

NEWSLETTER

Issue 40 – December 2014



CORESTA CONGRESS 2014

12-16 October, Québec, Canada





A bright autumn afternoon, illuminated by the last of the bright yellow maple leaves, welcomed the CORESTA delegates to Québec City. The venue, the iconic Chateau Frontenac, itself created a fairytale-like atmosphere and a majestic setting for the start of the CORESTA Congress 2014, held from 12-16 October.

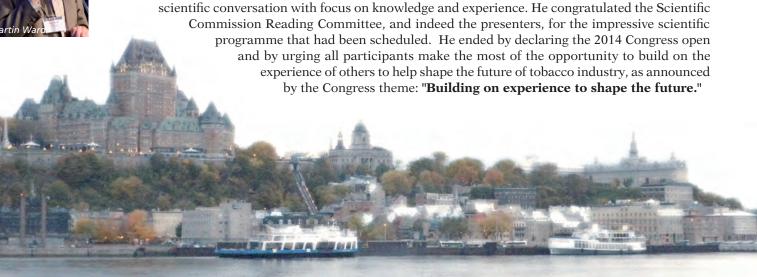
A total of 431 delegates from 32 countries participated in the Congress, together with 47 accompanying persons. An additional 27 persons travelled to Québec but only to attend various CORESTA Sub-Group and Task Force meetings held prior to the event. The number of participants at the Congress ranks it amongst one of the best attended in recent years.

At the Welcome Reception held on Sunday evening, Richard Voisine from Imperial Tobacco Canada Ltd was the first to welcome all participants to Québec City. He was especially delighted to do so as it was the very first time that a CORESTA Congress was being held in Canada. In his speech he retraced the history of tobacco in Canada, starting with the first tobacco seeds found on an 8th century archaeological site in southwest Ontario through to the widespread use of tobacco by the First Nations from the 16th century onwards, and up to the creation of Health Canada, the mandatory testing of smoke emissions and the HCI smoking regime.



The Secretary General of CORESTA, Pierre-Marie Guitton, alarmed attendees by walking on stage with a very large roll of paper anticipating a very long speech! There was a general sigh of relief when he started to read a short fairytale "Once upon a time ..." that ended happily with a huge thanks to all for coming to Québec. On a more serious note, Pierre-Marie mentioned that a record number of papers were being presented at this Congress (just under 250 had initially been submitted). He also addressed his gratitude to Imperial Tobacco Canada, JTI-McDonald, Rothmans, Benson & Hedges and SWM International for their financial assistance.

The CORESTA President, Martin Ward, took his turn to address participants and switched to scientific conversation with focus on knowledge and experience. He congratulated the Scientific by the Congress theme: "Building on experience to shape the future."



Future Meetings

4-8 October 2015 – Smoke Science / Product Technology Study Groups – Jeju, South Korea (Hosted by KT&G) 25-29 October 2015 – Agronomy & Leaf Integrity / Phytopathology & Genetics Study Groups – Izmir, Turkey (Host to be advised) 2016 – CORESTA Congress (host volunteers most welcome ...)

SCIENTIFIC PROGRAMME

The Scientific Commission Reading Committee had risen to the challenge of adequately fitting the record number of presentations (215) into the number of time slots available. Concurrent sessions had been set for most of the Smoke Science / Product Technology programme, and the Scientific Commission elections had been scheduled to follow straight after the General Assembly. Abstracts of all presentations can be found on the CORESTA website at www.coresta.org

Presentations - Final Figures	No	Total
Intergroup Papers	3	3
Agro-Phyto (Oral)	46	
Agro-Phyto (Posters)	18	
Total Agro-Phyto		64
Smoke-Techno (Oral)	94	
Smoke-Techno (Posters)	27	
Total Smoke-Techno		121
Sub-Group / Task Force Reports + ACAC	24	24
Keynote Address	1	1
Prize Winner Presentation	1	1
Forthcoming Meeting Presentations	1	1
TOTAL PRESENTATIONS		215

Keynote Speaker



The traditional Monday morning Plenary Session was opened by the President of the Scientific Commission, Derek Mariner, who immediately set the meeting tempo by outlining the purpose and structure of CORESTA and going through its different roles, responsibilities, activities, achievements and challenges.

This was useful for all attendees, particularly newcomers. His presentation also gave a thorough review of "who's who" in the CORESTA executive committees.

Intergroup Papers

Eric Massicotte from Canadian Border Services Agency, brought local touch to the presentations. In his very interesting paper on the *Determination of geographical* origin of tobacco leaves he explained how use of two different analysis models enabled the determination of tobacco leaf origin. He was optimistic that this research showed great potential in assisting in the fight against contraband cigarette producers.

Adult and youth smoking rates, a measure of the effectiveness of tobacco product regulation? was the title of the presentation by Stephen Stotesbury et al. (Imperial Tobacco Group, UK). The paper stressed that the primary focus of tobacco regulatory policy was to reduce smoking rates and examined the impact of smoking bans, taxation, and plain packaging on smoking rates worldwide. The study also considered whether there was a relationship between youth smoking and adult smoking rates, and investigated whether the availability of alternative products for tobacco consumers, such as snus and e-cigarettes, could be a contributory factor to the decline in smoking rates in several countries.

The third Intergroup paper, *Cadmium in tobacco leaves*, and the potential for its reduction, was presented by George Wagner from the University of Kentucky, who explained that while cadmium is found in probably all vegetable foods at low levels similar to those occurring in

most green tobaccos, it appears to be more concentrated in products made from dry, cured tobacco. The focus of his presentation was a review of the efforts made in the field of genetic modification, as described in available literature, to reduce tobacco leaf cadmium.

Agro-Phyto Presentations

The first sessions in the Agronomy & Leaf Integrity Study Group dealt with tobacco-specific nitrosamines (TSNAs). Effective methods to reduce TSNA levels is one of the challenges facing the tobacco industry. The papers examined the subject from various perspectives such as how to reduce TSNAs in burley tobaccos through alteration of the N-assimilation pathway. Another paper reported on the investigation of curing environment and TSNA accumulation within barns in dark air-cured tobacco (a graduate study project begun in 2012 and supported through a CORESTA Study Grant).

Phytopathology & Genetics papers covered pests and disease resistance. One of the sessions centered on rootknot nematodes. Beginning with the most significant root-knot nematode species on tobacco in Virginia, USA, presenters went on to speak about resistant cultivars and a sustainable management option for root-knot nematodes in Zimbabwe, and ended with a presentation on Italian comparative tests between nematode agrochemicals and alternative products. The subject of fungi was covered by presentations on black shank, caused by Phytophthora nicotianae, one of the most important diseases affecting tobacco production in the USA; Pythium and its survival in floatbeds in Zimbabwe; and Sclerotinia sclerotiorum on tobacco crops in France. Virus-related diseases had their own session in which managing of aphid transmitted virus diseases and potato virus Y incidence on tobacco were evoked. Two sessions were dedicated to tobacco breeding. Transcriptomes and gene expression profiles of two chilling- and drought-tolerant and intolerant tobacco varieties were compared and marker-assisted selection breeding and gene function analysis of the burley character in tobacco were also highlighted. How to produce superior blue mould resistant tobacco cultivars was discussed in one of the papers. Fertilisation and curing also had their share of presentations. Nitrogen application timings on yield, quality, and sucker control in flue-cured tobacco was evaluated and alternative fertiliser rates and programmes was discussed along with the pursuit of greener curing methods. The entomology session ran through the changing faces of the tobacco aphid, tobacco budworm control, and the development of resistance in the cigarette beetle. During the session dedicated to weeds and bacterial diseases in addition to parasitic weeds, other concerns such as how to reduce the influence of pesticide residues in soil and a new burley variety with high resistance against bacterial wilt were considered.



The production aspects of tobacco were covered by presentations dealing with heavy metal content and how to improve leaf integrity, the effect of conveyor use during sucker control application, and how to improve yield and quality by optimisation of the canopy structure of field-grown tobacco. A presentation on soilless media for tobacco seedling production started the seed and seedlings session. Other topics included salt injury in the tobacco float transplant production system, new types of float trays and how pre-chilling improves tobacco seed germination.

The last Agro-Phyto session featured a variety of presentations, beginning with one on decent youth employment and the elimination of child labour in agriculture. Others covered natural or modified sucrose esters to protect crops against various pests, and degradation and residue levels of triadimefon. The final paper dealt with the global crop protection taking into consideration the importance of monitoring CPA registration status when growing and sourcing tobacco materials.

Smoke-Techno Presentations

Studies in the Smoke Science & Product Technology Study Groups are increasingly being linked to regulatory requirements. The first presentations on smoke chemistry were a case study on cured leaf chemistry followed by a paper on the optimisation of testing schemes by associating smoking data with cigarette burning models taking into consideration the regulatory purposes of product monitoring and characterisation. Many scientists are confronted with challenges when testing products. The objective of one of the studies presented was to develop an improved method for the determination of TSNAs in tobacco and tobacco smoke using UPLC-MS/MS while another aimed to determine heterocyclic aromatic amines using the same method. The effect of smoking parameters on the burning process and mainstream smoke yields are always being studied in smoke chemistry and this year a pilot study on cigar burning and yields under different smoking intensities was presented.

The levels of potentially harmful compounds in mainstream cigarette smoke such as aromatic amines were also an important topic at the congress, together with Lower Ignition Propensity (LIP) / Fire Standard Compliant (FSC) cigarettes. In the LIP testing session, the challenges and issues faced during the development of the ignition propensity Monitor Test Piece (CM IP 2) were discussed.

Recent years have seen a worldwide surge in interest in e-cigarettes and novel products. Giving the topic the attention it deserves, the Congress dedicated two full sessions to e-cigarettes, and they also appeared in a variety of other presentations in different sessions.

Among others, a paper on e-cigarette vaping machine versus conventional smoking machine presented a compendium of differences in requirements and technology with regards to ISO 3308. Moreover it provided an outlook on the first proposal for a harmonised vaping regime.

Today there is an increasing need for analytical methods to measure e-cigarette compounds. With this in mind one of the papers, entitled *Characterisation of e-cigarette aerosol generation behaviour*, described a useful tool for product development and to assess consistency of construction and lifetime performance. Many other e-cigarette subjects were presented, including papers entitled *Development and validation of a device for measuring puffing topography of e-cigarette users, Droplet size measurement of e-cigarette aerosol* and *Nicotine and related impurities in electronic cigarette cartridges: stability studies and methodologies*, to mention only a few of the 14 papers and 6 posters focusing on e-cigarette research.

Smoke-Techno Workshops

(Workshop: a brief intensive course for a small group)

Having observed the success and positive feedback from workshops organised at Agro-Phyto Meetings, the Scientific Commission decided to initiate these within the Smoke-Techno Study Group. The Workshops took place on the Tuesday on Cigarette Design, Wednesday on Collaborative Studies and Thursday on Cigarette Toxicity.

The CORESTA Secretariat closely followed how the first workshop progressed on the Tuesday. Three panellists had been invited to make a 20-minute presentation each, which was followed by a discussion. The panellists presented cigarette design tools, each focusing on one special field of knowledge such as the influence of the implementation of an LIP regulation on the design of 10-1-10 cigarettes, cigarette filter design and design parameters of cigarettes for smoke yield reduction.

The key message from one participant was that the Workshop allowed different viewpoints on a complex subject to be covered in a short period of time. This was of valuable help for those starting out in cigarette industry as it provided an opportunity to share knowledge and openly ask questions. This was the first time that such a workshop had been organised in a Smoke-Techno session but hopefully, as the participant had expressed, not the last.

The feedback from the other two workshops was all in all very positive with comment that this type of team work was considered rewarding and profitable for the delegates.

Poster Session

Unlike previous Congresses, this year's poster session was scheduled to run over two working sessions concurrently with the General Assembly and Board and Scientific Commission elections. This innovation was generally well received as it allowed more time for delegates to view the posters and speak to authors. A total of 45 posters were presented on a wide range of topics.



Sub-Group / Task Force Reports

The CORESTA Sub-Groups and Task Forces (SGTF) have been very active over the last two years. Coordinators of 24 of the SGTFs took the opportunity to discuss their work, and at the request of the Scientific Commission and in line with the Congress theme, based their reports on

achievements and learnings over the years and future work and perspectives.

A combined meeting of the SGTF Coordinators and the new Scientific Commission members was also held to discuss various issues including the revision of the Rules for the Functioning of Task Forces and Sub-Groups.

SOCIAL PROGRAMME

CORESTA strives to achieve excellence, and delegates were given the opportunity to hear high level scientific presentations, and take part in discussions on several key topics. However, before the start of an intense scientific programme, delegates need a moment to prepare, and what better way than a welcome reception. As already briefly mentioned, this was duly held on the evening of 12 October in the Chateau Frontenac's Salle de Bal. After the opening speeches, the venue had suddenly been possessed by the Huron Indians. Attired in traditional costume, they had first purified the room with smoky scents and traditional dances. This was followed by the peace pipe (calumet) smoking ceremony - the four Sub-Group Presidents and the Secretary General passed the calumet from hand to hand respectfully, according to Huron customs. From that moment on, there had reigned the CORESTA spirit of sharing scientific knowledge and experience and delegates had left prepared for the next morning's working sessions.

Unlike the delegates, accompanying persons had the time and opportunity to discover some of Québec's attractions. A walking tour within Québec City featured a visit of Dufferin Terrace, the boardwalk overlooking the St. Lawrence River, the Seminary of Québec, founded in 1663 and now occupied by the Architecture School of Laval University, the Notre-Dame-de-Québec Basilica in the Lower Town and the Place Royale, with its restored houses of merchant families from the New France era. A day tour to the outskirts of the city, unfortunately marred by some rather wet weather, had included a drive through traditional villages of rural Québec, a visit to the Sainte-Anne-de-Beaupré shrine, lunch at the Montmorency Falls and a short tour of the Island of Orléans. A series of coupons had also afforded accompanying persons the opportunity to visit a number of Québec museums at their leisure.





As is custom at all CORESTA Congresses, the 2014 event was crowned by a Gala Dinner on the Thursday evening. The novelty this time was the distribution of the CORESTA medals during the evening, accompanied by live music.

During the dinner, the now former CORESTA Board President, Martin Ward, made his farewell speech. He started by expressing how impressed he was by the quality of papers and the number of new attendees on this occasion. He was of the opinion that the workshops generated interesting discussions and were "a big plus" for the event. He then warmly welcomed the new Board President, Ms Diane Raverdy-Lambert. Finally, he left delegates with the following messages on the future missions of CORESTA:

- The necessity to be relevant to the needs of CORESTA members
- Preparation of the science base for the future and current world of product regulation
- More communication with members and with the outside world on the solid scientific studies and results generated by CORESTA. This can be done through publications, attending meetings with regulators and making timely reports available on the CORESTA website.

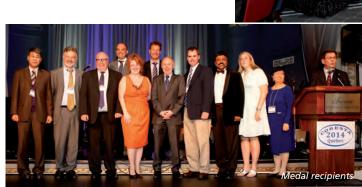
During the gourmet dinner, entertainment was provided by two professional opera singers who humorously interacted with delegates while singing internationally renowned musical compositions. As for digestion of the meal and processing of the scientific intake, this was facilitated by a few steps on the dance floor and/or a relaxing drink or two by the bar.

Due to lack of a host, the 2014 Congress had been organised by Pierre-Marie Guitton and the CORESTA Secretariat staff, who could

> not have managed without the invaluable help of the local event organiser Conférium who handled the administrative and onsite logistical issues. Grateful thanks go to Pierre and Alexis and their support team for all their hard work.









AWARDS

CORESTA PRIZE



Dr. William S. RICKERT received his PhD in Chemistry in 1968 from the University of Waterloo, Ontario, Canada. He was then awarded a two-year NATO Science Fellowship for post-doctoral studies at the Carlsberg Laboratorium in Copenhagen, Denmark. In 1970 he returned to the University of Waterloo as a Professor in the Department of Statistics where he taught courses in Applied Statistics until retiring in 1997. In 1976 Dr. Rickert founded Labstat International where he currently holds the positions of Chief Technical Officer and Executive Chairman. For the past 38 years, he has pursued his research interest in tobacco science and related subjects that have resulted in a total of 75 peer reviewed publications and 46 presentations at either CORESTA or TSRC. His research has covered many aspects of tobacco science including analytical methodologies relating to tobacco, tobacco smoke and environmental tobacco smoke. He has also published information on compensatory smoking, harm reduction, and the toxicology of smokeless and other tobacco products. His research interests have recently been extended to include the chemical characterisation and toxicology of e-cigarette vapours/liquids and new generation tobacco products. Dr. Rickert has participated, as a primary reviewer, in the National Cancer Institute's (NCI) peer review process and, in 1994, he was a member of the President's Ad Hoc Committee on the FTC methodology. In 1997, he was one of the reviewers for the NCI's monograph on cigar smokingin the US and was invited to the White House in regard to the President's task force on the tobacco settlement. More recently, he was the primary reviewer of a chapter in the 2010 Report of the Surgeon General. With respect to Canada, he has been the principle investigator on 140 Health Canada sponsored projects since 1982. He has chaired two expert committees for the Government of

Canada on "Cigarette Modification" and "Cigarette Toxicity Reduction" and was a member of Health Canada's Steering Committee on Environmental Tobacco Smoke and Lung Cancer from 1994-1997. At the international level, Dr. Rickert was a member of the World Health Organisation's Scientific Advisory Committee on Tobacco (SACTob) from 2000 until his resignation in 2002.

CORESTA MEDALS Gold Medals



Derek MARINER graduated in 1983 from University College, London, with a degree in Biochemistry and in 1992 obtained his PhD on mechanisms of nicotine uptake involving analytical chemistry, respiratory physiology and pharmacology. He worked at the Midhurst Medical Research Institute and then joined Rothmans R&D in 1989. Appointed Analytical Chemistry Manager in 1994, his work included agrochemical residue testing which lead him to CORESTA. In 1999, Derek became Product Science Manager in the newly formed British American Tobacco Group R&D, after the merger with Rothmans. He is currently Principal Scientist in the Analytical Development Centre. Derek joined the CORESTA Agrochemical Analysis SG in 1995 and became its Secretary. He also contributed to the Cigarette Butt Degradability, Environmental Tobacco Smoke and the Nicotine Uptake SGs and helped launch the E-Cigarette TF. He was Coordinator of the Smoking Behaviour SG from 2005-2010 and in 2007 became one of the CORESTA experts on ISO/TC126 WG 10. Derek was elected to the Scientific Commission (SC) in 2000 as Member, then as Vice-President (2002), and President (2004) of the Smoke Science Study Group. He was re-elected to the SC in 2008, and has served twice as its President (2008-2010, 2012-2014). From 2010-2012, he was Secretary of the Smoke Science Study Group and Vice-President of the SC. Derek received a CORESTA bronze medal in 2006 and a silver medal in 2010.



Mike OGDEN received BSc degrees in Chemistry and Applied Mathematics in 1980, and a PhD in Analytical Chemistry in 1985. He joined the R&D Department of R.J. Reynolds Tobacco Company in Winston-Salem, North Carolina, as a research chemist and has since held various scientific and research management positions over the last 25 years. With his team, he has established many official methods of analysis and has received several awards in recognition of his work. He is currently responsible for scientific and regulatory engagement for all Reynolds American Inc. tobacco operating companies. Mike has been actively involved in CORESTA for over three decades. He was a member of the Environmental Tobacco Smoke SG from 1987 and its Coordinator from 1995-2002 and was an influential member of the Review of Smoking Methods TF. He served both as member and secretary of the Scientific Commission Smoke Study Group from 1996-2002 and in 2004 became R.J. Reynolds' representative on the CORESTA Board where he has served two terms each as CORESTA's Vice-President and President. He led the 2002 CORESTA Congress Organising Committee and has played determinant roles in moving CORESTA forward and driving change and transformation within the tobacco industry at a global level. Mike was awarded the CORESTA Prize in 2002 and the bronze and silver medals in 2000 and 2006, respectively.

Silver Medals



Teresa DOROSZEWSKA is Head of the Department of Plant Breeding and Biotechnology and Deputy Director at the Institute of Soil Science and Plant Cultivation, Puławy, Poland. Teresa has participated in CORESTA meetings since 1990. Her research focuses on genetics, biotechnology and phytopathology and she has conducted research on the occurrence of Potato Virus Y in Poland since 1998. She has also authored two books: Album of Nicotiana Species published in 2009 and Diseases and Pests of Tobacco in 2014. In 2010 she obtained the title of Professor. Within CORESTA Teresa was Coordinator of the CORESTA SGs PVY Collaborative Study from 2003 to 2007 and Collaborative Study on Virus Diseases from 2007 to 2012. She was also member of the Phytopathology Study Group within the Scientific Commission for three terms from 2006 to 2012. Teresa received the bronze medal in 2006.



Laurence RUFFIEUX is Director of Agricultural Programs with Philip Morris International Management S.A., Switzerland. In 1998 Laurence joined the Pest and Sanitation Management in Stored Tobacco SG and became Co-Coordinator in 2002 until 2007. She participated in numerous CORESTA Infestation Control Conferences around the world and was a key contributor of the CORESTA Guide No. 2. In 2007 Laurence joined CORESTA Agrochemical Advisory Committee (ACAC) and since then has attended most of the ACAC meetings and, amongst other activities, has contributed to the revision of the CORESTA GRLs. In 2012, she joined the Sustainability in Tobacco Production TF and has actively worked within the TF's Curing workstream. Laurence received the bronze medal in 2006.

Bronze Medals



Gernot ALBER (Secretary General, SOTA, Switzerland) first participated in a CORESTA meeting in 1988 and has since attended most CORESTA congresses and meetings. From 1994-1996 he was a member of the Scientific Commission Phytopathology Group and currently contributes to the work of the SGs Collaborative Study on Blue Mould, Virus Diseases and the Integrated Pest Management TF. In 1997 he helped organise the Agro-Phyto Meeting in Montreux, Switzerland

Andy BAILEY (Tobacco Extension Specialist, University of Kentucky and University of Tennessee, USA) has been involved in CORESTA since 2003, serving as Coordinator of the SG TSNA in Air-cured and Fire-cured Tobacco since 2007. He is also part of the TF Integrated Pest Management, serving as group leader for the Weeds section, and is a trial executor in the TF Agrochemical Residue Field Trials. He has given over ten presentations at CORESTA Meetings and Congresses since 2003.

Leo CARUSO (Global Director of Scientific & Regulatory Affairs, JT International SA, Switzerland) earned the CORESTA Study Grant in 2000. Leo has since given several papers at meetings and served on the Scientific Commission from 2008-2010. He is an active member of CORESTA's Agrochemical Advisory Committee since 2007, has contributed to the revision of CORESTA GRLs and is the driving force behind "CARD" developed in 2012.

Wolf-Dieter HELLER (Scientific Director DZV-Deutscher Zigarettenverband / Editor Beiträge zur Tabakforschung International/Contributions to Tobacco Research, Germany) has participated in CORESTA activities since 1996 and has been involved in TFs and SGs RYO, Cigarette Ventilation, Pesticide Residues, Special Analytes and *In Vitro* Toxicity Testing of Tobacco Smoke. He has done statistical work for ACAC and is a longstanding member of the Smoking Behaviour and Biomarkers SGs.

Hyo-Keun KIM (Senior Manager, KT&G Research Institute, South Korea) has actively participated in the SGs Special Analytes and Routine Analytical Chemistry and is currently involved in the E-Cigarettes TF. He was a Smoke Science Study Group member of the Scientific Commission from 2008-2012 before becoming KT&G's representative to the CORESTA Board in 2012.

Jean-Marie LOUREAU (Senior Manager Product Development / Global Paper at SWM International, France) has been involved in CORESTA for 30 years. Since 1984, he has contributed in various TFs and has authored, co-authored and presented several papers at CORESTA Congresses and Meetings covering the influence of cigarette papers on smoke chemistry and focusing on LIP performances.

Jane PERRY (Ingredients Compliance Manager - Product Stewardship, British American Tobacco, UK) had a very active life as SG Pest and Sanitation Management in Stored Tobacco Secretary from 2006-2013. She drove the Pest Management agenda globally including the yearly Infestation Control Conference. In 2009 she wrote the SG's first newsletter and in 2012 prepared the publication of the first ever parameters for Controlled Atmospheres to control *Lasioderma*, that led to the CORESTA Guide No. 12.

Krishna PRASAD (Leader - Human Studies Group, British American Tobacco, Group R&D, UK) has been actively involved with the CORESTA Smoking Behaviour SG since the early 90's and has been its Coordinator since October 2010. He was a contributor to the 1999 Smoking Behaviour review published by Gerhard Scherer and has attended many CORESTA Meetings and Congresses and authored and co-authored numerous presentations and peer reviewed papers.

Nils ROSE (Managing Director, Borgwaldt KC, Germany) was Coordinator of the Monitoring and Maintenance of Physical Test Methods SG (now Physical Test Methods SG) from 2007-2012. He now participates in the SG and TF Smokeless Tobacco, Routine Analytical Chemistry, E-Cigarettes and the CORESTA Standard. He was elected Member of the Scientific Commission Product Technology Study Group in 2012 and hosted the 2014 Reading Committee and Scientific Commission meetings on behalf of Borgwaldt KC.

Wendy WAGSTAFF (Senior Statistician, Labstat International ULC, Canada) has been a co-author of seven published articles and over a dozen papers for both CORESTA and TSRC conferences over the last ten years, and has been presenter of some of these scientific papers. She has also lent her statistical expertise to numerous CORESTA TFs and SGs such as *In Vitro* Toxicity Testing of Tobacco Smoke, Routine Analytical Chemistry and Special Analytes, performing data analysis of collaborative study data and preparing reports.

Dongmei XU (Technical Leader of Biotechnology, Altria Client Services, Inc., USA) has been active in CORESTA since 1999 attending Congresses and Meetings. She is a long term member of the SGs TSNA in Air-cured and Fire-cured Tobacco and Virus Diseases. She is also involved in the Integrated Pest Management TF and in some activities of the Smokeless Tobacco SG and TFs Proficiency Testing for Detection of Transgenic Tobacco and E-Cigarettes. From 2008-2014 she served on the Scientific Commission as Secretary of the Phytopathology & Genetics Study Group and was SC Blue Mould SG liaison for four years.

GENERAL ASSEMBLIES

The CORESTA General Assembly was held midway through the Congress on Wednesday, 15 October 2014. Out of a total of 152 members, 76 member companies were present and a further 19 were represented by proxies.

The outgoing President of the Board, Martin Ward, chaired the General Assembly. Following the usual agenda, the CORESTA Secretary General, Pierre-Marie Guitton, reported on CORESTA activities since 2012 and presented the financial report for the 57th and 58th Financial Years. The detailed CORESTA Activity Report had been distributed to the official delegates of member companies before the Congress.

The General Assembly proceeded to the election of the Board by secret ballot. The results are as follows:



2014-2016 BOARD

Five companies were elected to the Board for a four year term of office and three companies were co-opted.:

ELECTED MEMBERS

A) Members elected in 2012 (for 4 years)
British American Tobacco (UK)
China National Tobacco Corporation (China)
Imperial Tobacco Ltd. (UK)

Imperial Tobacco Ltd. (UK) Japan Tobacco Inc. (Japan) University of Kentucky (USA) B) Members elected in 2014 (for 4 years) delfortgroup AG (Austria)

KT&G Corporation (South Korea) Reynolds American Inc. Services Co. (USA) SWM International, Inc. (USA) Universal Leaf Tobacco Company (USA)

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COOPTED MEMBERS (for 2 years)

Alliance One International (USA) Borgwaldt KC GmbH (Germany) Swedish Match North Europe Division (Sweden)



Board President: Diane RAVERDY-LAMBERT, SWM International, France

Diane Raverdy-Lambert has an MSc in Agricultural Engineering from Lasalle Beauvais Institut Polytechnique. She joined SWM's affiliate LTR Industries in 1990 as a product developer and worked in several R&D and regulatory affairs positions dealing both with reconstitued tobacco and papers. Diane is currently SWM Global Research Director. She attended her first CORESTA congress in 1990 and participated in the RYO and Cigarette Butt Degradability Task Forces and the Tobacco Factory Emissions Sub-Group. Diane was elected member of the Scientific Commission in 2004 and served as President (2006-2008), then Secretary (2008-2010), of the Product Technology Study Group. She has represented SWM on the CORESTA Board since 2010.



Board Vice-President: Huub VIZEE, delfortgroup AG, Austria

Huub Vizée has a degree in chemistry and joined the tobacco industry 28 years ago. During that period he held several positions in leaf buying and blending, quality, research, product development and engineering before becoming Head of Group Regulatory Development at Imperial Tobacco. He subsequently joined delfortgroup AG as Head of Group Regulatory Development. Within CORESTA Huub was actively involved in the development of smoking methods for fine cut tobacco and cigars. He represented Imperial Tobacco on the CORESTA Board from 2008-2010 and delfortgroup AG from 2012-2014. Huub has also served as a member of the CECCM and ECMA Boards.

STUDY GROUPS

A new initiative saw the Scientific Commission elections scheduled immediately after the General Assembly in order to optimise the time taken to elect the new Study Group executives and to allow for extra sessions to be allocated for the presentation of scientific papers.

Representatives of the CORESTA member companies elected 16 members to the Scientific Commission. Seven executives were re-elected and nine members were newly elected, significantly changing the face of the Commission. An additional four members were co-opted by the former Study Group Presidents. A full meeting of the Scientific Commission was held during lunchtime on Wednesday, 15 October, with both the outgoing and incoming executives present to facilitate handover of activities and portfolios.

2014-2016 SCIENTIFIC COMMISSION



Scientific Commission President

Marco PRAT, JT International GmbH, Germany

Marco has an MSc in Agronomy from the University of Perugia, Italy. He worked for many years as an agronomist for Universal Leaf Tobacco in Italy before joining JTI's Scientific and Regulatory Affairs Department in 2002. He is responsible for JTI's CPA residue control programme and currently holds the position of Global Product Integrity Director within JTI Global Leaf Agronomy. Marco is also Chairman of the CORESTA Agrochemical Advisory Committee and Coordinator of the CORESTA Agrochemical Analysis SG.



Scientific Commission Vice-President

Michael MEGER, JT International S.A., Switzerland

Michael holds a PhD in bio-analytical chemistry and has a professional background in product technology, smoke analysis and exposure monitoring. He joined JTI Scientific & Regulatory Affairs in 2002. Michael also serves as member and nominated expert in several technical committees, associations and international working groups.

AGRONOMY & LEAF INTEGRITY STUDY GROUP

President

Lea SCOTT, Universal Leaf Tobacco Co., USA



Lea obtained a BSc in Agronomy from North Carolina State University. He is currently the Vice President of Agronomy Services at Universal Leaf Tobacco Company, Inc. He coordinates Universal's global agronomy production and R&D programmes and represents Universal on agro-science issues. Lea also serves on the CORESTA Agrochemical Advisory Committee.

SecretaryMarcos LUSSO, Altria Client Services, USA



Marcos has a PhD in Plant Pathology and extensive training in tobacco breeding, agronomy and curing practices. He has worked in tobacco since 1992 and his current position is Associate Principal Scientist at Altria Client Services in Richmond, Virginia, USA.

Vice-President

Yongfeng GUO, Tobacco Research Institute, Academy of Agricultural Sciences, China



Yongfeng holds a PhD in Horticulture from Cornell University. He is currently a professor and lead scientist of Tobacco Functional Genomics at the Tobacco Research Institute of CAAS. His research focus includes molecular regulation of leaf senescence.

Member

Anthony JACKSON, Premium Tobacco Ltd, Thailand



Anthony has a BSc Hons. in Agriculture from the University of Natal. He has been involved in tobacco production since 1980. After running his own farming enterprise he worked in China as Yunnan Agronomy Manager for Alliance One International. Currently he is the Regional Agronomy Manager for Premium Tobacco Asia.

Besides agronomy functions in Asia and Africa he is also responsible for integrity issues for Premium Group.

PHYTOPATHOLOGY & GENETICS STUDY GROUP

President

Anne JACK, University of Kentucky, USA



Anne has a BSc Hons. in Agriculture from the University of Rhodesia and an MSc Applied Genetics from the University of Birmingham, UK. She worked for 26 years as plant breeder at the Tobacco Research Board of Zimbabwe and has spent the last 13 years as a research scientist at the University of Kentucky, working on

alkaloids and TSNAs. She has been involved with CORESTA for 20 years and heads the Integrated Pest Management TF.

Secretary

Irving BERGER, Souza Cruz SA/British American Tobacco, Brazil



Irving has a PhD in Agronomy from the University of Sao Paulo, Brazil. He has been with Souza Cruz/BAT for over eight years and is currently Leaf Product Stewardship Manager Secretary. Irving is also serves on the CORESTA Agrochemical Advisory Committee.

Vice-President

François DORLHAC de BORNE, Imperial Tobacco
Bergerac, France



François holds a PhD in Plant Molecular and Cellular Biology, and is Leaf Research Manager for Imperial Tobacco Ltd. One of his major concerns is the identification of molecular markers or genes using high-throughput sequencing and targeted mutation breeding. Another

part of his activities is GMT detection in the supply chain. Within CORESTA, François coordinates the SG Proficiency Testing for Detection of Transgenic Tobacco.

Member

Susan DIMBI, Tobacco Research Board, Zimbabwe



Susan has a PhD in Agricultural Entomology and a professional background in tobacco plant pathology and entomology. She has worked for the TRB since 2003 and is currently Head of the Plant Health Services Division and the Asst. General Manager, Research & Extension. Her main responsibility is to coordinate the research and extension

programmes. Susan also teaches the Mycology module at various Zimbabwean universities.

PHYTOPATHOLOGY & GENETICS STUDY GROUP (continued)

Member

Satoshi KATSUYA, Japan Tobacco Inc., Japan



Satoshi obtained an MSc in Agriculture from Nagoya University. He has been working for Japan Tobacco since 1993 and is currently a Director in charge of disease and insect pest control at the JT Leaf Tobacco Research Center.

SMOKE SCIENCE STUDY GROUP

President

Michael INTORP, Imperial Tobacco Group-Reemtsma, Germany



Michael is a food chemist and holds a PhD in Organic Chemistry. He has over 30 years' experience in tobacco and smoke science and product technology at Reemtsma and ITG and is currently leading the Groups' Special Analytics labs. He has been active in various CORESTA Sub-Group and Task Forces and serves as the Coordinator of the Special Analytes SG.

Secretary

Rob STEVENS, Lorillard Tobacco Company, USA



Rob holds a PhD in Analytical Chemistry, and he has over 21 years of tobacco science and product technology experience at Lorillard Tobacco Company. He is currently the Director, R&D Testing Services. He has been active in several diverse areas of CORESTA and is currently the Secretary for the E-cigarette TF.

Member Paul HARP, R.J. Reynolds Tobacco Company, USA



Paul has a PhD in Pharmaceutical Sciences and is certified as a Diplomat of the American Board of Toxicology. He joined RJRT in 2001 and his is currently Sr. Manager Product Integrity. His responsibilities span several diverse areas of product stewardship and he has been a member of the CORESTA Agrochemical Advisory Committee since 2009.

Vice-President

Martin BLUMENSTOCK, British American Tobacco, Germany



Martin holds a PhD in analytical chemistry from the Technical University, Munich. During his 12 years' service with BAT he has gained a professional background in product technology & analysis and scientific & regulatory affairs. He is an expert member on various national and regional technical committees and headsup BAT's Western Europe Analytical labs.

MemberGene GILLMAN, Enthalpy Analytical, Inc., USA



Gene holds a PhD from Wake Forest University, USA and is the Technical Director at Enthalpy Analytical Inc. He has been working in the tobacco industry and active in CORESTA for the past 14 years.

PRODUCT TECHNOLOGY STUDY GROUP

President

Michael MEGER, JT International S.A., Switzerland (see opposite page)

Vice-President

Stéphane COLARD, Imperial Tobacco Group (ITG), France



Stéphane has MSc in Engineering and Electronics, and a PhD in Materials Science. He has worked for the tobacco industry for 15 years and developed Quality Systems and managed physical, smoking, analytical and toxicological testing labs. He is now responsible for the ITG Regulatory Research Dept. leading scientific studies in relation with current and future regulations. He is Coordinator of the CORESTA Standards TF.

Member Linda CRUMPLER, Cerulean, USA



Linda holds a degree in Medical Laboratory Technology and a BSc in Chemistry. She worked for 30 years for RJRT in the Analytical Chemistry Division, Product & Process Technology and QA and Regulatory Compliance. She is now working for Cerulean as Business Development Director. Linda is also Coordinator of the CORESTA Routine Analytical Chemistry SG.

Secretary

Karl WAGNER, Altria Client Services, USA



Karl has a PhD in Analytical Chemistry from Wake Forest University. He is currently a Senior Research Scientist at Altria Client Services, Inc. Karl has worked in the industry for over 15 years in a variety of positions including positions in product stewardship and analytical sciences. He is currently the Secretary of the CORESTA Smokeless Tobacco SG.

MemberNils ROSE, Borgwaldt KC, Germany



Nils has a PhD in technical science, specifically mechanical engineering, obtained at the University of Hannover, Germany. He has served the tobacco industry for over 22 years. In 2004 he joined Borgwaldt KC where he is currently Managing Director, responsible for the development of testing instruments and smoking machines.

CORESTA REPORTS

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

• Tobacco Moisture, Water and Oven Volatiles

Technical Report – July 2014 (Sub-Group Physical Test Methods)

This document is a status report of common moisture methods used within the tobacco industry.

CORESTA Reference Products - 2012 and 2013 Analysis

Technical Report – July 2014 (Sub-Group Smokeless Tobacco)

After the first report of the work done in 2011, this report presents the results of the second and third interlaboratory studies designed to assess the stability of four CORESTA Reference Products (CRPs).

• Determination of Ammonia in Tobacco and Smokeless Tobacco Products

Technical Report – August 2014 (Sub-Group Smokeless Tobacco)

In 2013 the CORESTA Smokeless Tobacco Sub-Group (STS) conducted a collaborative study with the aim of expanding the scope of the CORESTA Recommended Method (CRM) No. 73, *Determination of Ammonia in Tobacco by Ion Chromatographic Analysis*, to include smokeless tobacco products. This report explains the work done to calculate repeatability and reproducibility (r&R) values and determine if the methodology was suitable for the determination of ammonia in tobacco and smokeless tobacco products.

CORESTA SUB-GROUPS & TASK FORCES

PRODUCT TECHNOLOGY Study Group

Task Force: Cigarette Manufacturing Variability (CVAR)



Confirmed Objectives:

- 1. To develop an appropriate experimental plan for a collaborative study to explore cigarette manufacturing variability.
- 2. To conduct a collaborative study of cigarette manufacturing repeatability and reproducibility to enhance the understanding of overall tobacco and smoke analyte variability relevant to commercial cigarette design features (testing results will be anonymous and confidential cigarette design information will not be disclosed).
- 3. To create a CORESTA technical report appropriate for engaging with scientists and regulators.

For more information please contact Jason Flora – Altria Client Services, USA (jason.w.flora@altria.com)

WEBPAGES



Communication on the work of the CORESTA Sub-Groups and Task Forces (SGTF) has continued and several additional SGTFs have published a dedicated webpage on their work and achievements on the CORESTA website. These pages can be accessed via the Study Groups links at www.coresta.org.

CORESTA IN THE PRESS

Tobacco Reporter

Tobacco Reporter published an article in its June 2014 issue, pages 54-58, entitled "Beetle Battle." Focusing on the work done to control the *Lasioderma serricorne*, the article reported on the Infestation Control Conference held in India in March 2014. Organised annually by the CORESTA Sub-Group Pest and Sanitation Management in Stored Tobacco, the conference provides valuable information and a training platform for anyone involved in protecting stored tobacco from insect infestation.



E-CIGARETTE MEETINGS

Many e-cigarette related events have been organised in various parts of the world, from trade shows to more scientific conferences and think tanks. As reported in the Issue 38 of the Newsletter, CORESTA took the opportunity to participate in some of these symposiums and workshops in 2013 and the trend has continued through 2014.

The CORESTA Secretary General, Pierre-Marie Guitton, has registered CORESTA as a Member of the French Standardisation body's (AFNOR) newly created e-cigarette commission, in which a number of scientists belonging to CORESTA member organisations are involved. This provides opportunities to demonstrate and promote CORESTA's analytical expertise.

CORESTA was also represented at the London 'Vapour Dialogue Meeting' by Steve Stotesbury, a Member of the Board, on 14 November 2014. This is a European group working on a joint standardisation protocol, bringing together the British Standard Institute, AFNOR and a number of European e-cigarette producers and suppliers. This group wants to show that e-cigarette stakeholders are applying good manufacturing practices and responsible procedures, and are thus ready to cooperate with European regulators in the implementation of the EU Tobacco Product Directive (TPD2).

Diane Raverdy-Lambert, the newly elected President of the CORESTA Board, participated in the E-Cig Industry Conference in London on 3 December 2014. Michael Meger, Vice-President of the newly elected Scientific Commission, presented CORESTA at the opening session of the Tobacco Journal International Tobacco Campus - 2nd International Workshop on "The next generation of e-cigarettes and MRTPs" in Wiesbaden on 8-9 December 2014.

Last but not least, the US Food and Drug Administration (FDA) is organising workshops intended to "address the individual health and population health effects of e-cigarettes". The FDA acknowledges that there is much to be learned about these products and that such workshops are appropriate forums to garner more knowledge. On 10-11 December 2014, a Public Workshop entitled "Electronic Cigarettes and the Public Health" was organised with the purpose to "gather scientific information and stimulate discussion among scientists about electronic cigarettes." A large segment of this first workshop on e-cigarettes being on product science (specifically e-liquid and aerosol constituents), Rob Stevens, Secretary of the CORESTA E-Cigarette Task Force (ECIG TF) mainly in charge of the analytical activity of this group, had submitted an abstract that had been accepted. His talk focused on presenting and discussing the preliminary proficiency studies recently completed by the ECIG TF on e-cigarette liquid and aerosol chemical composition analyses. Rob's presentation is available on the CORESTA website in the Regulatory Affairs section.



UPCOMING CORESTA MEETINGS (2015)

Meeting	Date	Location	
Agrochemical Advisory Committee (ACAC)	19 January	Chiang Mai, Thailand	
Scientific Commission	20-21 January	Chiang Mai, Thailand	
Board	9-10 February	Geneva, Switzerland	
Task Force CORESTA Standard (STDS)	19 February	London, UK	
Sub-Group Cigar Smoking Methods (CSM)	24 February	Milton Keynes, UK	
Infestation Control Conference (PSMST)	Date and venue to be announced		
Sub-Group Pest and Sanitation Management in Stored Tobacco (PSMST)	on the CORESTA website		
Sub-Group Routine Analytical Chemistry (RAC)	27 April	Hangzhou, China	
Sub-Group Physical Test Methods (PTM)	28 April	Hangzhou, China	
Sub-Group Smokeless Tobacco (STS)	29 April	Hangzhou, China	
Sub-Group Special Analytes (SPA)	30 April	Hangzhou, China	
Task Force In Vitro Toxicity Testing of Tobacco Smoke (IVT)	18-19 May	Neuchâtel, Switzerland	
Task Force E-Cigarettes (ECIG)	10 June	Toronto, Canada	
Board	8-9 July	Windsor, UK	
SMOKE SCIENCE and PRODUCT TECHNOLOGY STUDY GROUPS	4-8 October	Jeju Island, South Korea	
AGRONOMY & LEAF INTEGRITY and PHYTOPATHOLOGY & GENETICS	25-29 October	Izmir, Turkey	

List of Hosts of Congresses and Joint Study Group Meetings

Congress	Agronomy & Leaf Integrity and Phytopathology & Genetics	Smoke Science and Product Technology
2016 (??)	2017 (११)	2017 (??)
Canada 2014 (CORESTA)	Turkey 2015 (To be advised)	South Korea 2015 (KT&G)
Japan 2012 (JT)	Italy 2013 (Deltafina et al.)	Spain 2013 (ITG)
UK 2010 (BAT)	Chile 2011 (SQM)	Austria 2011 (TANNPAPIER)
China 2008 (CNTC)	Croatia 2009 (TDR)	France 2009 (CORESTA)
France 2006 (Altadis/SWM)	Poland 2007 (CORESTA)	South Korea 2007 (KT&G)
Japan 2004 (JT)	Brazil 2005 (Sindifumo)	UK 2005 (ITG)
UŚA 2002 (RJR)	Romania 2003 (Rom. Gov.)	Germany 2003 (Rhodia)
Portugal 2000 (PMI)	South Africa 2001 (IIC)	China 2001 (CNTC)
UK 1998 (BAT)	China 1999 (CNTC)	Austria 1999 (Wattens)
Japan 1996 (JT)	Switzerland 1997 (CISC)	Germany 1997 (Reemtsma)
Zimbabwe 1994 (TRB)	UK 1995 (Rothmans)	Austria 1995 (Austria Tabak)

2016 will mark the 60th anniversary of the founding of CORESTA in 1956.

CORESTA member-companies are invited to volunteer for the honour of hosting this important occasion and should contact the CORESTA Secretariat at their earliest convenience!

Acronyms used in the Newsletter				
ACAC CORESTA Agrochemical Advisory Committee AFNOR Association Française de Normalisation CARD CORESTA Agrochemical Residue Database CAAS China Academy of Agricultural Sciences CECCM Confederation of European Community Cigarette Manufacturers	HCI			
CM IP CORESTA Monitor Ignition Propensity CPA Crop Protection Agent CRP CORESTA Reference Product CRM CORESTA Recommended Method ECMA European Cigar Manufacturers' Association	NCI			
FDA Food and Drug Administration (USA) FTC Federal Trade Commission FSC Fire Standard Compliant GMT genetically modified tobacco GRL Guidance Residue Levels	UPLC-MS/MS Ultra Performance Liquid Chromatography Tandem Mass Spectrometry TPD			

The CORESTA staff wishes you a Merry Christmas, a Happy Holiday Season and a Peaceful and Prosperous New Year 2015

