordinator, and I had the honour to serve on the Scientific Commission from 2014 until 2018. So, it seems fair to say that I am reasonably familiar with the CORESTA association and well aware of member expectations.

One sometimes reaches a turning point in one’s professional life, and the time came to me to choose another direction. My intention was not to step back but to continue to support scientific research relative to tobacco products while moving laterally from the position of CORESTA member to the position of Secretary General. By doing so, I seized the opportunity to support cooperation in addition to scientific research.

The tobacco industry is operating in interesting times. The environment is changing faster than ever as regulatory pressure increases and consumer choices evolve rapidly. Nowadays, most of the large manufacturers and producers talk about their business transformation to create and share value sustainably. Science already plays an important role in this transformation and in value creation, and it is not by chance that CORESTA recently decided to create new groups like LNTP, HTP or NGTX. No doubt there will be more changes to come and that CORESTA will continue to proactively play a very important role for the benefit of all members and other stakeholders.

Pierre-Marie hands over to me the key to the CORESTA Secretariat, and I am lucky to find the association in perfect order. My mission is to run the association smoothly, and I know that I can count on a CORESTA team well-known for their professionalism. As the new Secretary General of CORESTA, I am personally committed to meeting members' expectations.

CORESTA PROJECTS

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

- **Project 231: Aerosol Collaborative Study: Qualification of a Reference Device**
  SG EVAP - E-Vapour - Approved August 2019
- **Project 233: Presentations at INVESTA Congress, Havana, Cuba, Dec 2019**
  CORESTA - Approved August 2019
- **Project 235: Presentation Boards on CORESTA and RFT SG, University of Kentucky Burley Tobacco Tour, Aug 2019**
  SG RFT - Agrochemical Residue Field Trials - Approved August 2019
- **Project 237: Collaborative Study Menthol in Smoke**
  SG RAC - Routine Analytical Chemistry - Approved September 2019
- **Project 238: Joint Experiment Test Study on Matrix Effects from DAC Tobaccos**
  SG AA - Agrochemicals Analysis - Approved September 2019
- **Project 239: Systematic Review of CORESTA Guide No. 10 - Measurement of Diameter of Cigarettes and Filter Rods**
  SG PTM - Physical Test Methods - Approved September 2019
- **Project 240: 13th Collaborative Study on Physical Parameters**
  SG PTM - Physical Test Methods - Approved September 2019
- **Project 241: Revision of CORESTA Guide No 7 - A Scale for Coding Growth Stages in Tobacco Crops**
  CORESTA - Approved September 2019
- **Project 242: Identification and Elimination of HHPs in Leaf Tobacco Production**
  ACAC - Agrochemical Advisory Committee - Approved October 2019
- **Project 243: 16th FAPAS CPA Analysis Proficiency Test - 2020**
  SG AA - Agrochemicals Analysis - Approved October 2019
- **Project 244: Initial Study for the Determination of Very Low Nicotine (VLN) in Smoke Condensates**
  SG RAC - Routine Analytical Chemistry - Approved November 2019
- **Project 245: Ames Inter-laboratory Study**
  SG IVT - *In Vitro* Toxicity Testing - Approved November 2019
- **Project 246: Proficiency Test for Nicotine and Minor Alkaloids/Nicotine Degradants in Nicotine Pouches and E-liquids**
  SG TTPA / EVAP - Tobacco and Tobacco Products Analytes / E-Vapour - Approved November 2019
- **Project 247: Update Guide No. 01 GRLs**
  ACAC - Agrochemical Advisory Committee - Approved October 2019

CORESTA REPORTS

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

- **2012 Collaborative Study on B[a]P, VOCs, and Carbonyls in Mainstream Cigarette Smoke**
  Technical Report [SMA-228-1-CTR] – *August 2019* (Sub-Group Smoke Analytes)

  In 2011, an interlaboratory collaborative study was initiated for the determination of Benzo[a]pyrene, selected volatile organic compounds, and selected carbonyl compounds in mainstream cigarette smoke generated under ISO and Intense (i.e. Health Canada Intense) smoking conditions. The intent of this study was to update the respective CORESTA Recommended Methods (CRMs 58, 70 and 74) to include repeatability and reproducibility (r&R) values for these analytes generated under Intense smoking conditions. The results of the study demonstrated that the CRMs, with modifications, were fit for use under ISO and Intense smoking conditions.

- **Rationale and Strategy for *In Vitro* Toxicity Testing of Combustible Tobacco Products**
  Technical Report [IVT-225-CTR] – *October 2019* (Sub-Group *In Vitro* Toxicity Testing)

  The existing 2004 guideline has been reviewed in order to re-evaluate the relevance of the initial rationale and strategy of *in vitro* testing of combustible tobacco products, identify recent and comparable regulatory testing guidelines and examples in publications, and provide a pragmatic summary of key features of each recommended assay. The review effort revealed that the overall strategy and rationale remains valid and relevant.

CORESTA REPORTS (continued)

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

- **2016 Joint Experiment on Aromatic Amines in Mainstream Cigarette Smoke by LC-MS/MS**
  Technical Report [SMA-048-3-CTR] – *November 2019* (Sub-Group Smoke Analytes)

  This report covers the Joint Experiment (JE) conducted in 2016 with LC-MS/MS focused on evaluation of the SPE clean-up procedure. Its aim was the comparison of two SPE approaches using either a single cartridge (MCX) or two cartridges (dual SPE). Kentucky reference cigarettes 3R4F smoked under both ISO and intense smoking regimes were selected as a testing matrix. The variations between the SPE clean-ups and the different smoking regimes were recorded. Due to the small number of laboratories that participated and the limited data analysis of the submitted results, it was concluded that a larger study would be required to further investigate both methods and to confirm the findings.

- **1st Collaborative Study on Air Permeability in Accordance with ISO 2965:2019**
  Technical Report [PTM-217-CTR] – *November 2019* (Sub-Group Physical Test Methods)

  Air permeability is an important parameter of wrapping papers for tobacco products. The method for measuring air permeability is specified in ISO 2965. The revised version of ISO 2965, used for measuring air permeability, allows the use of the 2×15 mm^2 measuring head. At this time no repeatability and reproducibility data are available for this size of measuring head used on conventional cigarette paper. This collaborative study serves to provide the r&R data and to compare permeability values obtained with both the 2×15 mm^2 and 10×20 mm^2 measuring heads.

- ***In vitro* Micronucleus Assay Inter-Laboratory Proficiency Study**
  Technical Report [IVT-110-CTR] – *November 2019* (Sub-Group *In Vitro* Toxicity Testing)

  An *in vitro* micronucleus assay proficiency study was conducted to evaluate the micronucleus induction of a mainstream smoke extract of three cigarettes using a common study protocol. The median variability of three replicates was below 20 % and the proficiency study showed that the sensitivity of the micronucleus assay was good enough to differentiate the test pieces. The study enabled laboratories to evaluate the method proficiency, to compare results with those of other laboratories and to obtain an external audit of documentation procedures that might identify potential areas for improvement.

CORESTA RECOMMENDED METHODS

Updated

- **CRM No. 58** – Determination of Benzo[a]pyrene in Cigarette Mainstream Smoke by Gas Chromatography-Mass Spectrometry
  (Fifth edition – November 2019) [SMA-228-2-CRM-58]
- **CRM No. 70** – Determi nation of Selected Volatile Organic Compounds in the Mainstream Smoke of Cigarettes - Gas Chromatography-Mass Spectrometry Method
  (Fifth edition – September 2019) [SMA-228-3-CRM-70]
- **CRM No. 74** – Determination of Selected Carbonyls in Mainstream Cigarette Smoke by High Performance Liquid Chromatography (HPLC)
  (Fifth edition – August 2019) [SMA-228-4-CRM-74]

The above three CORESTA Recommended Methods (CRMs) were updated with repeatability and reproducibility (r&R) values for Benzo[a]pyrene, selected volatile organic compounds, and selected carbonyl compounds in mainstream cigarette smoke generated under ISO and Health Canada Intense smoking conditions. The review is based on the Technical Report 2012 *Collaborative Study on B[a]P, VOCs, and Carbonyls in Mainstream Cigarette Smoke.*

- **CRM No. 75** – Determination of Tobacco Specific Nitrosamines in Mainstream Cigarette Smoke by LC-MS/MS
  (Third edition – August 2019) [SMA-232-CRM-75]

This CRM was put through the systematic review process and a few adjustments made by the Smoke Analytes SG.

- **CRM No. 65** – Determination of Total and Nicotine-Free Dry Particulate Matter using a Routine Analytical Cigar-Smoking Machine – Determination of Total Particulate Matter and Preparation for Water and Nicotine Measurements
  (Fifth edition – August 2019) [CSM-121-2-CRM-65]

This CRM was subject to a periodic technical and editorial review by the CORESTA Cigar Smoking Methods Sub-Group and updated accordingly. It includes new technologies and improves the applicability to laboratory operations. The revision is supported by the Technical Report *2018 Collaborative Study for CRM65 Update of Repeatability and Reproducibility.*

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

CORESTA GUIDES

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

Update

CORESTA Guide No. 1

The Concept and Implementation of CPA Guidance Residue Levels
(Fifth edition – November 2019) [ACAC-247-CTG-01]

The updated version of the Agrochemical Advisory Committee (ACAC) Guide No. 1 on the CORESTA Guidance Residue Levels (GRLs) was released in November. It includes GRLs for nine additional CPAs and the revision of GRLs for two other CPAs.

GRLs are a tool to assist and provide guidance for the interpretation and evaluation of agrochemical residue testing results and to serve as an indicator that Good Agricultural Practice (GAP) is being implemented. GRLs are applicable to cured tobacco leaf while focusing on processed tobacco leaf which is predominantly used for the production of traditional cigarette tobaccos and the GAPs associated with the cultivation of these tobacco types.

Revision

CORESTA Guide No. 2

Phosphine Fumigation Parameters for the Control of Cigarette Beetle and Tobacco Moth
(Fourth edition – August 2019) [PSMST-073-CTG-02]

CORESTA Guide No. 2 sets the standards for the implementation of fumigation practices to deal effectively with phosphine resistant beetle and moth populations in order to curb the spread of phosphine resistance and to keep phosphine as a viable insecticide for the tobacco industry. This guide was reviewed by the CORESTA Sub-Group Pest and Sanitation Management in Stored Tobacco (PSMST) and updated with references, explanation of resistance, and calibration recommendations.

CORESTA Guide No. 9

Freezing Parameters for the Control of Cigarette Beetle and Tobacco Moth
(Second edition – August 2019) [PSMST-070-CTG-09]

This Guide outlines the freezing parameters to control insect pests in tobacco. Freezing is a non-toxic, residue free alternative to phosphine fumigations and provides a means to address concerns of treating tobacco in cold weather and where there is phosphine resistance. The document was revised by the CORESTA Sub-Group PSMST and updated with references and tempering details.

CORESTA Guide No. 12

Controlled Atmosphere Parameters for the Control of Cigarette Beetle and Tobacco Moth
(Third edition – August 2019) [PSMST-067-CTG-12]

Controlled atmosphere (CA) treatments are environmentally safe, leave no chemical residue, do not negatively affect commodity quality, have a low risk of resistance development, and treatment times are comparable to phosphine fumigations and freezing treatments. This Guide was updated by the CORESTA Sub-Group PSMST with references, calibration recommendations, and humidity comments.

CORESTA Guide No. 5 – Technical Notes

TN 002 – Dinitroanilines *(November 2019)* [AA-227-1-CTN002]
TN 003 – Methamidophos *(November 2019)* [AA-227-2-CTN003]
TN 004 – Pyrethroids *(November 2019)* [AA-227-3-CTN004]
TN 005 – Auxin-Herbicides *(November 2019)* [AA-227-4-CTN005]

The CORESTA Guide No. 5 includes a series of technical notes on compounds that require additional consideration to ensure satisfactory analysis. The above Technical Notes were reviewed and updated by the CORESTA Sub-Group Agrochemical Analysis (AA).

New

CORESTA Guide No. 26

Technical Guide for Designing E-Vapour Product Stability Studies
(September 2019) [EVAP-178-CTG-26]

With the global development of electronic cigarettes, knowledge of stability and storage conditions for marketed products becomes increasingly important for product shelf life determination. This Technical Guide provides guidance on how to conduct a stability study.

Consumer Reported Outcome Measures Consortium (CROM)

Christelle CHREA
CROM TF Coordinator

Catherine ACQUADRO
CROM TF Co-coordinator

To support regulatory decision-making on new tobacco products, there is a need for developing scientifically credible standards to ensure that consumer-reported outcomes measures (CROM) are valid and reliable, i.e., they accurately measure what they set out to measure. To that end, the CROM Consortium Task Force, created within the CORESTA Product Use Behaviour (PUB) Sub-Group in October 2018, has been working on the foundation of a consortium to establish best practices and guidelines for the integration of CROM in the tobacco regulatory process.

The introductory meeting of the CROM Task Force was held in Kunming, China, on 22 October 2018 where 25 participants attended. The overall purpose of the CROM Consortium was presented by Christelle Chrea (Philip Morris Products) and Catherine Acquadro (ICON) and the discussion led to the decision to create a Working Group 0 (WG0) with the following specific targets:

- To clarify the goals of the Consortium, the research questions and the scope of work.
- To oversee the development of the CROM Consortium: governance, structure, budget and funding mechanisms and engagement with third parties.
- To prepare a workplan for the execution of future phases for the working groups (WGs).

The WG0 created after Kunming had monthly teleconferences between November 2018 and May 2019 with 14 participating members, representing eight tobacco stakeholders. During this six-month period, the WG0: 1) developed a definition of Consumer-Reported Outcomes, 2) reviewed key documents (guidance, reports, articles and MRTPA briefing packages), extracted the information according criteria agreed upon by the group, and compiled the information; 3) developed a taxonomy on concepts to be measured for pre- and post-marketing purposes in tobacco regulatory science.

All these activities were reviewed during the second CROM Task Force meeting held in Montreal, Canada on 24 May 2019 where 17 participants attended. Decision was made during the meeting to present the work of WG0 as a poster at the annual CORESTA SSPT Conference in Hamburg in October 2019. During the meeting, the Task Force members also agreed on the following targets for the CROM consortium:

To provide guidance on how to develop, validate, identify, access and use CROM to evaluate tobacco and nicotine-containing products for pre-market and post-market purposes:

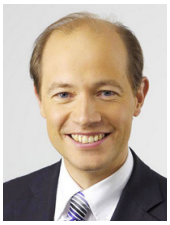
- By reviewing existing standards on the development and validation of CROM and by reviewing information on CROM;
- By providing recommendations on the development and validation of CROM;
- By creating a knowledge repository to store CROM and facilitate identification and access of the most appropriate CROM in a specific context of use;
- Through a cooperation platform involving tobacco industry and the guidance of academia and regulatory agency stakeholders.

During the third Task Force meeting held in Hamburg, Germany on 6 October 2019, the consortium structure, working plan and funding mechanisms were agreed upon between the Task Force members. Specific working groups will lead the execution of specific objectives, while an independent scientific committee, composed of academic and public health researchers, will be constituted to guide and review the outcomes of the other working groups. The CORESTA Scientific Commission will provide overall oversight of the consortium to ensure conformity of the work with CORESTA standards. The Task Force members will remain the central oversight component of the consortium from a scientific, operational and financial view point.

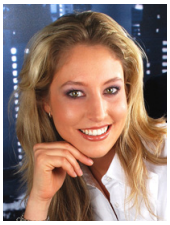
To ensure the credibility and excellence of the deliverables produced by the CROM consortium, it is paramount to get technical support from external subject matter experts for the execution of the working plan. An initial financial investment from six tobacco stakeholder members of the CROM has already been confirmed and the development of the governance model and funding mechanisms of the CROM consortium is currently ongoing with the view to have them in place by early 2020. The coordinators of each WG have been nominated and they now have the task to develop a New Working Item Proposal (NWIP) to define the specific objectives, working plan, milestones, deliverables and budget for the WG they are coordinating.

We are encouraging all CORESTA members who are interested to reach out to Christelle Chrea (christelle.chrea@pmi.com) or Catherine Acquadro (cacquadro@mapigroup.com), Coordinators of the CROM Task Force, to discuss willingness to get involved in the CROM consortium, as a funding or contributing member. More information is also available on the CROM webpage on the CORESTA website at https://www.coresta.org/groups/consumer-reported-outcome-measures-consortium.

Physical Test Methods Sub-Group Meeting (Munich, Germany)



Bernhard EITZINGER
PTM SG Coordinator



Patricia MÜLLER
PTM SG Secretary

The Physical Test Methods (PTM) Sub-Group held its autumn meeting as a full-day meeting at the airport in Munich on September 17, 2019. The meeting was attended by 12 participants.

The PTM Sub-Group carries out several regular collaborative studies, with the annual Collaborative Study on Physical Parameters being the largest and most important in its working program. The 12th Collaborative Study on Physical Parameters progressed as planned, the data were received and analysed and a report has recently been submitted to CORESTA for publication. Further routine work items concern round robin tests on calibration standards for pressure drop, filter ventilation and air permeability, which all proceed as planned. Reports on the 14th round robin test on pressure drop calibration standards and the 7th round robin test on filter ventilation calibration standards were prepared and submitted to CORESTA.

As a new work item the PTM Sub-Group carried out a collaborative study on air permeability, based on the revised version of ISO 2965:2019, including measurements on cigarette paper using a small (2×15 mm^2) measuring head. A report was prepared and recently published.

A major achievement this year was the publication of CRM 90 on the measurement of the sealing strength of pouches for tobacco products. This work has been underway for several years and has now been completed with the publication of the new test method and the technical report on the corresponding collaborative study in July.

The PTM Sub-Group continues to work on the development of a test method for the crush strength of flavour capsules for cigarette filters. A draft method has been defined and a collaborative study is currently being carried out to determine repeatability and reproducibility of the new method. The work is expected to continue during 2020.

Other topics that were discussed and may lead to new projects are the measurement of low pressure drops for consumables of heated tobacco products and their components, the measurement of the permeability of pouch materials for tobacco products and a collaborative study on diffusion capacity of cigarette paper. CORESTA members interested in any of these topics are most welcome and encouraged to join the PTM Sub-Group.

The next meeting will take place in spring 2020, but date, location and host have yet to be defined and will be announced early in 2020.

Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices Task Force Meeting (Victoria Falls, Zimbabwe)

Marcos LUSSO
LNTP TF Coordinator

Anna MALPICA
LNTP TF Secretary

To support the five-year road map determined by the CORESTA Board in order to address the changes in the tobacco industry and the interests of CORESTA members, the Agronomy & Leaf Integrity and Phytopathology & Genetics Study Groups proposed a new CORESTA Task Force (TF) to conduct a Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices (LNTP).

The proposed TF objectives, approved by the CORESTA Scientific Commission and Board, are:
1. To determine the impact variety selection has upon nicotine levels.
2. To determine the impact of modified cultural practices on nicotine levels.

The first TF meeting was organised prior to the AP2019 Conference in Victoria Falls, Zimbabwe. The meeting focus was on the presentation of the TF objectives, identification of the members and participants in the collaborative studies, and discussion on the field trial protocol. After opening the meeting and presenting the agenda, Marcos Lusso, TF Coordinator, announced that Anna Malpica, tobacco breeder at Bergerac Seed & Breeding in France, had accepted the role of Secretary. Anna brings much knowledge and experience on low nicotine after having conducted trials from 2017 to 2019 in collaboration with different CORESTA members.

At the meeting, the preliminary field trial protocol was presented and several topics, such as tobacco germplasm to be used, chemistry data to be collected and suggestions for having analytical tests done in one central laboratory, were discussed. Anna and Marcos collected all points raised during the discussions and will circulate the final protocol in December. The list of participants will also be complete in December and seed shipment is planned to start in January 2020. The trials in the Northern hemisphere are planned to begin in February 2020.

The TF meeting was very successful with 54 attendees of which 35 expressed interest in joining the group as members and 13 expressed interest in conducting field trials covering 10 tobacco production regions in the Northern and Southern hemispheres.

The next TF meeting is scheduled to be held in 2020 at the CORESTA Congress in Vienna, Austria.

Biomarkers Sub-Group Meeting (Hamburg, Germany)

G.L. PRASAD
BMK SG Coordinator

Kirk NEWLAND
BMK SG Secretary

The Biomarker Sub-Group (BMK SG) met in Hamburg, Germany, on the afternoon of October 5th, 2019, and was attended by 31 delegates. The work in BMK SG is anchored around the vision to "Identify and evaluate biomarkers of exposure and potential harm that are fit-for-purpose for tobacco product research." The status of two ongoing projects (NWIPs #161 and #186), which are nearing completion, was reviewed: Further, 1) A decision to revise the previously-developed technical guidance document on Reference Standards for Tobacco Biomarkers (CORESTA Guide No. 20) analysis was taken; 2) A technical presentation summarized the recent progress on the utility of select arachidonic acid metabolites as short-term biomarkers of potential harm.

Several new potential projects were considered by the SG: 1) The tobacco marketplace has significantly changed over the past few years with the emergence of next-generation tobacco products. Discussion on the vision and the objectives of the SG to ensure continued alignment and prioritization of the workstreams in the BMK SG with the evolving market took place. 2) A new collaborative project within the BMK SG on developing common industry data standards for tobacco biomarkers was discussed. 3) Planning for a new inter-lab comparison study for a tobacco biomarker of exposure was initiated. 4) Collaborative opportunities between the *In Vitro* Toxicology Sub-Group (IVT SG) and the 21st Century Toxicology for Next Generation Tobacco and Nicotine Products Task Force (NGTX TF) were explored.

Celerion Inc. will host the next BMK SG meeting on May 6th, 2020, in Belfast, Northern Ireland, U.K.. The Spring 2020 meeting will offer additional collaborative opportunities to the SG delegates, as the Spring meetings of the Product Use Behaviour (PUB) and IVT SGs, and the NGTX and CROM TFs will also be hosted by Celerion in Belfast between May 5th and May 7th, 2020.

CORESTA COMMUNICATION AT EXTERNAL EVENTS

University of Kentucky Tobacco Industry Tour 2019

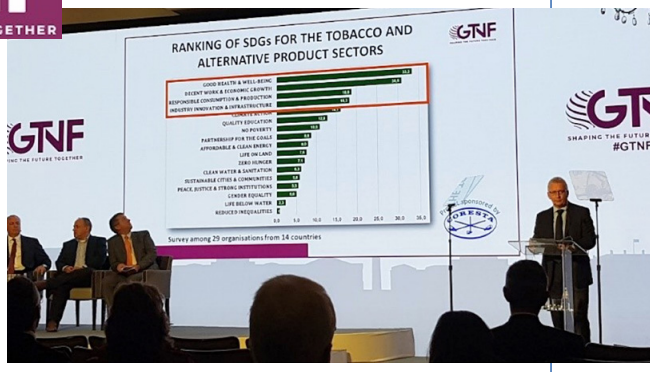
As part of the mission of the University of Kentucky's College of Food Agriculture and Environment, the Tobacco Extension section of the Plant and Soil Science department hosts an annual tobacco industry tour to highlight aspects of on-going research. Attendance is open to members of the tobacco industry, inclusive agricultural supply companies, and any interested members of the public. Through the course of the day, the attendees visit on-going test plots on the University's Spindletop Farm situated on the outskirts of Lexington, and then visit test plots situated on farms during the afternoon. At each of the stops, the principal investigator has 10 to 15 minutes to give a short overview of the rationale for the test, show any available data and explain how the test is being done before the attendees have the opportunity to walk through the test plots if they wish. The test plots that were highlighted during the 2019 tour were tests to control suckers, weeds, insects in cigar tobacco, control fungal and bacterial leaf diseases in Burley tobacco, and agronomic aspects of producing low nicotine tobacco.

This year, on 13 August 2019, the CORESTA Residue Field Trial was included as a stop on the tour. The trial is one of three test plots, two Burley and one dark air-cured, that the University of Kentucky does on behalf of the CORESTA Residue Field Trials Sub-Group (RFT SG) as part of the CORESTA Agrochemical Advisory Committee's (ACAC) mission of establishing guidance residue levels for tobacco crop protection agents. This was also an opportunity to introduce CORESTA to the public if they were not yet aware of the organisation, and explain its membership structure, its scope and its value to the tobacco industry. The presentation was made by Colin Fisher, Research Scientist at the University of Kentucky and member of the CORESTA Scientific Commission, with help from the outgoing CORESTA Secretary General and the RFT SG Coordinator for the preparation of the flip chart for the talk.

CORESTA COMMUNICATION AT EXTERNAL EVENTS (continued)

Global Tobacco & Nicotine Forum (GTNF 2019)

On 26 September 2019, Stéphane Colard (new Secretary General of CORESTA) was invited to participate in a plenary discussion panel at the GTNF held in Washington DC, USA. The theme of the GTNF was "More Choice, Less Risk" and attendees were composed of public health experts and key industry decision makers. The panel discussed approaches on how to ensure a sustainable value chain. Stéphane presented some outputs of the project he conducted with CORESTA regarding the impact of the tobacco and alternative product sectors on the United Nations Sustainable Development Goals (full report available on the CORESTA website at www.coresta.org). He also presented a circular process aligned with the Goals for creating shared value sustainably.



US Food and Drug Administration Center Standards Day

On 2 October 2019, the FDA organised an internal Standards Day aimed at *"bringing together Standards Development Organizations with FDA researchers and liaisons to collaborate and share ideas"*. Recognised as such an organisation, CORESTA was invited and participated in this event held in FDA premises in Washington, DC, USA, together with ISO, CTP, NIST, USTAG and many other standardisation bodies. The event was not strictly tobacco-related and many internal FDA departments also presented posters on their work.

At the CORESTA stand, a tablet was made available to promote the association's website and two posters were displayed. One of the posters presented the CORESTA vision and the structure of the working groups with emphasis on some of the newly created groups (LNTP, CROM, HTP, NGTX), the other poster explained the method development process along with the list of CORESTA Recommended Methods (CRMs) that have served as a basis for ISO Standards. The full list of CRMs was also made available to the visitors, as well as the newly produced CORESTA brochure and the detailed cooperation process for project development.

US Food and Drug Administration Center for Tobacco Products Meeting (FDA/CTP)

In conjunction with the FDA Standards Day, CORESTA had been invited by the US FDA CTP to present the association and its activities at a meeting on 2 October 2019. Stéphane Colard presented the statutes and rules, the governance and structure and the process of cooperation. Lea Scott (President of the CORESTA Scientific Commission) and Rob Stevens (Vice-President of the Scientific Commission) presented the main activities and outputs of the AP and SSPT Study Groups respectively. Around 70 attendees from FDA/CTP participated and asked questions. Much positive feedback was received.

Tobacco Science Summit

On July 29-31, 2019, CORESTA was invited to give a presentation at the 2019 Tobacco Science Summit in Durham, NC, on the standardization of e-vapour methods. Rob Stevens (Vice-President of the CORESTA Scientific Commission) gave a presentation on the process for standardization of analytical methods and current activities within the CORESTA E-Vapour Sub-Group for methods for e-vapour products. Representatives from the FDA, e-vapour manufacturers, suppliers, and standardization bodies (NIST) were among the 50 attendees. The presentation was very well received. The importance of sharing scientific knowledge, conducting inter-laboratory studies, and the value of collaboration were highlighted during the open discussion among attendees.

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

UPCOMING CORESTA MEETINGS / CONFERENCES (2020)

Meeting	Date	Location
ACAC - Agrochemical Advisory Committee	19 January	Louisville, KY, USA
Scientific Commission	23-24 January	Louisville, KY, USA
Board	12-13 February	Montevideo, Uruguay
SG EVAP - E-Vapour	22 April	Lausanne, Switzerland
SG RAC - Routine Analytical Chemistry	23 April	Lausanne, Switzerland
SG TTPA - Tobacco and Tobacco Products Analytes	23 April	Lausanne, Switzerland
SG SMA - Smoke Analytes	24 April	Lausanne, Switzerland
TF HTP - Heated Tobacco Products	24 April	Lausanne, Switzerland
TF CROM - Consumer Reported Outcome Measures Consortium	5 May	Belfast, N. Ireland, UK
TF NGTX - 21st Century Toxicology for Next Generation Tobacco and Nicotine Products	5 May	Belfast, N. Ireland, UK
SG BMK - Biomarkers	6 May	Belfast, N. Ireland, UK
SG PUB - Product Use Behaviour	6 May	Belfast, N. Ireland, UK
SG IVT - *In Vitro* Toxicity Testing	7 May	Belfast, N. Ireland, UK
CORESTA CONGRESS	**11-15 October**	**Vienna, Austria**

CORESTA CONGRESS 2020

The **2020 CORESTA Congress** will be held in Vienna, Austria, from **11-15 October**, under the theme "**Integrated Science: Opportunities and Challenges**". The event will take place at the Vienna Hilton Hotel and is being hosted by the JT Group.

Vienna is the heart of Austria – a quick search on the internet will show that the city is a fascinating destination not to be missed: “UNESCO World Heritage Site”, “oldest ferris wheel in the world”, “origin of the French croissant”, “coffeehouses”, “the Pez”, “world’s oldest and longest tram network”, “one of 10 most livable cities”, “home of numerous famous composers”, “Viennese waltz”, “2020 capital of music”, “largest vine-growing city in the world”, “the Spanish riding school”, “largest museum complex in Europe”, “tumultuous history”, “the Habsburgs”, … the list is endless …

CORESTA and the Congress hosts invite you to mix scientific research with cultural discovery and look forward to welcoming you to the 2020 CORESTA Congress.

The official Congress website will be online early 2020 with all the necessary information.

Season's Greetings from the CORESTA Staff !
Best wishes for a Merry Christmas, a Happy Holiday Season,
and a Peaceful New Year 2020.