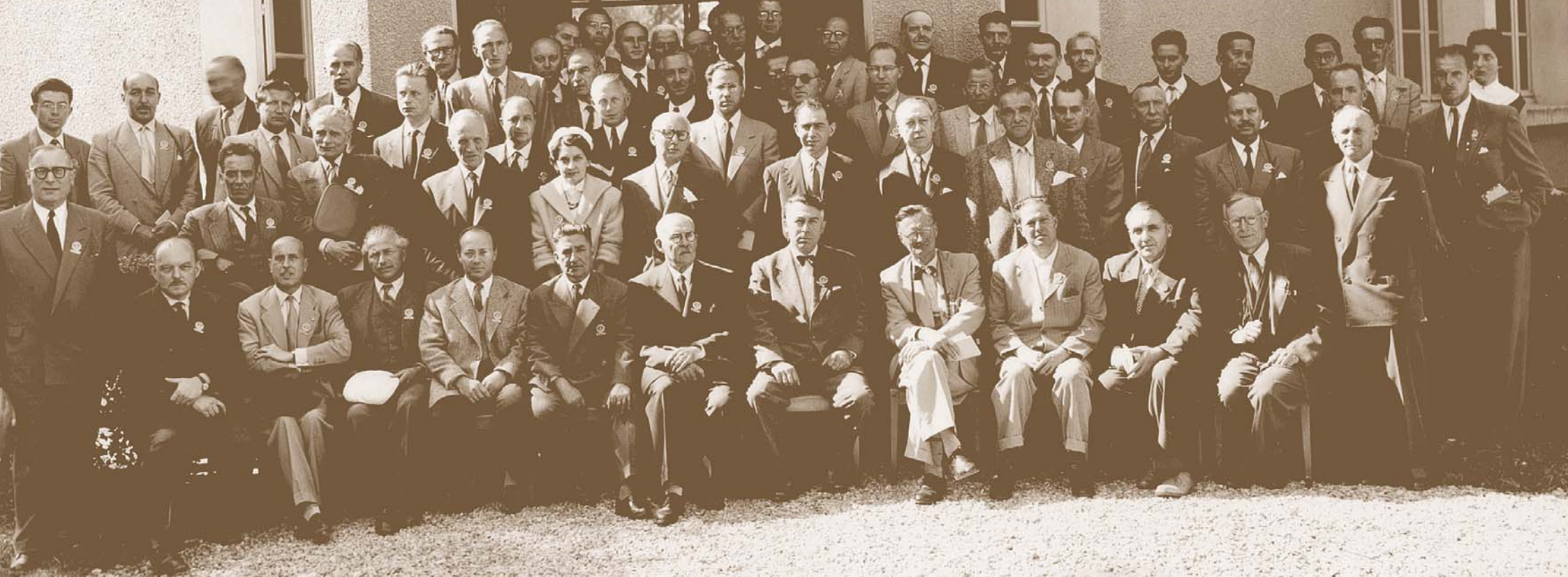
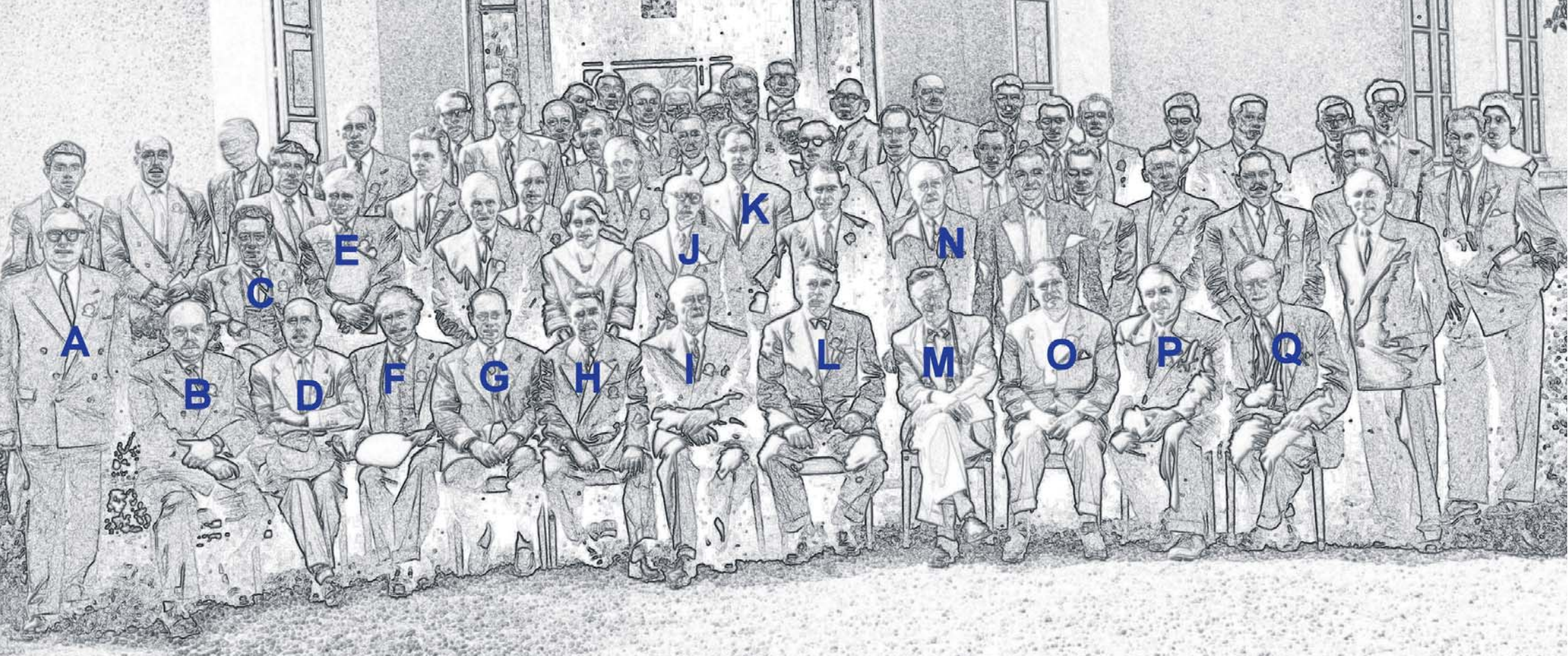


CORESTA 1956-2006





Picture taken at the 1955 First International Scientific Tobacco Congress

The following persons have been identified:

- | | | | |
|---|--|---|--|
| A | René Bernardie , <i>Dir. Agronomy, Seita, France</i> | J | M.R. Israël , <i>Seita, France</i> |
| B | Louis Genevoix , <i>Prof. Univ. Bordeaux, France</i> | K | Daniel Schwartz , <i>Seita, France</i> |
| C | Dimitri Arghyroudis , <i>Dir. Inst. Drama, Greece</i> | L | Pierre Grimanelli , <i>Director General Seita, France</i> |
| D | Enrique Alcatraz-Mira , <i>Dir. Inst. Sevilla, Spain</i> | M | Caspar Coolhaas , <i>Prof. Univ. Wageningen, Netherlands</i> |
| E | Constantin Pyriki , <i>Dir. Inst. Dresden, German Democratic Republic</i> | N | Léon Pomey , <i>Seita, France</i> |
| F | Albert Frey-Wyssling , <i>Prof. Polytechnikum, Zürich, Switzerland</i> | O | Mario Giovanozzi , <i>Dir. Inst. Rome, Italy</i> |
| G | Alexandre Fardy , <i>Prof. Athens School of Agronomy, Greece</i> | P | Karl Schmid , <i>Dir. Inst. Forchheim, Federal Republic Germany</i> |
| H | Pierre Chanceaulme , <i>Dir. Inst. Bergerac, France</i> | Q | Igor Bolzunov , <i>Dir. Fürstenfeld Exp. Station, Austria</i> |
| I | Prosper Gisquet , <i>Hon. Dir. Inst. Bergerac, France</i> | | |



FIFTY YEARS OF CORESTA

1956-2006



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The CORESTA Secretariat has much pleasure in presenting you with this booklet, which was produced with the assistance of various CORESTA members. The information contained in this booklet was compiled from various authoritative sources and every effort has been made to ensure that the figures quoted are as factual as possible. However, we sincerely apologise if, despite our best attempts, some of the information is found to be inaccurate and we encourage readers to bring any errors or omissions to our attention.



PRESIDENT'S FOREWORD

It is a great pleasure as President of CORESTA to be asked to provide some thoughts and comments to the historical perspective covering the 50 years that CORESTA has been in operation.

When I first joined the Industry, over thirty years ago, I quickly became aware of the elite corps of our scientists and those of other member companies that attended and participated in CORESTA. How I longed to aspire to the level of this body of scientific expertise. Unfortunately I studied as a biological scientist and had little to contribute at that time to the scientific working groups and had to wait until managerial status offered me the opportunity to join the CORESTA Board in the early to mid 90's. An honour indeed, at last to be part of this tremendous international body with a world-wide reputation. A reputation built on the scientific endeavours and excellence of our members with a true spirit of comradeship and respect between all who work within CORESTA.

It is a proud moment for all who have been associated with CORESTA over the last 50 years and I truly believe that the organisation is just as important today for our industry and just as inspiring to our new young scientists to ensure the organisations future and success over the next 50 years.

Vive le CORESTA!



Graham READ
British American Tobacco,
United Kingdom



THE TOBACCO WORLD IN 1956

Fifty years is both a short time in history yet a long time in human life. Therefore it is worthwhile, as a preamble to this celebration of the 50th Anniversary of CORESTA, to remind ourselves of a few facts from the 1950's.

In 1956, the world population was 2.8 billion - less than half the 6.5 billion alive today. The Olympic Games took place in Melbourne, actress Grace Kelly married Prince Rainier of Monaco and President Eisenhower was re-elected. A number of countries under colonial rule had recently either acquired their independence or were still fighting for it. At the Twentieth Party Congress of the Communist Party of the Soviet Union, Nikita Khrushchev denounced Stalin's personality cult, although many more years were to pass before the cold war between the Western and Eastern blocks came to end.

Cigarette consumption was growing in most countries, despite reports linking tobacco and lung cancer which had been published in the early fifties.

Annual world cigarette production in 1956 was approximately 2,000 billion and this has now increased to around 5,400 billion.

Filter cigarettes were still at the development stage, and Switzerland was the only country where filter cigarettes dominated (57%) the market in 1956. The respective figures were 27.5% in the US, 17% in Germany and just a few percent in Japan, U.K. and France. Now non-filter cigarettes are only a small part of total sales.

World tobacco leaf production in 1956 was estimated at 3,8 million tons - this is above 8 million tons today. Dark tobaccos (*i.e.* other than flue-cured Virginia, Burley, Oriental) represented 35% of world production in 1956, but are now less than 20%. Reconstituted tobacco was used as a cigar binder, but its use in cigarette manufacturing was still experimental. Research on the paper-machine process was very active and resulted in rapidly increased usage in the 1960's. Expanded tobacco was not yet used in cigarette manufacturing.

Let us take a more detailed look at a few countries.

France



In 1956 every tobacco-related activity was a state monopoly in metropolitan France (overseas territories not included). SEITA (Service d'Exploitation Industrielle des Tabacs et Allumettes) was a department of the Ministry of Finance, with responsibility for the

manufacture, importation and distribution of tobacco products to a network of state-controlled retailers. It had a workforce of about 13,000 people. It also had a monopoly on matches.

Leaf was produced by private growers under the close supervision of SEITA - the only buyer and processor. In 1956, 56,000 tons of tobacco (dark air-cured) were produced by 106,000 growers.

Research activity was intense and the Tobacco Institute of Bergerac, founded in 1927, had in time gathered a large collection of *Nicotiana* and was working on genetic breeding for improved resistance to disease, adaptation to local conditions, yield and quality. A new Research Centre, focusing on process and blending technology, and chemistry, opened in Les Aubrais, near Orléans in 1954. Both these Research Centres are still in operation.

Sales in 1956 were 42.5 billion cigarettes, 17,500 tons of smoking tobacco and 393 million cigars and cigarillos for a population of 43.4 million. Smoking tobacco was either rolled or smoked in a pipe and represented an important part of total sales.

More than 75% of men were smokers with little difference between age groups (79% in the 20-34 age group, 69% in the above 65 age group). In contrast whilst 35% of women smoked they were 51% of the age group 20-34 but only 6% of the above 64 age group.

The French cigarette market in 1956 consisted almost exclusively of non-filter dark cigarettes with a very small segment being Virginia or American blend, including around 3% imports. The successful American

Blend king-size filter cigarette Royale was launched in 1956 although the sales of filter cigarettes that year must have been a very small percentage of the total.

The tobacco scene in France has changed radically in the past fifty years and these changes have affected all aspects of the business. In particular, the founding of the European Common Market and the subsequent European rules for free trade and competition have resulted in the gradual dismantling of the monopolies. SEITA was first turned into a state-owned company with a semi-public statute in 1962, then ruled by commercial law in 1980 and privatized in 1995. In 1999 it merged with Tabacalera, the former Spanish Monopoly, to form Altadis.

Of all monopolies held by the State, one has been maintained: the state-controlled network of retailers, now directly ruled by the government.

Imports became significant with the opening of the borders. By 1976 10% of cigarettes and 36% of cigars were imported. The French consumers gradually turned away from dark air-cured cigarettes which now are only a small share of the market and this had consequences on the domestic leaf growing.

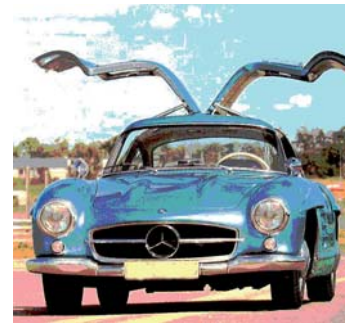
In recent years the French market has been subjected to massive price increases imposed by the government, which not only directly affected consumers but also changed the price differential between France and its neighbouring countries. Border sales, which used to be in favour of the French market, are now detrimental to local sales.

The market is now 55 billion cigarettes; 7,800 tons smoking tobacco (mainly RYO) and 1,850 million cigars. Altadis has a market share of 27% in cigarettes and 27% in cigars.

In 2003, 33% of men and 26% of women were smokers. Smoking incidence has decreased significantly with age for both sexes.

Tobacco cultivation has changed significantly since 1956 with only 3,900 growers (down from 106,000) producing 22,035 tons of tobacco from 8,136 ha, mainly Virginia flue-cured and Burley (figures for 2004). Nine cooperatives purchase the tobacco and processing is by the Cooperatives' Union. The leaf production sector has also set up an extension structure (ANITTA) based in Bergerac.

Germany



In 1956 Germany was a divided country with a total population of 70.9 million (including 17.7 million East Germans). By 2004 the total population had reached 82.5 million.

In 1956 in West Germany, 83% men and 21% women were smokers, whereas in 2004 the figures were 33.2% men and 22.1% women. (No data could be obtained for East Germany.)

Tobacco manufacturing employed 78,725 persons in West Germany in 1956. These persons were in 302 companies (185 of which employed no more than 50 persons). Now, in the whole of Germany, 32 firms employ 11,450 persons.

In the West German leaf growing sector 46,000 persons were employed, with 10,304 ha under tobacco. Today in the whole of Germany 4,450 ha of tobacco are cultivated and the workforce is 3,700 family labour with 10,000 – 15,000 seasonal workers.

West German cigarette sales in 1956 were 48.86 billion pieces, compared with 111.72 billion for the whole of Germany in 2004. Fine-cut tobacco sales were 10,120 tons for West Germany in 1956 and 24,258 tons for the whole country in 2004.

With sales of 3.6 billion cigars in 2004, Germany remains a big cigar market. However this is a significant drop from the 4.5 billion sold in 1956 in West Germany alone.

Taxes on all tobacco products were 13.76 billion euros in 2004.

Japan



The Tobacco Monopoly Bureau was established in 1898 by the Tobacco Monopoly Act for collecting tobacco tax. It was reorganised as the Japan Monopoly Corporation (JMC), “Nihon Senbai Kousha” in 1949.

In 1956 the tobacco sector including leaf procurement, manufacturing, distribution to government-approved retailers, and the importing/exporting of cigarette products was operated by JMC. JMC's business was not limited to tobacco – salt and camphor were also included in the scope of the monopoly's business at the time.

Japanese domestic leaf was produced by private growers under contract with JMC. By law JMC had to purchase all domestic leaf products. In 1956 152,800 tons of tobacco were produced by 440,000 growers; leaf types were flue-cured (64%), domestic air-cured (34%), and Burley (2%).

Japan has a long history of research activity in tobacco. The Hatano Leaf Tobacco Research Station in Kanagawa was established in 1899 for research in tobacco breeding and cultivation technology, and in 1920 the former Tobacco Research Institute (TRI) was established at Shinagawa, Tokyo. The TRI covered a wide range of topics from fundamental research to product development. It also performed research on salt and camphor. Both research institutes were merged into the JMC Tobacco Research Institute at Yokohama in 1973 and this still exists today as the Tobacco Science Research Centre. The former Leaf Tobacco Research Stations of Okayama, Kagoshima, Morioka and Iwata were all merged to form the Utsunomiya Station which has now become the Leaf Tobacco Research Centre in Oyama, Tochigi.

In 1956 the Japanese population was 89.5 million and total cigarette sales were 104.2 billion with 5,900 tons of Japanese fine-cut tobacco for the Japanese pipe, “Kiseru”. All Japanese cigarettes were non-filter in 1956. Some filter cigarettes were on the market but these were imported and sold only to “foreign” smokers in Japan. The first domestic filter cigarette, “Hope”, was launched for the Japanese smoker in 1957.

The major brands in 1956 were “Shinsei”, “Ikoi”, “Golden Bat” and “Peace”. “Peace” is still a significant Japanese brand. All brands were Virginia blends, but some American blend cigarettes were imported from the United States. However, sales of imported filter cigarettes from the United States and United Kingdom totalled only 0.018% of the sales in 1956. The 1956 prices of main brands were 40 yen for 20 cigarettes of “Shinsei” and 40 yen for 10 cigarettes of “Peace”. Imported cigarettes were expensive: Winston was 150 yen for 20 cigarettes. The starting monthly salary for a college graduate working as a bank clerk was 5,600 yen in 1956. Japan was under the dollar-pegged currency regime and 1 dollar was worth 360 yen.

An official survey of incidence in Japan in 1961 found that 83% of men and 16% of women were smokers.

In 1956 JMC employed about 41,000 people and operated 40 factories. JMC was privatised to form Japan Tobacco Inc. in 1985 and the tariffs on cigarettes were abolished in 1987. JT acquired the international business of R.J.R. Nabisco and established Japan Tobacco International S.A. in 1999. In recent years the Japanese cigarette market has averaged 293 billion of which 99.7% are filtered. The pipe and cigar market is very small. Recent market analysis in Japan shows that American blends with charcoal filters are core products. The average tar yield of the top 100 sales products in the market in 2004 was 7.2 mg. The market share of 1 mg to 3 mg tar cigarettes was 24% for the top 100 products and JT had a 73% share of the market.

In 2004, the Japanese population was 127.7 million and starting to decrease. Smoker incidence surveys indicated that 46.9% of men and 13.2% of women were smokers.

The tobacco monopoly system ended in 1985. However, JT is still required by law to purchase all domestic tobacco leaf which in 2004 amounted to 52,000 tons grown by 18,000 growers.

The price of the top brand cigarette, Mild Seven Super Light, is now 270 yen for 20 cigarettes. In 2004, the starting monthly salary for a college graduate working as a bank clerk was 173,000 yen.

As of March 2005, JT had 10,124 employees and 17 factories for all business, tobacco, pharmaceutical and food products.

United Kingdom



In 1956 the U.K. population was around 51 million (vs. 60 million in 2005). An estimated 75% of the male and 42% of the female adult population were smokers, whereas in 2003 the figures were 31% and 24%, respectively.

Tobacco cultivation in the U.K. has been prohibited since the 17th century and tobacco products taxation was exclusively based on an import tax on leaf tobacco. The raw material in tobacco factories was therefore a very precious commodity. This in turn gave the U.K. a unique character on several aspects of the industry as compared to most other countries:

- The price of cigarettes was directly linked to the amount of tobacco they contained, making king-size cigarettes a luxury item. As smoking tobacco was taxed at the same level the market for roll-your-own tobacco was very small.
- Factories employed many more people than on the Continent, the excess staff being employed in reducing tobacco usage and recovering waste to benefit from tax refund.

This taxation system lasted until 1976 when the U.K. aligned itself with the European tobacco tax system, whereby the finished product, not the raw material is subject to taxation.

In 1956 the market was nearly 100 billion cigarettes, 180 million cigars, 5,800 tons of rolling tobacco and 8,800 tons of pipe tobacco. Imperial Tobacco Ltd had a 76% market share in cigarettes and employed 22,000 persons. One can therefore extrapolate that the whole industry must have employed about 30,000 persons at the time.

In 2003 74 billion cigarettes were sold, along with 809 million cigars, 10,700 tons of rolling tobacco and 450 tons of pipe tobacco.

United States of America



In 1956 the population of the United States was 161.5 million, and now approaches 281.4 million. 52.7% men and 32.2% women were smokers in 1956 against 27.7% men and 22.3% women at present.

Cigarette consumption was 397 billion in 1956, and is 463 billion now. Average per capita annual consumption has therefore decreased from 2,458 cigarettes to 1,645 cigarettes. Regular length cigarettes (70 mm) represented 48% of sales in 1956, versus 0.5% nowadays. Filter cigarettes were only 27.5% of the market in 1956 but are now 99%.

Top 10 cigarettes brands:

1956	Current
Camel	Marlboro
Lucky Strike	Doral
Salem	Newport
Vantage	Camel
Old Gold Reg.	Winston
Chesterfield	Basic
Commander	GPC
Royale	Kool
Kool	Salem
Parliament	Virginia Slims

Leaf production in 1956 was 771,800 tons and is currently 317,800 tons. Federal, state and local excise taxes on cigarettes for fiscal year 2004 amounted to more than 20 billion dollars.

The Consumer Price Index has increased by a **factor of 9** since 1956. In comparison, the prices of the following aggregates or commodities have increased by:

Price per pack of cigarettes	26
US Gross National Product	23
Price per pound of meat	18
Average annual income	16
Consumer spending on tobacco products	15,8
Price per single postage stamp	13
Price for new Ford automobile	11,4
Consumer Price Index	9
Price for average house	6,8
Price per loaf of bread	5,5
Federal minimum hourly wage	5,15
Price per pound of coffee	4,3
Price per pound of tobacco leaves	3,6
Price per dozen eggs	2,6

Conclusion

We live in a world that has changed considerably in the last 50 years. However if we looked at the evolution of other industries or activities, we could find many that have changed more drastically than tobacco. Just remember what intercontinental travel meant 50 years ago in terms of speed and cost, and what office equipment was used at the time. Despite facing immense challenges the tobacco industry is still alive. Indeed, the past five years have presented many new challenges and opportunities whilst the next 50 years will undoubtedly see some dramatic changes as the industry adapts in an ever changing world. The theme of the 2006 CORESTA Congress, *Risk reduction and smoking acceptance: addressing the challenge*, testifies to the Industry's willingness to face the issues at hand.





50 YEARS OF CORESTA HISTORY

The Foundation

Various attempts were made in the distant past to set up an international organisation of tobacco scientists (meeting in Zurich, 1937, followed by the foundation of an International Tobacco Centre in Rome, meeting in Amsterdam, 1951) but the idea really took off when tobacco scientists asked the French Tobacco Monopoly (SEITA) to organise an International Scientific Tobacco Congress.

This first International Scientific Tobacco Congress took place from September 7th to 10th, 1955 in Paris. Most participants were from the leaf production sector and the presentations reflected a strong emphasis on leaf issues such as genetics, breeding, agronomy, phytopathology and leaf processing. Studies on smoke chemistry were also mentioned in a few presentations.

The Congress made the following resolutions:

“The delegates of the 24 nations participating in the first International Scientific Tobacco Congress, held in Paris from the 7th to the 10th of September 1955, express the following wishes :

- That genetical considerations be borne in mind in all research on the numerous problems concerning the improvement and the cultivation of the tobacco plant.
- That the next international meetings as well as national publications bring out not only the results achieved but also, as widely as possible, the methods employed.
- That a close, concrete and permanent cooperation be achieved between the various sectors of study concerning tobacco, more particularly between selection and manufacture.
- That standardisation and the application of determination techniques relating to chemical, physical and, as far as possible, taste characteristics of tobacco be pursued.

- That be set up :
 - a world bank for genes of the species of cultivated tobacco;
 - a world collection of wild species and of all genotypes of the said species;
 - a world collection of interspecific breeds.
- That, in the field of biochemistry, the reference systems be unified, analytic methods standardised, and that be constituted and preserved a collection of biochemical reference samples.
- That through international cooperation the prophylactic and therapeutic measures designed to diminish the effect of the main diseases of tobacco and in particular virus diseases, be intensified and disseminated.
- That a collection of specific antibodies for the identification of the main pathological agents be constituted and preserved.
- That international cooperation in the field of tobacco plant physiology be intensified, with regard more particularly to the general biogenetics of nicotine but not limited to Nicotianae.

That, in order to put into effect the resolutions listed above, a permanent Secretariat be constituted, and, in order to set up this secretariat as quickly as possible, express the wish that:

- if at least 10 adhesions from Institutions or Organisations belonging to at least 5 different Nations reach the Committee of this Congress before the 31st December 1955, an «INTERNATIONAL SECRETARIAT FOR COOPERATION IN SCIENTIFIC STUDIES RELATIVE TO TOBACCO» be immediately constituted with headquarters in Paris, 53 quai d’Orsay, it being understood that an adhesion implies a commitment to contribute to the operation of the Secretariat by a yearly contribution of 100,000 French Francs* or a yearly supporting contribution of 300,000 FF.

* The French francs referred to in the resolutions were “old francs”: 100,000 FF in 1956 is the equivalent of approximately 1800 € in 2006.

- that as soon as the adhesions referred to above in a) are received, participants be convened in order to establish the Statutes of the Secretariat.”

These resolutions were adopted unanimously and as a result a meeting was held in Paris on April 23rd, 1956, with representatives from 24 organisations. This marked the actual founding of CORESTA.

The founding members were from Austria, Belgium, Colombia, France, Germany (Federal and Democratic), Greece, Iran, Italy, Lebanon, Morocco, Sweden, Switzerland, Syria, Thailand, Tunisia, U.S.A. and Yugoslavia.

All were State Monopolies or Government Research Institutes or Extension Services with the exception of one cooperative (SOTA, Switzerland) and one commercial company (General Cigar, U.S.A.).

Internal Structure of CORESTA

CORESTA is an association governed by French law. From its inception, there was a Board, a Scientific Commission and a Secretary General. However, it was not until 1966 that the present structure with four Study Groups (Agronomy, Phytopathology, Smoke, Technology) was formalised, although the Smoke Study Group was initially set up in 1959. In 2002 the remits of the Smoke and Technology Study Groups were revised and the Study Groups renamed Smoke Science and Product Technology, respectively.

Rules for the designation of Board and Scientific members have been modified on several occasions to improve the functioning of the organisation.

The number of Board members has been revised several times, from 5 at inception to the present 14. For a long period half of the Board members were “entitled” members, chosen among CORESTA’s oldest members



and not subject to election by the General Assembly.

In 1992 this was changed to only 3 “entitled” members out of 12 Board members and in 2000 the concept of “entitled” members was discontinued.

The Board now comprises 14 member-organisations, of which 12 are subject to election by the General Assembly (for a 4-year tenure) and 2 are co-opted by the newly elected Board (for a 2-year tenure renewable once). At each General Assembly half of the 12 elected members are subject to either election or re-election.

The Scientific Commission members, on the other hand, have been elected since the

formalisation of Study Groups in their individual capacities by the Study Group delegates.

Until 1998, members were allowed only two consecutive two-year mandates, but there were “non-member” Study Group Secretaries. This was then changed to a single rule of a maximum of three consecutive 2-year mandates, after which a member must retire for at least two years. SEITA provided a Secretary General to CORESTA until mid-2001, when it was decided that the association should be independent. Office space needed by the General Secretariat was provided by SEITA at its Paris headquarters at Quai d’Orsay from inception to mid-2000. Subsequently independent offices have been rented at the present address of 11 rue du Quatre Septembre, 75002 Paris.

The present Rules governing CORESTA are:

Statutes (Lisbon, 2000)

Internal Rules (Kyoto 2004)

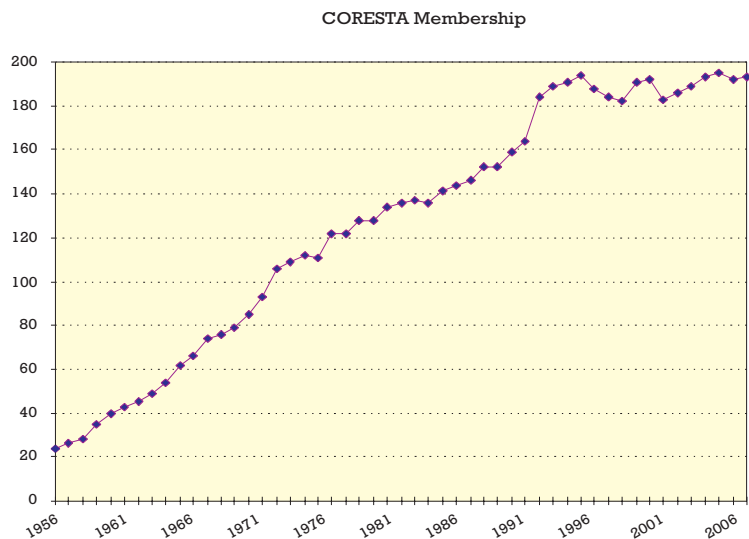
Rules Governing the Functions of the Scientific Commission and Study Groups (Brighton 1998)

Rules for the Functioning of Task Forces and Sub-Groups (July 2003)

Guidelines for Co-ordinators of Task Forces and Sub-Groups (July 2003)

CORESTA Membership

The following graph shows the growth of the membership over time:



Around 15 years after inception, the membership had largely diversified from its original composition, to include the major cigarette manufacturers of the western world, as well as the main suppliers of papers and filters. In recent years, in the wake of increased regulatory requirements for measuring smoke compounds as well as for other analytical requirements, a number of independent laboratories have joined CORESTA.

CORESTA Activities

Meetings for the General Membership

Meetings have always been an essential part of CORESTA. They are an opportunity for both scientific presentations and informal contacts and discussions, leading to fruitful exchanges and new initiatives.

It took many years to establish the present schedule of a plenary Congress in even years and separate meetings of Agronomy-Phytopathology and Smoke Science-Product Technology in alternate years.

After the founding Congress of 1955, the next large meeting was the 2nd International Tobacco Scientific Congress in Brussels, in June 1958. A Congress was held in Istanbul, Turkey in August 1960 and another in Harare, Zimbabwe (at that time called Salisbury, Rhodesia) in February 1963. In October 1964 the Congress was held in Vienna, Austria. Since then autumn has been the preferred time of the year for Congresses.

These meetings were called "Symposia", or "International Tobacco Scientific Congress", but since 1992, all plenary meetings have been called "Congresses".

At each Congress a General Assembly of CORESTA is held, as well as elections for the renewal of the Scientific Commission and Board.

The Smoke and Technology Groups maintained separate meetings from 1959 until 1966, as well as sometimes in Congress years. Joint Agronomy-Phytopathology meetings took place in 1960, 1961, 1962 and 1963 outside of Congresses.

After 1967, the scheduling of these meetings continued in its present form. The list of all plenary meetings and Study Group meetings since 1969 is given in the Appendix.

Other Meetings

Numerous meetings with limited attendance are organised under the banner of CORESTA.

Board and Scientific Commission meetings now take place at least twice a year, and are needed for the regular functioning and direction of the organisation.

The many working groups (Special Committees, Sub-Groups, Task Forces) meet according to their needs, mostly independently and sometimes in conjunction with general meetings.

Scientific Work

The scientific work within CORESTA only covers non-competitive topics of interest to the industry (of which there are many!) and is mainly conducted by the various working groups. These are either set up for a limited purpose and duration (referred to as Task Forces) or with a long-term perspective (Sub-Groups, Special Committees).

The decision to set up one of these working groups can originate from an individual suggestion or a CORESTA body. Precise terms of reference, a time deadline for completion of their tasks, a coordinator and sufficient membership support must be found before the Scientific Commission and Board can approve the setting up of a new working group.

The end product of a working group can be a CORESTA Recommended Method, (58 of them have been published since inception), a CORESTA Guide, a Technical Report, or any form of document made publicly available and presented at CORESTA meetings.

Promoting better practices with respect to tobacco production in the field, protection of the environment in tobacco cultivation or in industrial production are other aspects of CORESTA activities, which can be achieved by producing recommendations, organising training seminars or through symposia held in conjunction with the annual meetings.

The lists of the CORESTA Recommended Methods and CORESTA Guides are given in the Appendix.

A Few Landmarks

Blue Mould

International cooperation in the field of tobacco diseases was included in the list of resolutions of the 1955 Congress. This may have been a premonition. In 1960 a sudden and extremely virulent epidemic of blue mould appeared in Europe and the Mediterranean area, and destroyed a sizeable part of the crops for several successive years.

Much scientific work was then achieved under the CORESTA umbrella in the 1960's on the identification of strains, study of resistant varieties, trial of fungicides and recommendations for preventative/curative treatments.

A Warning Service run by the General Secretariat was established in 1961. It was in charge of gathering information on blue mould outbreaks anywhere in the Euro-Mediterranean area and sending this information back to all participants in order that areas neighbouring an outbreak should be informed as soon as possible.

A collaborative trial was also set up in 1964 whereby seeds of several tobacco varieties, chosen for their wide range of sensitivity to blue mould were sent every year to various participants, mostly Research Institutes, and planted for observation. This allowed a check for presence of the fungus, stability of the resistant lines and resistance of new introductions added to the trap collection. CORESTA played a significant role in addressing the problem of blue mould.

Due to the systematic preventative measures taken blue mould has generally been under control in the Euro-Mediterranean area over the past 20 years. However there is every indication that the fungus is present in most growing areas and could severely affect crops again if proper preventative measures are not maintained.



Blue mould outbreak

In 2006 the monitoring of blue mould was passed to the European Association for Tobacco Research and Experimentation, a network of growers and government research stations.

Nicotiana Catalogue

CORESTA has long been a proponent of tobacco germplasm preservation and the free exchange of seed for scientific and educational purposes. Amongst the original intentions of the founders was the setting up of an international gene bank for tobacco.

A "Temporary List of Nicotiana" was published in 1957. Some twenty-six years later, in 1983, a more extensive listing of tobacco germplasm was published. This included information on morphology, disease resistance and physio-chemical characteristics.

At the 1993 annual meeting CORESTA established the Nicotiana Catalogue Update Task Force to recognize the need for continual updating of the existing catalogue and to provide information in a modern electronic format. The purpose of this Task Force was to update the 1983 edition of the "Catalogue des NICOTIANA". The Task Force has produced a spreadsheet which has been included on the CORESTA CD-ROM since version 15 (January 2003) and represents the initial accomplishments in the update process; this includes data on nearly 6500 accessions.

Smoking Methods

The first smoking machines were designed in the early 20th century, although the need for a standardised procedure was not recognised until the 1930's. However several types of machines and procedures existed for another 40 years, as smoking machines were mainly used for quality control purposes by the various manufacturers.

The US Surgeon General's Report of 1964 gave the Federal Trade Commission (FTC) impetus to develop a standardised smoking-machine methodology to implement a labelling system for the "tar" and nicotine yields of US cigarette brands. The FTC set up its own laboratory and finalised its own method in 1966-1967.

In parallel, similar developments took place in Europe resulting in the publication of several national methods. This diversity of approaches prompted CORESTA to work on a smoking method that would form the basis of an internationally accepted smoking method.

Subsequently CORESTA Recommended Method No 10 was finalised in September 1968 and published in 1969. The method still allowed for several types of machines to be used and two systems for the collection of the condensates: the electrostatic trap or Cambridge filter.

With the gradual publication of cigarette smoke yields and the introduction of a European regulated ceiling for tar and nicotine, there was a need to harmonise all smoking methods used in the European Union, in a way that could satisfy all stakeholders.

This was the work of two major Task Forces, "Revision of Method No 10" and "Review of Smoking Methods". The number of specialists involved, the amount of work and the variety of trials undertaken were unprecedented in the history of CORESTA.

Eventually four methods were produced at the end of 1989, covering:

- No 21 Atmosphere for conditioning and testing tobacco and tobacco products
- No 22 Routine analytical cigarette-smoking machine: specifications, definitions and standard conditions
- No 23 Determination of total and nicotine-free dry particulate matter using a routine analytical cigarette-smoking machine - Determination of total particulate matter and preparation for water and nicotine measurements
- No 24 Cigarettes - Sampling

The Cambridge filter was the only collection system retained but there were still differences between results obtained from linear and rotary machines. Further work stressed the importance of air-flow around the cigarette and, in August 1991, Methods 21-24 were updated and a new Method added:

- No 25 Ambient air-flow around cigarettes in routine analytical smoking machines : control and monitoring

A special CORESTA Bulletin 1991 No 3 on Smoking Methods was published in December 1991.

It included a 100 page report on the work achieved and the procedures used by the Task Force as well as:

- Updated versions of Methods 7 & 8, originally published in 1986 and 1987, respectively:
 - No 7 Determination of nicotine in the mainstream smoke of cigarettes by gas chromatographic analysis
 - No 8 Determination of water in the mainstream smoke of cigarettes by gas chromatographic analysis
- Updated Methods 21-24, and new Method 25.

The set of CORESTA Smoking Methods was subsequently the basis for International Standards referred to in the European legislation. Differences between this set and the US FTC method are minimal.

Neither FTC nor CORESTA methods were ever intended to measure smokers' uptake, nevertheless a controversy has arisen in recent years on how consumers may interpret the figures produced by these methods.

In the wake of the smoking methods for cigarettes, considerable time and effort was devoted within CORESTA towards the production of smoking methods for "fine-cut smoking articles" and cigars. Special mention must be made of the latter, as there has been a CORESTA Sub-Group on Cigars since 1972, set up with the objective of studying the mechanical smoking of cigars.

Many challenges arose when trying to establish a standard protocol for cigar products that can have all sorts of shapes and dimensions, in addition to exhibiting a much larger variability than factory-made cigarettes. Eventually, after many years of trials, it was recognised that a solution was to use a puff volume that would vary according to the volume of the cigar itself. Six CORESTA methods were produced from 1998 to 2005:

- No 46 Atmosphere for conditioning and testing cigars of all sizes and shapes (May 1998)
- No 47 Cigars – Sampling (January 2000)

No 64 Routine Analytical Cigar-Smoking Machine - Specifications, Definitions and Standard Conditions (November 2005)

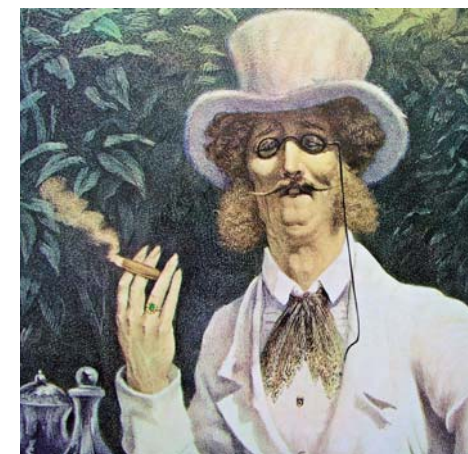
No 65 Determination of Total and Nicotine-Free Dry Particulate Matter using a Routine Analytical Cigar-Smoking Machine – Determination of Total Particulate Matter and Preparation for Water and Nicotine Measurements (November 2005)

No 66 Determination of Nicotine in the Mainstream Smoke of Cigars by Gas Chromatographic Analysis (November 2005)

No 67 Determination of Water in the Mainstream Smoke of Cigars by Gas Chromatographic Analysis (November 2005)

Smoking Behaviour

The CORESTA Smoking Behaviour Committee was set up in 1996. At that time there were extensive discussions within the public health community, particularly in Canada and the U.S.A., on whether or not smoke yields obtained by smoking machines were relevant to those obtained when humans smoked cigarettes. The FTC in the U.S.A., individual states such as Massachusetts, and the Canadian Province of British Columbia, all believed that humans obtained higher levels of smoke constituents from



their cigarettes than the yields produced by standard smoking machines. There were many initiatives to change the machine smoking parameters to, it was claimed, “reflect more accurately how humans smoke cigarettes”. However there had been an enormous amount of work done over the previous thirty years on determining how humans did smoke their cigarettes, much of it performed and published by tobacco industry scientists. Therefore CORESTA set up the Smoking Behaviour Committee in order to review all this work. Scientific knowledge on smoking behaviour is critical to any initiative which seeks to develop smoking machines to “more closely” mimic human smoking.

The Smoking Behaviour Committee was set up in 1996 at a time when CORESTA considered only the physical and chemical sciences and did no work in the human biological sciences. As the work on smoking behaviour did not fit into the existing CORESTA Study Groups it reported directly to the Scientific Commission. During 2002 the Smoke Study Group expanded its remit to include biological sciences and in that year the Smoking Behaviour Committee became a Sub-Group reporting to the CORESTA Smoke Science Group.

Agro-Chemical Advisory Committee (ACAC)

The Agrochemical Advisory Committee (ACAC) was first discussed in October 1989 when a small Working Group set up by the Scientific Commission considered if CORESTA should become more involved with agrochemical issues. The Board in June 1990 agreed that CORESTA should be more involved. The remit of ACAC, as originally proposed, was to:

- gather existing scientific data and regulatory information about tobacco agrochemicals
- provide a mechanism for concerted tobacco industry awareness of and response to emerging agrochemical issues.

This advisory committee is comprised of members who are specialists in pest control and have wide geographic and company representation. Members were chosen on the basis of their individual expertise and their appointment is subject to the approval of the Scientific Commission.

The co-ordinator of the Pesticides Sub-Group was often consulted and as from 1996 was made an *ex officio* member of the Committee. This has facilitated a two-way interaction between the Sub-Group and ACAC.

ACAC strongly supports the concepts of Good Agricultural Practice (GAP) in tobacco production and has provided information to the CORESTA membership on a number of issues surrounding this subject.

One of the first outputs from ACAC was a publication in 1993 on “The Use of Published Guidelines in the Selection, Application and Handling of Agrochemicals in Leaf Tobacco Production”. This publication provides the guiding principles of Good Agricultural Practice as it relates to agrochemicals.

ACAC has organised meetings in several countries with representatives of their respective tobacco sectors (growers, dealers, regulators, etc.) to promote GAP and especially the responsible use of agro-chemicals.

In recent years the Committee has focussed on collation of data on registered pesticides and regulations for their use in the different leaf-production areas, kept up to date its database on regulatory and advisory maximum residue limits, supported a database on pesticide residues in tobacco and revised its list of Guidance Residue Limits. As a consequence of its close involvement in issues that preserve the integrity of leaf tobacco production, ACAC has been the starting point for a number of Task Forces and Sub-Groups, including those dealing with gene modification, applied aspects of tobacco-specific nitrosamine formation, good agricultural practice, proficiency tests for laboratories involved in pesticide analyses and the development of a system for standardising the growth stages of the crop.

A spreadsheet with regulated maximum residue limits (MRLs) in countries where such limits have been published was recently produced and included on the CORESTA CD-ROM as of version 21, together with limits agreed upon by industry bodies for countries where no regulated MRLs are available.

Good Agricultural Practices (GAP)

GAP is a concept encompassing a large number of topics, from soil and water conservation to pest and disease management. A Sub-Group on

GAP was set up in 1997 jointly by the Agronomy and Phytopathology Study Groups with the general objective of encouraging and promoting sustainable tobacco agricultural practices. However it appeared that the task was too vast for a single Sub-Group and that it would be more efficient to set up successive Task Forces with limited scope and duration. In 2003 a Task Force called Good Agriculture Practices (GAP) Guidelines was set up with the objective of gathering, compiling and assessing the data and GAP programmes in use in various countries and organisations, and publishing this in a document where practices and recommendations common to most programmes would be described.

The Good Agricultural Practices (GAP) Guidelines were finalised in February 2005 and published as CORESTA Guide N° 3. The Guide is available from the CORESTA website and has been included on the CD-ROM from version 20 onwards.

GAP is a permanent concern of CORESTA. Presentations of work on the topic at CORESTA meetings have been and are encouraged. Task Forces focused on specific aspects of GAP are in operation and more will be set up.

Genetically Modified Tobacco

At the end of the 1990's it was clear that genetic engineering had become a powerful tool to develop new varieties of plants with improved capacities (e.g. resistance to disease) and it was equally clear that there was strong public concern about the technique as applied to food stuffs in most countries. Regulatory authorities in the European Union, Japan and Switzerland, for example, established threshold levels for inadvertent comingling of genetically modified organisms (GMOs) in food, feed and seed as a basis for labelling requirements. Detection methods mostly based on the Polymerase Chain Reaction (PCR) had been described for a variety of crops.

Because of public concern and the need to comply with regulations on threshold levels, the industry concurred that it would discourage the release of any genetically modified tobacco lines by avoiding their use in raw material. A reliable, precise tool for measuring the presence of

genetically modified tobacco was therefore needed. Accordingly, in 1998 a Task Force Genetically Modified Tobacco - Detection Methods was created by the Scientific Commission, with the following mandate:

- Review methods for detecting genetically modified tobacco (including cured leaf, tobacco products, plants and seed);
- Propose principles for sampling procedures.

The Task Force, which included 23 organisations from 13 countries, thoroughly investigated these issues and presented its report at the end of 1999.

In 2000, a new Task Force was created to test the methods first investigated:

Task Force Genetically Modified Tobacco: Collaborative Study on Detection Methods



The objective was to provide selected methods of GM tobacco detection and quantification for which acceptable performance characteristics had been determined through independent testing at Task Force members' laboratories. This proficiency test was carried out with the assistance of a third party independent laboratory (LGC Limited, Teddington, U.K.) which provided reference materials and coordinated the testing scheme according to internationally agreed protocols.

The Task Force successfully completed four rounds of Proficiency Trials with 18 laboratories from 10 countries and produced its final report in early 2004.

The Task Force was disbanded and succeeded in 2004 by the *Sub-Group Genetically Modified Tobacco - Proficiency Testing* in charge of organising regular Proficiency Testing rounds of GM tobacco in order to maintain and further improve the capabilities acquired in the previous experimentations.

CORESTA Documentation

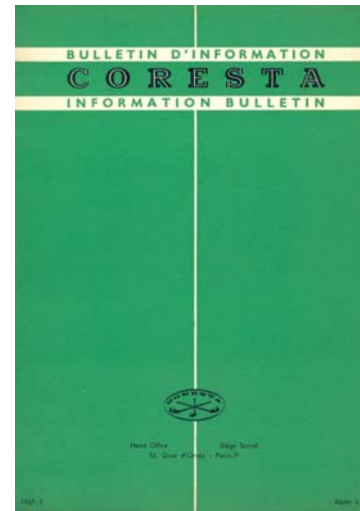
Documentation has been a primary concern of CORESTA since its inception and for 43 years quarterly Information Bulletins have been published. These Bulletins were the only CORESTA publication until the mid-1980's when it was decided to publish the abstracts of the Bulletin in electronic form.

The electronic database was hosted on a mainframe computer and first demonstrated at the 1990 Congress in Greece. The database was accessed through a (slow) phone connection and in practice very few members used it.

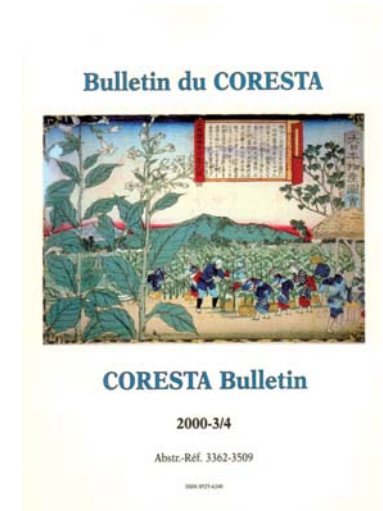
Therefore in 1994 the database was transformed into a Folio Views infobase to be distributed two or three times per year on a CD-ROM.

To date 22 versions have been published. The CD-ROM contains all abstracts published since 1976 (over 30,000), all Recommended Methods and CORESTA Guides, Statutes and Rules, important reports and scientific documentation.

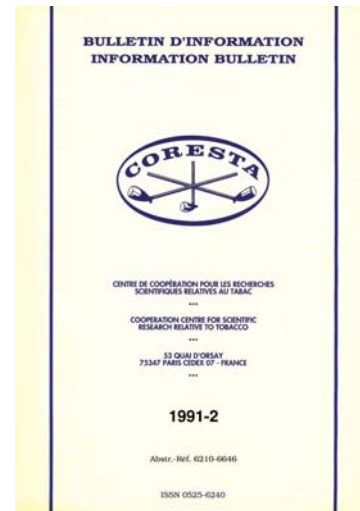
At the 2000 Congress in Lisbon, it was decided to make English the sole working language in CORESTA (previously all documentation had been



The Bulletin 1957-1990



The Bulletin 1998-2000



The Bulletin 1991-1997



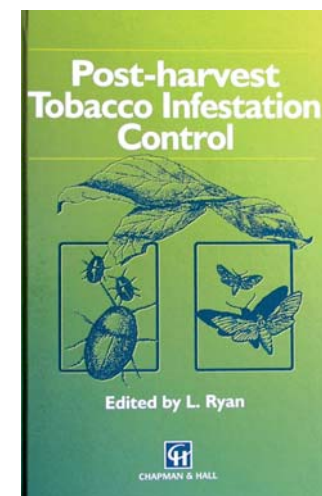
The CD-ROM since 1996

published in French and English) and to discontinue the printed Bulletin, as all information it contained was reproduced on the CD-ROM.

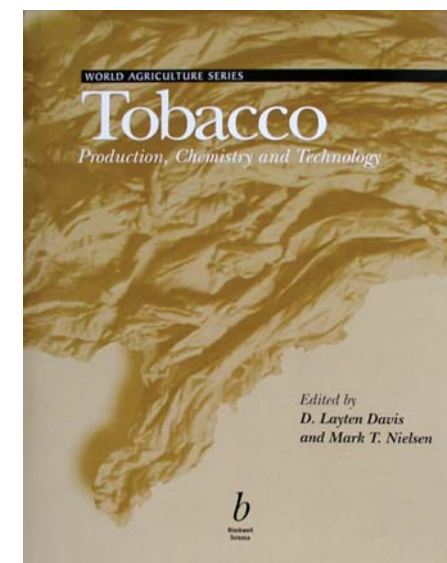
A CORESTA website (www.coresta.org) was launched in March 2000 with no restricted access and has gradually grown to include general information on CORESTA, dates of future meetings, all Recommended Methods and Guides, and other tobacco related scientific information.

To maintain a lively link with the membership, a CORESTA Newsletter has been published since July 2001, with 2-3 issues per year. Important articles on work being done within CORESTA or on important issues of general interest to the industry are published in the Newsletter.

In addition to the documentation directly issued by CORESTA, two books were published by scientists affiliated with CORESTA, with the direct support of CORESTA.



Post-Harvest Tobacco Infestation Control was published in 1995 by Chapman & Hall, London, U.K.



Tobacco – Production, Chemistry and Technology was published in 1999 by Blackwell Science, Oxford, U.K.



APPENDICES

List and Themes of CORESTA Congresses since inception

Year	Place & date	Host	Theme
2006	Paris, France (15-20 October)	Altadis- Schweitzer-Mauduit International	Risk Reduction and Smoking Acceptance: Addressing the Challenge
2004	Kyoto, Japan (3-7 October)	Japan Tobacco Inc.	Scientific Expertise Applied for the Future
2002	New Orleans, U.S.A. (22-27 September)	R.J. Reynolds Tobacco & other US companies	Celebrating the Past, Charting the Future
2000	Lisbon, Portugal (15-19 October)	Philip Morris/Tabaqueira	Challenging the New Millennium
1998	Brighton, U.K. (11-15 October)	British American Tobacco	Progress through Research
1996	Yokohama, Japan (3-8 November)	Japan Tobacco Inc.	Forward together, Integrating Concepts and Technology
1994	Harare, Zimbabwe (9-14 October)	Tobacco Research Board	Search for Excellence
1992	Jerez de la F., Spain (11-16 October)	Tabacalera S.A.	1492-1992: the Blossoming of a Culture
1990	Kallithea, Greece (7-11 October)	National Tobacco Board	Meeting the Challenge
1988	Ghangzhou, China (9-13 October) <i>(9th International Tobacco Scientific Congress)</i>	China National Tobacco Corp.	Tradition and Innovation
1986	Taormina, Italy (26-30 October)	A.A. dei Monopoli di Stato	Quest for Quality
1984	Vienna, Austria (7-12 October) <i>(8th International Tobacco Scientific Congress)</i>	Austria Tabakwerke	Towards Tailor-Made Tobacco
1982	Winston-Salem, U.S.A. (31 October - 4 November)	R.J. Reynolds Tobacco Co.	Progress in Tobacco Research
1980	Manila, Philippines (9-14 November) <i>(7th International Tobacco Scientific Congress)</i>	Philippines Tobacco Adm.	Improvements on the Characteristics of Tobacco and Tobacco Products: Influence of Recent Developments in Production and Manufacturing Techniques

List and Themes of CORESTA Congresses since inception *(continued)*

Year	Place & date	Host	Theme
1978	Sofia, Bulgaria (1-5 October)	Bulgartabac	The Improvement of the Methods for Production of Tobacco and Tobacco Products - Influence on Quality and Economics
1976	Tokyo, Japan (14-19 November) <i>(6th International Tobacco Scientific Congress)</i>	Japan Tobacco Inc.	Tobacco and Tobacco Products - Quality and Economics, Today and in the Future
1974	Montreux, Switzerland (22-27 September)	Association Suisse des Fabricants de Cigarettes	Influence of the Production and Manufacturing Conditions on the Physical and Chemical Characteristics of Tobacco and Smoke, mainly: Filling Capacity, Burning Rate and Smoke Composition
1972	Williamsburg, U.S.A. (22-28 October)	Several US Companies <i>(joint with TCRC)</i>	Recent Advances in Tobacco Science and Technology
1970	Hamburg, Germany (14-19 September) <i>(5th International Tobacco Scientific Congress)</i>	Verband der Cigarettenindustrie	Tobacco Production
1968	Stockholm, Sweden (18-19 September)	Svenska Tobaks AB	
1966	Athens, Greece (19-26 September) <i>(4th International Tobacco Scientific Congress)</i>	National Tobacco Board	
1964	Vienna, Austria (6-10 October)	Austria Tabak	
1963	Salisbury, Rhodesia (18-26 February) <i>(3rd International Tobacco Scientific Congress)</i>	Tobacco Research Board (Rhodesia & Nyasaland)	
1960	Istanbul (22-26 August) - Symposium	Turkish Monopolies	
1958	Brussels, Belgium (9-15 June) <i>(2nd International Tobacco Scientific Congress)</i>	Fedetab	
1955	Paris, France (7-10 September) <i>(1st International Tobacco Scientific Congress)</i>		“Founding Congress”, resulted in the foundation of CORESTA in 1956. The first General Assembly was held on 23 April 1956.

Joint Meetings of the Agronomy and Phytopathology Study Groups since 1969

Year	Place	Date	Host
2005	Santa Cruz do Sul, Brazil	23-28 October	Sindifumo
2003	Bucharest, Romania	12-16 October	Romanian Parliament
2001	Cape Town, South Africa	30 September - 4 October	Institute Industrial Crops
1999	Suzhou, China	10-14 October	CNTC
1997	Montreux, Switzerland	6-10 October	CISC (Swiss Cigarette Manufacturers Assoc.)
1995	Oxford, U.K.	9-12 October	Rothmans/R&R
1993	Budapest, Hungary	3-7 October	Philip Morris
1991	Louisville, Ky., U.S.A.	15-18 October	Brown & Williamson
1989	Cesme, Turkey	3-6 October	Tekel
1987	Porto Alegre, Brazil	12-16 October	Souza Cruz
1985	Drama, Greece	2-4 September	National Tobacco Board
1983	Bergerac, France	19-23 September	SEITA
1981	Torgiano, Italy	28 September - 1 October	Universal Leaf Tobacco
1979	Marrakech, Morocco	30 September - 5 October	Régie Marocaine
1977	Bratislava, Czechoslovakia	19-23 September	Bab Institute
1975	Torremolinos, Spain	6-10 October	Servicio Nacional Tabacos
1973	Skopje, Yugoslavia	1-6 October	Yugo Tutun
1971	Vougliameni, Greece	12-15 October	National Tobacco Board
1969	Hammamet, Tunisia	13-17 October	Régie Tunisienne

Joint Meetings of the Smoke (Science) and (Product) Technology Study Groups since 1969

Year	Place	Date	Host
2005	Stratford-Upon-Avon, U.K.	4-8 September	Imperial Tobacco Ltd.
2003	Freiburg, Germany	7-11 September	Rhodia
2001	Xian, China	2-6 September	CNTC
1999	Innsbruck, Austria	5-9 September	Papierfabrik Wattens
1997	Hamburg, Germany	7-11 September	Reemtsma Cigarettenfabriken
1995	Vienna, Austria	10-14 September	Austria Tabak
1993	Budapest, Hungary	12-16 September	Institute Debrecen
1991	Utrecht, The Netherlands	15-20 September	V.N.K (Smoking Tobacco Association)
1989	Interlaken, Switzerland	13-15 September	CISC (Swiss Cigarette Manufacturers Assoc.)
1987	Bournemouth, U.K.	6-9 September	British American Tobacco
1985	Brussels, Belgium	16-18 September	Fedetab
1983	Florence, Italy	24-28 October	Monital
1981	Albufeira, Portugal	26-30 October	Tabaqueira
1979	Bristol, U.K.	3-7 September	Imperial Tobacco Ltd.
1977	Munich, Germany	5-9 September	Philip Morris
1975	Copenhagen, Denmark	2-5 September	Skandinavisk Tobak
1973	Nice, France	10-14 September	SEITA
1971	Rome, Italy	18-22 October	Monopoli di Stato
1969	London, U.K.	15-19 September	Cigarette Components

Presidents and Vice-Presidents of the CORESTA Board

Year	Presidents	Vice-Presidents
2004	Graham READ (British American Tobacco, U.K.)	Henri PAPENFUS (Alliance One International, U.K.) (Feb. – Oct. 2006) Jacobus S. COETZEE (Universal Leaf Tobacco, U.K.) (Until Jan. 2006)
2002	Paul SADLER (Imperial Tobacco, U.K.)	David TOWNSEND (R.J. Reynolds, U.S.A.)
2000	Paul SADLER (Imperial Tobacco, U.K.)	David TOWNSEND (R.J. Reynolds, U.S.A.)
1998	Manuel BOURLAS (Philip Morris, U.S.A.)	Leslie COUSINS (Tobacco Research Board, Zimbabwe)
1997	<i>Manuel BOURLAS (Philip Morris, U.S.A.) Acting President (December 97 - October 98)</i>	
1996	Bernard PITIÉ (SEITA, France)	Manuel BOURLAS (Philip Morris, U.S.A.)
1995	<i>Manuel BOURLAS (Philip Morris, U.S.A.) Acting President (August 95 - November 96)</i>	
1994	Günther HAYN (ATW, Austria)	Manuel BOURLAS (Philip Morris, U.S.A.)
1992	Günther HAYN (ATW, Austria)	Luis ESTEBAN (Tabacalera, Spain)
1990	Bertrand de GALLÉ (SEITA, France)	Günther HAYN (ATW, Austria)
1988	Bertrand de GALLÉ (SEITA, France)	Carmelo SAPIENZA (A.A.M.S., Italy)
1986	Francis EYRAUD (SEITA, France)	Carmelo SAPIENZA (A.A.M.S., Italy)
1984	Alois MUSIL (ATW, Austria)	Francis EYRAUD (SEITA, France)
1982	Alois MUSIL (ATW, Austria)	Roy E. MORSE (R.J. Reynolds, U.S.A.)
1980	Jean CARRIÈRE (SEITA, France)	D.P. TABIJE (P.T.A., Philippines)
1978	Jean CARRIÈRE (SEITA, France)	Dimiter YADKOV (Bulgartabac, Bulgaria)
1976	Oswald Von KIELMANSEGG (ATW, Austria)	Minomatsu IZUMI (Japan Tobacco, Japan)
1974	Oswald Von KIELMANSEGG (ATW, Austria)	Karl WAERNBERG (Svenska Tobaks, Sweden)
1970	R. SCHLENKER (Verband Cig., Germany)	Oswald Von KIELMANSEGG (ATW, Austria)
1966	<i>Th. ANDREADIS (N.T.B., Greece) Acting President</i>	
1966	Jean SADRIN (SEITA, France)	R. SCHLENKER (Verband Cig., Germany)
1956	Pietro COVA (A.A.M.S., Italy)	Pierre GRIMANELLI (SEITA, France)

Presidents and Vice-Presidents of the Scientific Commission of CORESTA

Year	Presidents	Vice-Presidents
2004	Hal TEEGARDEN (U.S.A.)	Derek MARINER (U.K.)
2002	Jürgen HOLLWEG (Germany)	Ferruccio GADANI (U.S.A.)
2000	Martin WARD (U.K.)	Jürgen HOLLWEG (Germany)
1998	Maria Elmano ROCHA (Portugal)	René DELON (France)
1996	Henri D. PAPENFUS (U.K.)	David TOWNSEND (U.S.A.)
1994	Richard R. BAKER (U.K.)	Jacques TANCOGNE (France)
1992	Leslie T.V. COUSINS (Zimbabwe)	Richard R. BAKER (U.K.), Roger R. BLACK (U.S.A.)
1990	Nicolas BASKEVITCH (France)	Leslie T.V. COUSINS (Zimbabwe), Hans V. THOMSEN (Denmark)
1988	André BEUCHAT (Italy)	Claude JOIGNY (France), Brian SMEETON (U.S.A.)
1986	Thomas S. OSDENE (U.S.A.)	Ruy VILLAS BOAS (Portugal), Jacques CHOUTEAU (France)
1985	David T. WESTCOTT (U.K.)	Thomas S. OSDENE (U.S.A.)
1984	Basil C. AKEHURST (U.K.)	Nicolas BASKEVITCH (France)
1982	Basil C. AKEHURST (U.K.)	Jacques CHOUTEAU (France), Robert SELIGMAN (U.S.A.)
1980	Hinrich ELMENHORST (Germany)	Roger CORBAZ (Switzerland), Helmut REIF (Austria)
1978	Jacques FLESSELLES (France)	Basil C. AKEHURST (U.K.), David T. WESTCOTT (U.K.)
1976	Ian MCDONALD (Rhodesia)	Basil C. AKEHURST (U.K.), Jacques FLESSELLES (France)
1974	Anton ARTHO (Switzerland)	Ian MCDONALD (Rhodesia), F.E. RESNIK (U.S.A.)
1972	Henri HITIER (France)	Charles H. KEITH (U.S.A.), J.G. RAEBER (Rhodesia)
1970	Henri HITIER (France)	Ian MCDONALD (Rhodesia), Helmut WAKEHAM (U.S.A.)
1968	Karl Heinz WEBER (Germany)	Henri HITIER (France), D. BAILOV (Bulgaria)
1966	Karl Heinz WEBER (Germany)	D. ARGHYROUDIS (Greece), Mario GIOVANNONZI (Italy)
1963	Jean CUZIN (France)	K. SCHMID (Germany), C. PYRIKI (Germany)
1958	Jean CUZIN (France)	Renato HUTER (Switzerland), C. PYRIKI (G.D.R.)
1956	Jean CUZIN (France)	Renato HUTER (Switzerland)

Secretary General

Jean PEYROT 1956-1972

Pierre RAY 1972-1982

Jacques FLESSELLES 1982-1984

Pierre LEDEZ 1984-1989

François JACOB since 1989

CORESTA Prize and Study Grant recipients since inception in 1978

Year	Place	Prize	Study Grants
2006	Paris	Dr. René DELON (France)	Mr. CAO Yi (China), Ms. Navneet KAUR (Canada), Ms. Martina KYSELKOVÁ (France) Mr. Marcin PRZYBYŚ (Poland)
2004	Kyoto	Dr. Motohiko MURAMATSU (Japan)	Ms. LIU Yanhua (China), Mr. LU Binbin (China), Ms. Lisette MONZÓN (Cuba) Ms. Johanne MOREL (France), Mr. Zachary TAYLOR (U.S.A.)
2002	New Orleans	Dr. Mike OGDEN (U.S.A.)	Mr. Leonard BUKUTA (Zimbabwe), Ms. Li Peng (China), Ms. PENG Lijuan (China) Mr. Shawn TROXLER (U.S.A.)
2000	Lisbon	Dr. Lowell BUSH (U.S.A.)	Mr. Leonardo CARUSO (Brazil), Mr. Ramsey LEWIS (U.S.A.), Mr. WAN Xiuqing (China) Ms. Elena YORDANOVA (Bulgaria)
1998	Brighton	Dr. Inger WAHLBERG (Sweden)	Ms. Shirley AGRUPIS (Philippines), Mr. Loren FISHER (U.S.A.) Ms. Lina LUO (China), Ms. Esmè VAN JAARSVELD (R.S.A.)
1996	Yokohama	Dr. Earl A. WERNSMAN (U.S.A.)	Mr. Bruce JONES (U.S.A.), Ms. Valentina ILCHEVA (Bulgaria), Ms. Elizabeth JOHNSON (Trinidad) Ms. Alison ROBERTSON (Zimbabwe), Mr. WANG Baoxing (China)
1994	Harare	Dr. Pierre SCHILTZ (France)	Ms. Shawn CARLSON (U.S.A.), Ms. Florence MASSON (France) Mr. YANG Wei Zu (China), Ms. Tracey GLOVER (Zimbabwe) Art Manzelli Prize
1992	Jerez	Dr. Richard R. BAKER (U.K.)	Ms. Natalia Borisova VELEVA (Bulgaria), Mr. Kenneth FLOWER (Zimbabwe) Ms. Isabelle LACOURT (France), Mr. Jerry MORRIS (U.S.A.), Mr. WEI Xiaochen (China)
1990	Kallithea	Dr. Jacques CHOUTEAU (France)	Mr. Gregory GOINS (U.S.A.), Mr. Michel HERNOULD (France) Mr. Inigo PFEIFFER (Spain), Mr. Abdessamad TAHIRI ALAOUI (Morocco)
1988	Guangzhu	Dr. Curt R. ENZELL (Sweden)	Ms. Rosa Maria BENITO MORENO (Spain), Mr. CUI Mingwu (China) Mr. QI Qungang (China), Ms. Florence TRENTIN (France)
1986	Taormina		<i>No Prize & Study Grants awarded that year</i>
1984	Vienna	Dr. Ian McDONALD (Zimbabwe)	Ms. Sylvie CHETRIT (France), Mr. Jonathan LAPHAM (Zimbabwe) Mr. Bernard PELISSIER (France)
1982	Winston-Salem	None	Ms. Sakiko AKADA (Japan), Mr. Janos GERGICS (Hungary) Mr. Mfwidi-Nitu PULULU (Zaire), Ms. Elisabeth REDEI-ENDRENE (Hungary)
1980	Manila	Dr. James F. CHAPLIN (U.S.A.)	Ms. Patricia AHL (Switzerland), Mr. Connie R. CAMPBELL (U.S.A.) Mr. Colin R. FISHER (Zimbabwe), Mr. Gabor PAZAR (Hungary)
1978	Sofia	Dr. T.C. TSO (U.S.A.)	Mr. Apoloniusz BERBEC (Poland), Ms. Valentina RUIZ GUTIERREZ (Spain) Mr. Johan VEYS (Belgium)

List of the CORESTA Recommended Methods

Ref.	Title	Date	Bulletin	Observations
No 1	Determination of dithiocarbamates in tobacco	Nov. 1978	1978-2	First version 1973-1 Second version 1974-2
No 2	Determination of organochlorine pesticide residues on tobacco	May 1997	1997-1	First version 1974-2 Second version 1994-3/4
No 3	<i>Determination of the air permeability of cigarette paper</i>	1976	1975-3/4	Replaced by Method No 40
No 4	Determination of maleic hydrazide residues in tobacco	Sep. 1976	1976-2	
No 5	Determination of carbon monoxide in the mainstream smoke of cigarettes by non-dispersive infrared analysis	Sep. 1993	1993-4	First version 1982-2
No 6	Measurement of ventilation : definitions and measurement principles	Mar. 2000	2000-1	First version 1983-2/3
No 7	Determination of nicotine in the mainstream smoke of cigarettes by gas chromatographic analysis	Aug. 1991	1991-3	First version 1986-3/4
No 8	Determination of water in the mainstream smoke of cigarettes by gas chromatographic analysis	Aug. 1991	1991-3	First version 1987-2
No 9	Determination of nicotine in cigarette filters by gas chromatographic analysis	Oct. 1989	1989-2	
No 10	<i>Machine smoking of cigarettes - Determination of crude and dry smoke condensate</i>	Sep. 1968	1969-1	Replaced by Method No 23
No 12	Determination of alkaloids in cigarette smoke condensate	Sep. 1968	1969-2	
No 13	Determination of alkaloid retention by cigarette filters	Sep. 1968	1969-2	By spectrophotometry By GC
No 14	<i>Determination of nicotine in ambient air by gas chromatographic analysis</i>	Sep. 1993	1993-4	First version 1990-1 Replaced by Method No 50
No 15	Cigarettes - Determination of water in smoke condensates - Karl Fischer method	Mar. 1990	1990-2	
No 16	Lamina strip particle size determination	Jan. 1991	1991-1	
No 17	Stem content of lamina strips	Jan. 1991	1991-1	
No 18	<i>Materials used as cigarette tipping papers having a perforated zone - Determination of unit air-flow and permeability</i>	Jan. 1991	1991-1	Replaced by Method No 40
No 20	Determination of alkaloids in manufactured tobacco	Sep. 1968	1969-2	
No 21	Atmosphere for conditioning and testing tobacco and tobacco products	Aug. 1991	1991-3	First version 1989-4
No 22	Routine analytical cigarette-smoking machine: specifications, definitions and standard conditions	Aug. 1991	1991-3	First version 1989-4
No 23	Determination of total and nicotine-free dry particulate matter using a routine analytical cigarette-smoking machine - Determination of total particulate matter and preparation for water and nicotine measurements	Aug. 1991	1991-3	First version 1989-4

List of the CORESTA Recommended Methods *(continued)*

Ref.	Title	Date	Bull./CD	Observations
No 24	Cigarettes - Sampling	Aug. 1991	1991-3	First version 1989-4
No 25	Ambiant air-flow around cigarettes in routine analytical smoking machines: control and monitoring	Aug. 1991	1991-3	
No 30	Determination of residues of the suckercide Flumetralin (Prime Plus, CGA-41065) on tobacco	Jun. 1991	1991-2	
No 31	Determination of residues of the suckercide Pendimethalin (Accotab, Stomp) on tobacco	Jun. 1991	1991-2	
No 32	Determination of residues of the suckercide Off-Shoot-T (N-alkanol mixture) on tobacco	Jun. 1991	1991-2	
No 33	Determination of acetate in cigarette paper	Jan. 1993	1992-3/4	
No 34	Determination of citrate in cigarette paper	Jan. 1993	1992-3/4	
No 35	Determination of total alkaloids (as nicotine) in tobacco by continuous flow analysis	Nov. 1994	1994-3/4	
No 36	Determination of nitrate in tobacco by continuous flow analysis	Nov. 1994	1994-3/4	
No 37	Determination of reducing substances in tobacco by continuous flow analysis	Nov. 1994	1994-3/4	
No 38	Determination of reducing carbohydrates in tobacco by continuous flow analysis	Nov. 1994	1994-3/4	
No 39	Determination of the purity of nicotine and nicotine salts by gravimetric analysis - Tungstosilicic acid method	Nov. 1994	1994-3/4	
No 40	Determination of air permeability of materials used as cigarette papers, filter plug wrap and filter joining paper including materials having an oriented permeable zone	Oct. 1994	1994-3/4	
No 41	Determination of the draw resistance of cigarettes and filter rods	Jun. 1995	1995-1	new version end 2005
No 42	Atmosphere for conditioning and testing fine-cut tobacco and fine-cut smoking articles	Jun. 1997	1997-1	
No 43	Fine-cut tobacco - Sampling	Jun. 1997	1997-1	
No 45	Determination of phosphate in cigarette paper	Jan. 1998	1997-4	
No 46	Atmosphere for conditioning and testing cigars of all sizes and shapes	May 1998	1998-1	
No 47	Cigars - Sampling	Jan. 2000	2000-1	
No 50	Environmental Tobacco Smoke - Determination of nicotine and 3-ethenylpyridine in the vapour phase	Jan. 2002	CD 13	
No 51	Environmental Tobacco Smoke - Estimation of its contribution to respirable suspended particles - Determination of particulate matter by ultraviolet absorbance and by fluorescence	Jan. 2002	CD 13	
No 52	Environmental Tobacco Smoke - Estimation of its contribution to respirable suspended particles - Method based on solanesol determination	Jan. 2002	CD 13	
No 53	Determination of paper wrapper burn speed	May 2002	CD 14	

List of the CORESTA Recommended Methods *(continued)*

Ref.	Title	Date	Bull./CD	Observations
No 54	Determination of Nicotine and Nicotine-Free Dry Particulate Matter in Sidestream Smoke using a Fishtail Chimney and a Routine Analytical/Linear Smoking Machine	June 2002	CD 15	
No 55	Determination of Carbon Monoxide in the Vapour Phase of Cigarette Sidestream Smoke using a Fishtail Chimney and a Routine Analytical/Linear Smoking Machine	June 2002	CD 15	
No 56	Determination of Water in Tobacco and Tobacco Products by Karl Fischer Method	Dec. 2002	CD 16	
No 57	Determination of Water in Tobacco and Tobacco Products by Gas Chromatographic Analysis	Dec. 2002	CD 16	
No 58	Determination of Benzo[a]Pyrene in Cigarette Mainstream Smoke – Gas Chromatography-Mass Spectrometry Method	Feb. 2004	CD 18	
No 59	Determination of Triacetin in Filter Rods by Gas Chromatographic Analysis	June 2004	CD 20	
No 60	Determination of 1,2-Propylene Glycol and Glycerol in Tobacco and Tobacco Products by Gas Chromatography	Feb. 2005	CD 20	
No 61	Determination of 1,2-Propylene Glycol, Glycerol and Sorbitol in Tobacco and Tobacco Products by High Performance Liquid Chromatography (HPLC)	Feb. 2005	CD 20	
No 62	Determination of Nicotine in Tobacco and Tobacco Products by Gas Chromatographic Analysis	Feb. 2005	CD 20	
No 63	Determination of Tobacco Specific Nitrosamines in Cigarette Mainstream Smoke - GC-TEA Method	June 2005	CD 20	
No 64	Routine Analytical Cigar-Smoking Machine - Specifications, Definitions and Standard Conditions	Nov. 2005	CD 21	
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	Nov. 2005	CD 21	
No 66	Determination of Nicotine in the Mainstream Smoke of Cigars by Gas Chromatographic Analysis	Nov. 2005	CD 21	
No 67	Determination of Water in the Mainstream Smoke of Cigars by Gas Chromatographic Analysis	Nov. 2005	CD 21	

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Ref.	Title	Date	Newsletter/CD
No 1	The Concept and Implementation of Agrochemical Guidance Residue Levels	Dec. 03	8
No 2	Phosphine Fumigation Parameters for the Control of Cigarette Beetle and Tobacco Moth	Mar. 04	9
No 3	Good Agricultural Practices (GAP) Guidelines	Feb. 05	CD 20



Pipe tobacco packing at the Metz factory, 1955



Harvesting tobacco with horse-cart, Bergerac, 1950's