



# **Smoke Analysis Sub Group (SA) Annual Report 2022**

**Virtual CORESTA Congress**

**10 October – 28 October 2022**



- ❖ **Smoke Analysis SG (SA) overview**
- ❖ **Achievements 2021-2022**
- ❖ **Active projects**
- ❖ **CORESTA Strategy House**



# SA Sub-Group Overview

- ❖ **Created in 2020 by merging Routine Analytical Chemistry (RAC) and Smoke Analytes (SMA) Sub-Groups**
- ❖ **SA SG Structure**
  - Co-Coordinator: Hiromoto Yamazaki and Jana Jeffery
  - Workstreams and leads:
    - Reference Products – Thomas Schmidt
    - Cigarette smoke methods – Rana Tayyarah
    - Cigar smoke HPHC methods – Anthony Brown
- ❖ **SG meetings**
  - Usually 40-60 participants
  - Last meeting virtual 10th May, approx. 55 participants
  - Next meeting virtual, November 2022



# 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 2021

Project #	Deliverables		
P198	CRM #75	Determination of Tobacco Specific Nitrosamines in Mainstream Smoke by LC-MS/MS	Revised
P198	TR	2019 Collaborative Study for B[a]P and TSNA Compounds in Mainstream Cigar Smoke	Published
P244	TR	2019 Initial Collaborative Study for the Determination of Very Low Nicotine in Total Particulate Matter from the Mainstream Smoke	Published
P294	TR	2021 Study for Select PAH in Mainstream Cigarette Smoke	Published
P295	TR	2021 Study for NOx in Mainstream Cigarette Smoke	Published
P296	TR	2021 Study for HCN in Mainstream Cigarette Smoke	Published
P305	TR	CORESTA Monitor Test Piece CM-IP2 Collaborative Study 2021	Published
P306	TR	CORESTA Monitor Test Piece CM9 collaborative study 2021	Published



# SA Active Projects

## WS “Reference Products”

### ❖ P339: CM9 TNCO Collaborative Study 2022

- Project lead: Thomas Schmidt
- 33 participating laboratories
- Status update
  - Call for participants: May 2022
  - Study performed: June – July 2022
  - Reporting and statistical analysis: September 2022
  - Completion: December 2022



# SA Reference Products Update in May 2022

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



# SA Active Projects

## WS “Cigarette Smoke Methods”

### ❖ Project 294 – PAHs in mainstream cigarette smoke: Part 2

- Project lead: Rana Tayyarah
- Objective: Collaborative Study with a selected method used by all participants, using Reference/Monitor Cigarettes and both smoking regimes (ISO and intense)





# SA Active Projects

## WS “Cigarette Smoke Methods”

- ❖ **Project 295 - NO/NO<sub>x</sub> in mainstream cigarette smoke CRM**
  - **Project lead: Thomas Schmidt**
  - **Objective: Publish CRM**
  
- ❖ **Project 296 – HCN in mainstream cigarette smoke: Part 2**
  - **Project lead: Jun Zhou**
  - **Objective: Evaluation of refined sample preparation details**



# SA Sub-group Future studies

Workstream	New project	Leads
Reference Products	P340 – 2022 Collaborative Study of the New CORESTA Monitor Test Piece CM10	Project lead: Thomas Schmidt Lead statistician: Mike Morton
Cigarette smoke methods	P341 – VLN collaborative study: TNCO analysis under ISO and intense smoking regimes	Project lead: Hiromoto Yamazaki Lead statistician: Mike Morton

❖ **Estimated timings for both studies: 2022-2023**



# CORESTA Strategy House

- ❖ Review of SA SG projects
- ❖ Update of 2-year and 5-year plans
- ❖ Scheduled for November 2022 SA SG meeting



# Acknowledgements

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



# Thank you for your attention