



Smoke Analysis Sub-Group (SA) Annual Report 2023

CORESTA SSPT Conference

12 October 2023



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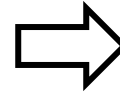
- **Established in 2020 (merging RAC & SMA Sub-Groups)**
- **SA SG new structure**

Two co-coordinators: Hiromoto Yamazaki & Jana Jeffery

Workstreams:

- Reference products – Thomas Schmidt
- Cigarette smoke methods – Rana Tayyarah
- Cigars smoke HPHC methods – Anthony Brown

Liaison: Jana Jeffery



Coordinator: Hiromoto Yamazaki

Secretary: Rana Tayyarah

Workstreams: no change

Liaison: no change

- **SG meetings**
 - **Usually 40-60 participants**
 - **Meetings in 2023: 20th April at Antibes Juan-les-Pins & 8th October in Cancun**
 - **Next meeting: Spring 2024**



SA Sub-group Overview

- **SA objectives**

1. To propose and maintain CORESTA Recommended Methods (CRMs) and related documents for the analysis of smoke constituents from combustible tobacco products other than cigar TNCO.
2. To organise the manufacture of and maintain CORESTA Monitor Test Pieces.



SA Achievements since Q4 2022

Project #	Deliverables		
P295	CRM #104	Determination of Oxides of Nitrogen (NOx) in Mainstream Cigarette Smoke by Chemiluminescence	Published
P162	Contributions to Tobacco Research	Selected Phenolic Compounds in Mainstream Cigarette Smoke, CORESTA Collaborative Study and Recommended Method	Published
P339	TR	2022 Collaborative Study of CORESTA Monitor 9 (CM9) for the Determination of Test Piece Weight, TPM, Water, Nicotine, NFDPM, Carbon Monoxide and Puff Count Obtained under Mainstream 'Non-Intense' and 'Intense' Smoking Regimes	Published



SA Active Projects WS “Reference Products”

- **P340: Collaborative Study of the New CORESTA Monitor Test Piece CM9 & CM10**
 - **Project lead: Thomas Schmidt**
 - **Deliverable: TR**
 - **Status update**
 - Call for participants: February 2023
 - Study performed: May – June 2023 (34 participating laboratories)
 - Reporting and statistical analysis: September 2023
 - Discussion on draft TR: Spring 2024



SA Active Projects WS “Reference Products”

- **CORESTA Monitor Stock Situation (CM9)**
 - 1.411.000 sticks available
- **CORESTA Monitor Production (CM10)**
 - PMI production Q2 2022
 - 5 Mio sticks of CM10 manufactured
- **CORESTA IP Monitor Stock Situation (IP2)**
 - 123.000 sticks available at distributors



SA Active Projects

WS “Cigarette Smoke Methods”

- **Project 294 – PAHs in mainstream cigarette smoke: Part 2**
 - Project lead: Rana Tayyarah
 - Deliverable: TR, CRM & Publication
 - Status update: TR for study 1 published
 - Next step: Launch Study 2, small study for method refinement ahead of Study 3 (collaborative study)

- **Project 295 - NO/NOx in mainstream cigarette smoke CRM**
 - Project lead: Thomas Schmidt
 - Deliverable: TR, CRM & Publication
 - Status update: TR & CRM #104 published



SA Active Projects

WS “Cigarette Smoke Methods”

- **Project 296 – HCN in mainstream cigarette smoke: Part 2**
 - Project lead: Xingyu Liu
 - Deliverable: TR, CRM & Publication
 - Status update: Collaborative study completed
 - Next step: Review of TR on collaborative study and submit CRM
- **Project 341 – Collaborative Study for the Determination of Very Low Nicotine (VLN) in Mainstream Smoke**
 - Project lead: Hiromoto Yamazaki
 - Deliverable: TR for Updating ISO 10315 to include VLN
 - Status update: Test VLN tobacco grown by the University of Kentucky supplied
 - Next step: Call for volunteer of making and packing cigarette samples



SA Active Projects

WS “Cigars smoke HPHC methods”

- **P373 – Collaborative Study for the Determination of Benzo[a]pyrene in Mainstream Cigar Smoke**
 - **Project lead: Anthony Brown**
 - **Deliverable: TR for expanding scope of CRM #58 to include Cigars**
 - **Status update**
 - Call for participants: July 2023
 - Study performed: August – November 2023
 - Discussion on results: Spring 2023



SA New Projects

Workstream	New project
Cigarette smoke methods	P374 – Collaborative Study of Four Metals in Cigarette Mainstream Smoke with ISO Smoking Regimes



SA New Projects

WS “Cigarette smoke methods”

- **P374 – Collaborative Study of Four Metals in Cigarette Mainstream Smoke with ISO Smoking Regimes**
 - **Project lead: Kentaro Eguchi**
 - **Deliverable: TR of Metals in smoke (supporting ISO)**
 - Four metals: Lead (Pb), Cadmium (Cd), Arsenic (As) and Mercury (Hg)
 - **Status update**
 - Familiarization step: October 2023 – April 2024
 - Study protocol and sample distribution: January – April 2024
 - Study performed: May – July 2024
 - Statistical analysis: August – September 2024
 - Review by Sub-Group: Oct 2024
 - Submission to SC: May 2025



Acknowledgements

- To all laboratories participating in SA projects
- To all participants of SA meetings, contributions and engagement



Thank you for your attention