CORESTA
Developments and Activities

Dr Stéphane Colard, Secretary General (Designate)
Mr Lea Scott, President Scientific Commission (Universal Leaf)
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October 2nd, 2019, FDA Center for Tobacco Products

Outline

- Introduction to CORESTA
- Key activities in the Study Groups
- The strengths of CORESTA

STATUTES & RULES ARE PUBLICLY AVAILABLE

CORESTA

Cooperation Centre for Scientific Research Relative to Tobacco

A non-profit organisation created in 1956 governed by French law

Purpose*

To promote cooperation in scientific research relative to tobacco and its derived products

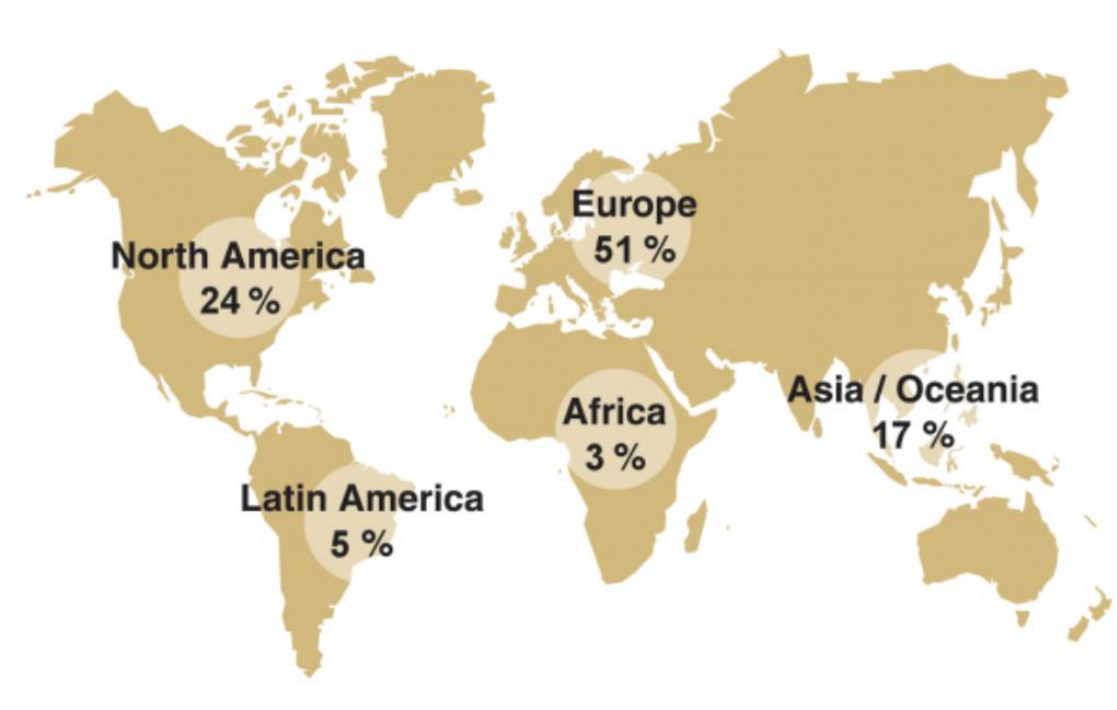
*Legally binding

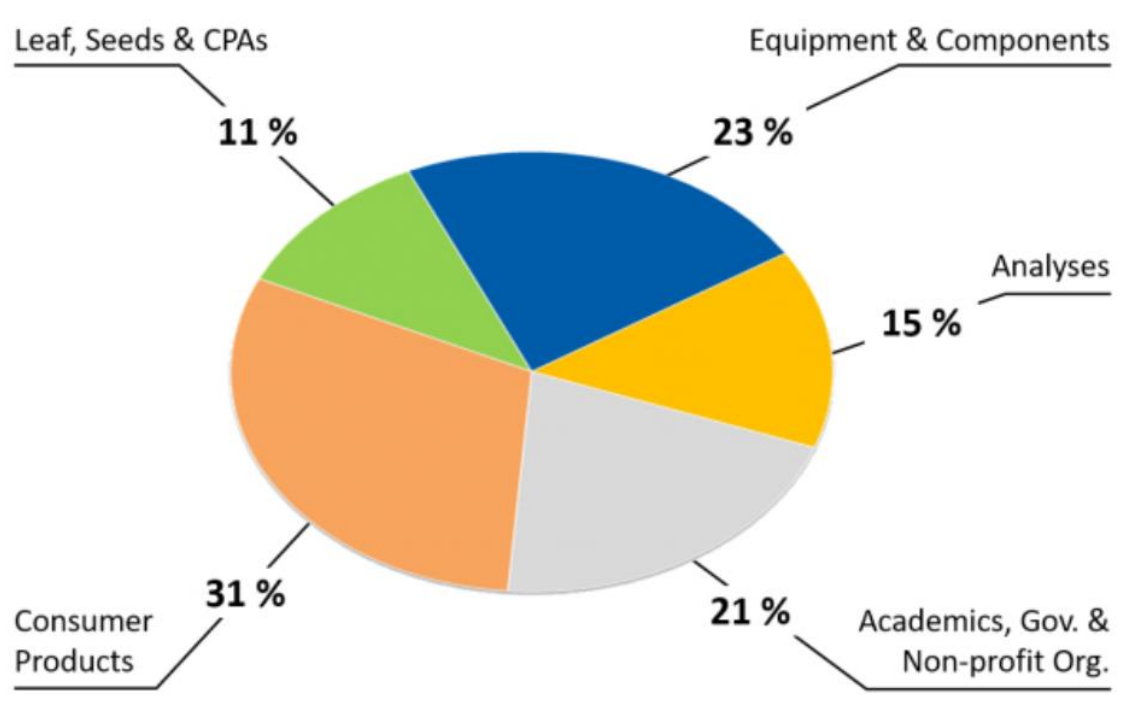
The Vision

> “To be recognised by our members
> and relevant external bodies
> as an authoritative source of publicly available
> credible science and best practices
> related to tobacco and its derived products”

Membership

162 members (September 2019)





>600 participants across 26 Sub-Groups and Task Forces

Governance & Structure

Strategy and Policy:
14 elected/co-opted organisations

Administration
3.5 people

General Secretariat

Board

General Assembly

162 Member organisations

Scientific Commission

Technical Oversight:
20 elected experts

- Workshops & Annual Conferences
- Agronomy & Leaf Integrity
- Phytopathology & Genetics
- Product Technology
- Smoke Science
- Agrochemical Advisory Committee

26 subject or product-specific Working Groups (Sub-Groups or Task Forces)

~ 600 experts

Spectrum of Scientific Cooperation Topics

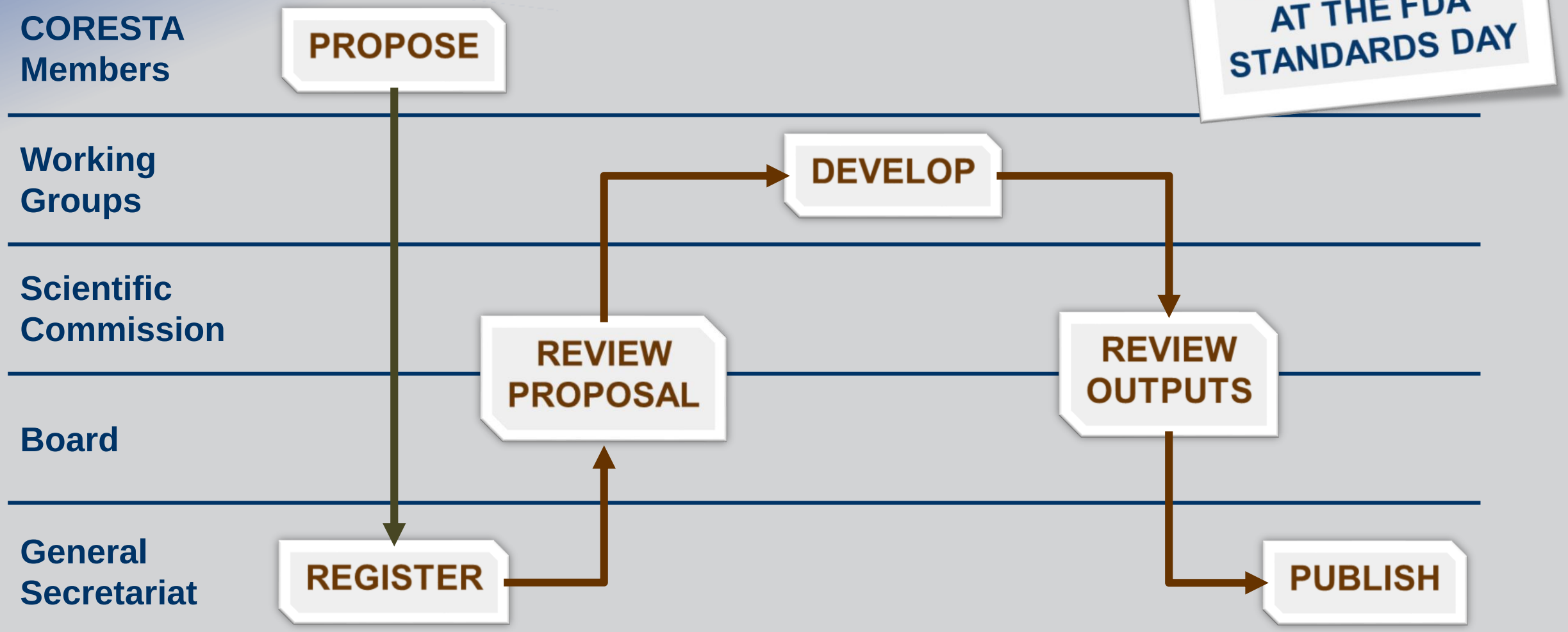
- Integrated Pest Management
- Virus Diseases
- Extended Diagnostic Expert System
- Efficacy of Biological & Eco-Friendly Crop Protection Agents
- Collaborative Study Black Shank
- **Tobacco Alkaloid Genetics**
- **Tobacco Biotechnology and Omics**

- Routine Analytical Chemistry
- Physical Test Methods
- Cigar Smoking Methods
- Tobacco and Tobacco Products Analytes
- E-Vapour
- **Cigarette Variability**
- **Heated Tobacco Products**

- Agrochemicals Analysis
- Pest and Sanitation Management in Stored Tobacco
- Proficiency Testing for Detection of Transgenic Tobacco
- TSNA in Air-cured and Fire-cured Tobacco
- Agrochemical Residue Field Trials
- **Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices**

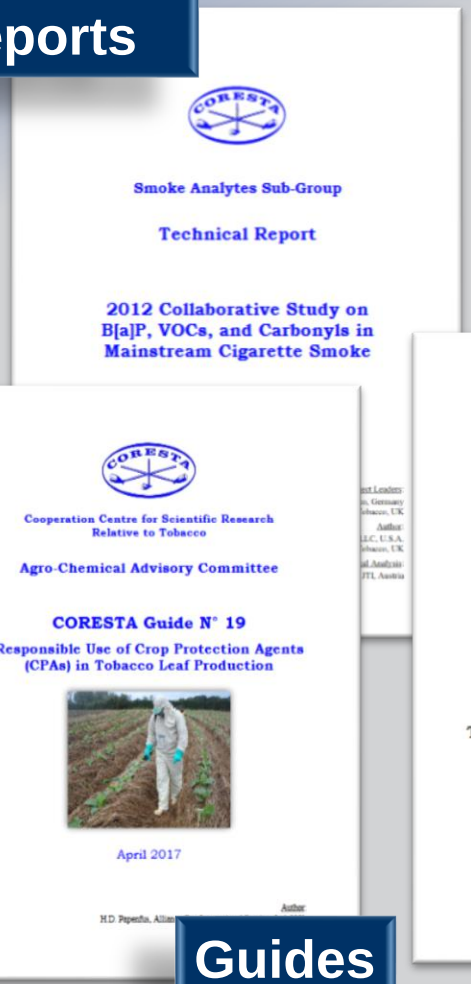
- Product Use Behaviour
- Smoke Analytes
- *In Vitro* Toxicity Testing
- Biomarkers
- **Consumer Reported Outcome Measures Consortium**
- **21st Century Toxicology for Next Generation Tobacco and Nicotine Products**

The Process (Simplified)



Publications

Technical Reports

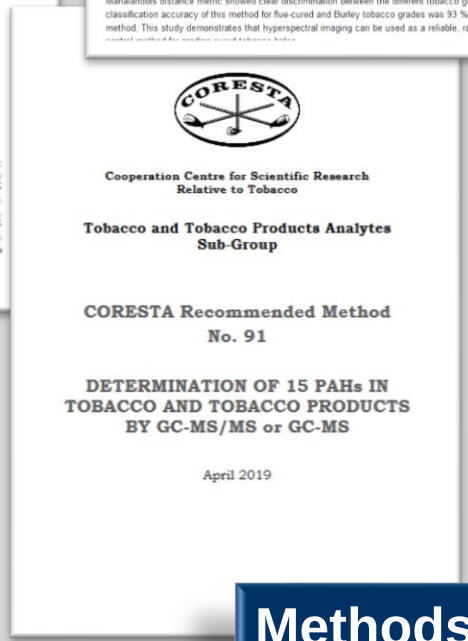


Abstracts & Presentations

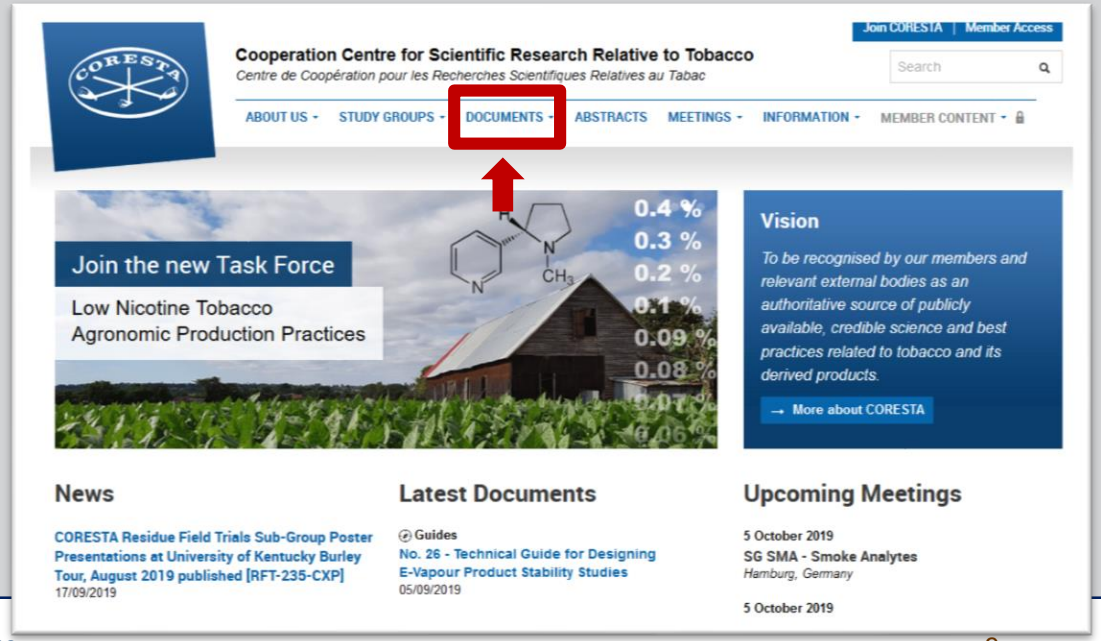
~ 9000 abstracts/presentations

Guides

Methods



www.coresta.org



Agronomy & Leaf Integrity
Phytopathology & Genetics

Lea SCOTT

President of the Scientific Commission

Agronomy and Phytopathology

Agronomy and Leaf Integrity

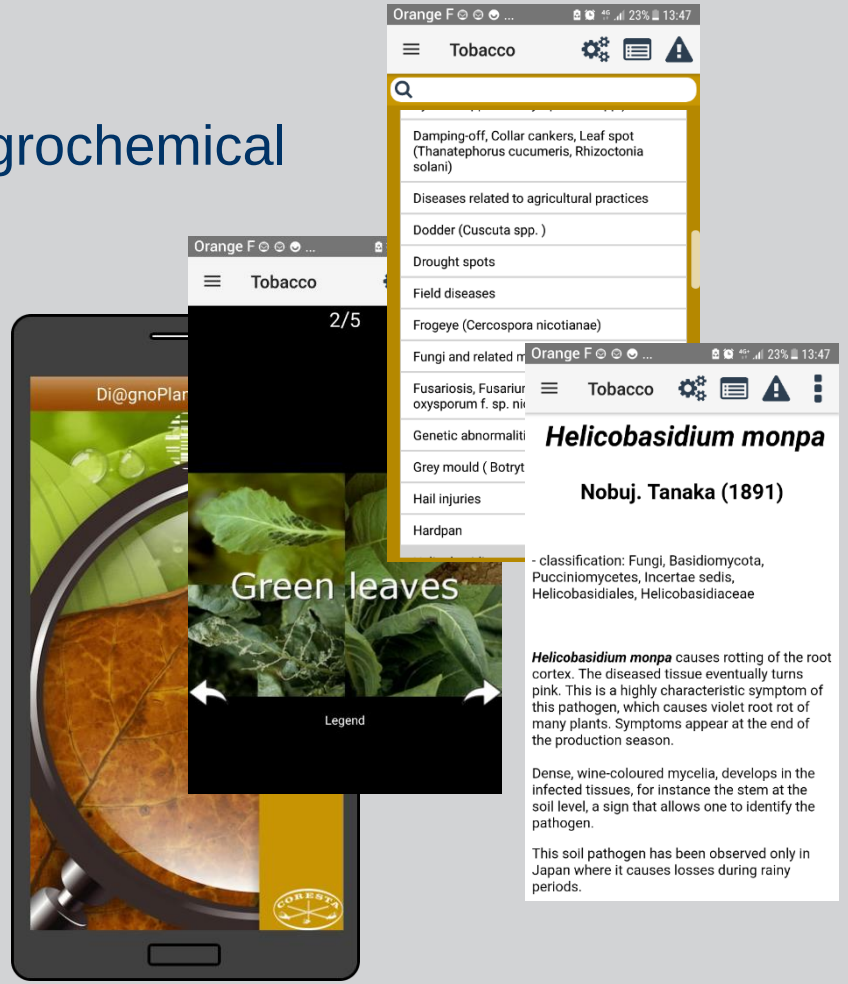
- Scientific study on the production of all tobacco leaf types
- Crop management practices and environmental factors that influence crop production
- Good Agricultural Practices for efficient, sustainable tobacco production and leaf supply
- Guidance on pest & sanitation of stored tobaccos

Phytopathology and Genetics

- Study of tobacco pests and diseases and plant breeding
- Integrated Pest Management (IPM)
- Genetic mapping, molecular markers and genetic diversity

Current activities

- Proficiency testing of multi-residue analytical methods for agrochemical residues and for detection of transgenic tobacco
- Agrochemical residue field trials to support setting/review of Guidance Residue Levels
- Investigation of low nicotine tobacco agronomic practices
- Regular Infestation Control Conferences
- Identification and evaluations of biological control products and methods
- Sharing of tobacco genetic materials for disease resistance
- Defining biotechnology terminology for non-scientists
- Data contribution to Di@gnoplant



Agrochemical Advisory Committee

- **Objectives**
  - To address matters relating to agrochemicals* and topics associated with product stewardship and integrity in tobacco by gathering relevant information and disseminating guidance to stakeholders.
- **Guidance documents**
  - No. 1 - Agrochemical Guidance Residue Levels (GRLs)
  - No. 3 - Good Agricultural Practices (GAP) Guidelines
  - No. 19 - Responsible Use of Crop Protection Agents (CPAs) in Tobacco Leaf Production
  - No. 21 - Best Practices and Crop Protection in Cigar Dark Air-Cured Tobacco
  - No. xx - Technical Aspects of CPA Usage (underway)

** Agrochemicals are those substances used in farming to manage pests or to regulate plant growth. They are also referred to as crop protection agents (CPAs) and plant protection products (PPPs), including biopesticides.*

Smoke Science
Product Technology

Rob STEVENS

Vice-President of the Scientific Commission

Smoke Science and Product Technology

Smoke Science

- Responsible for the scientific study of emissions from, and exposure to, tobacco and related products.
- Development of specific chemical and biological methods and investigation of means to assess exposure and use.

Product Technology

- Concerned with the study of processes and procedures relating to tobacco processing and manufacturing facilities.
- Description of tobacco and tobacco products in terms of physical properties, chemical properties and quality.
- Development of Reference Materials.

Smoke Science and Product Technology

❖ Recommended Methods*, Guides and Reports on tobacco, product and smoke analysis (biological, chemical and physical)

- Since 1956, 93 CORESTA Recommended Methods (CRMs) produced, of which 43 ISO standards based on CRMs
- + 3 CRMs currently in the process of becoming ISO standards
- Regular collaborative studies/proficiency trials to support member labs' accreditation (agrochemicals, TNCO, physical…)
- Protocols for *in vitro* toxicity testing of mainstream smoke

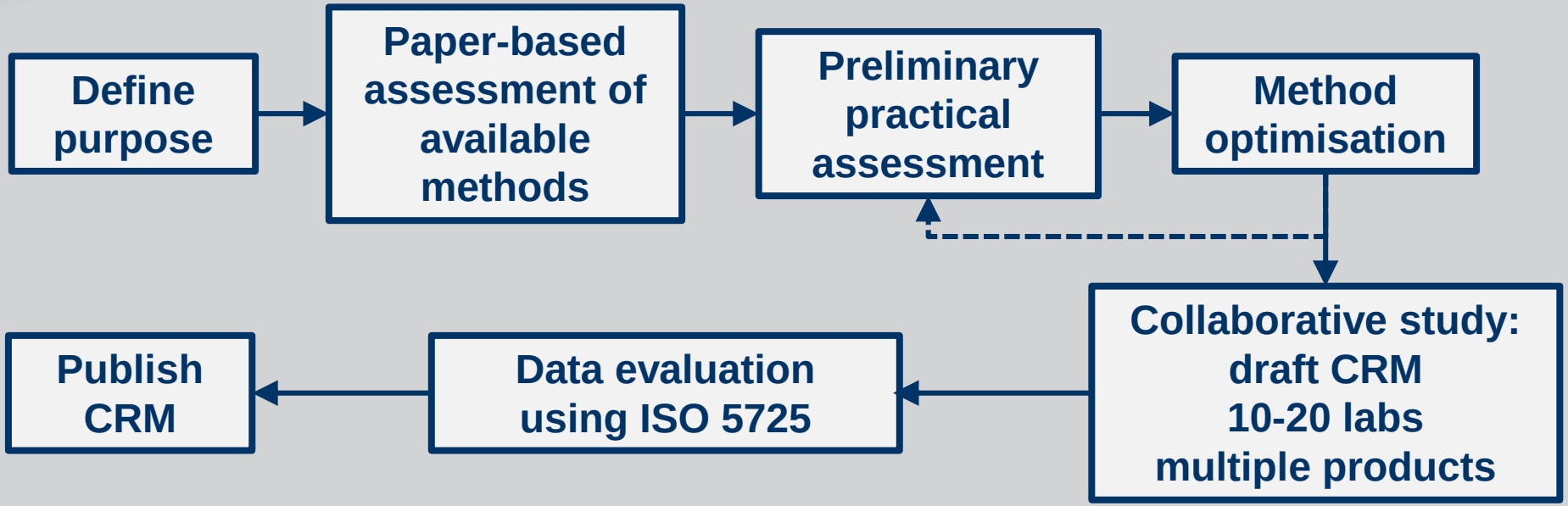
❖ Developed Reference Materials

- 'CORESTA Monitor test piece' for smoking machine set-up
  + 1 for LIP testing
- 4 smokeless tobacco products

71 out of 92 CRMs are currently active, due to obsolescence/replacement of older ones

Development of Recommended Methods

- Consensus-based process



- Discussions during process provide insight into causes/reduction of intra- and inter-laboratory variability
- Methods and Reports are made available on the CORESTA website

Current activities

- Ongoing contribution to ISO TC126 standards development (CORESTA is a Liaison A member)
- Experimental evaluation of commercial cigarette variability over short term (one production week), medium term (production over one year), and long term (production over three years)
- Regular collaborative studies and proficiency tests
- E-cigarette and Heated Tobacco Product working groups
- Analytical methods for cigars
- Working groups on Consumer Reported Outcomes and 21st Century Toxicology (NGPs)

The Strengths of CORESTA

The strengths of CORESTA

- **Transparent and inclusive ways of working**
  - global inter-disciplinary participation
  - non-member expertise welcomed
  - annual meetings open to all interested parties
- **Focus on sharing and advancing scientific knowledge**
- **Proficiency testing activity supports laboratory accreditation**
- **Track record supporting development of International Standards**

Thank you