



# **Smoke Analysis Sub-Group (SA) Annual Report 2021**

**Virtual CORESTA SSPT Conference**

**18 October – 28 October 2021**



- ❖ **Smoke Analysis SG (SA) overview**
- ❖ **Achievements 2020-2021**
- ❖ **Active projects**
- ❖ **CORESTA Strategy House – way forward**
- ❖ **AOB**



# 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**
  - Generally, 40-60 participants
  - Last meeting virtual 11<sup>th</sup> May, 50 participants
  - Next meeting virtual, 17<sup>th</sup> and 19<sup>th</sup> November 2021



# 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 2020

Project #	Deliverables		
P48	CRM #95	Determination of Aromatic Amines in Mainstream Cigarette Smoke by Gas Chromatography Mass Spectrometry with Negative Chemical Ionisation (GC/MS(NCI))	Published
P237	CRM #97	Determination of Menthol in Mainstream Cigarette Smoke with an Intense Smoking Regime by Gas Chromatography	Published
P229	Guide #8	CORESTA Monitor Test Piece Production and Evaluation Requirements	Revised
	TR	Influence of Standard Deviations for CORESTA Monitor Test Piece Weight on Tar, Nicotine, and Carbon Monoxide Yields”	Published
P270	TR	2020 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
P223	TR	2020 Collaborative Study on Benzo[a]pyrene in Mainstream Cigarette Smoke	Published



# SA Active Projects

## WS “Reference Products”

### ❖ P306: CM9 TNCO Collaborative Study 2021

- Project lead: Thomas Schmidt
- Study completed
- TR in progress

### ❖ P305: Study of CORESTA Ignition Propensity Monitor Test Piece CM IP 2

- Project lead: Thomas Schmidt
- Study completed
- TR in progress



# SA Reference Products Update in May 2021

- ❖ **CORESTA Monitor Stock Situation (CM9)**
  - **3.830.000 sticks available**
- ❖ **CORESTA Monitor Production (CM10)**
  - **Status update - PMI will conduct prototype testing in 2021 and produce first half year 2022**
- ❖ **CORESTA IP Monitor Stock Situation (IP2)**
  - **204.200 sticks available at distributors**



# SA Active Projects

## WS “Cigarette Smoke Methods”

- ❖ **P244: Initial Study for the Determination of Very Low Nicotine (VLN) in Smoke Condensates**
  - **Project lead: Anthony Brown**
  - **TR in progress**





# SA Active Projects

## WS “Cigarette Smoke Methods”

- ❖ **P294: Determination of PAH in Cigarette Mainstream Smoke**
- ❖ **P295: Determination of NOX in Cigarette Mainstream Smoke**
- ❖ **P296: Determination of HCN in Cigarette Mainstream Smoke**
  - **Project lead: Rana Tayyarah (294), pending for 295/296**
  - **Study 1 completed**
  - **TR in progress**
  - **Decision for launch Study 2**



# SA Active Projects

## WS “Cigar Smoke HPHC Methods”

- ❖ **P198: Collaborative Study Cigar Smoke HPHCs – B[a]P and TSNAs**
  - **Project lead: Rana Tayyarah**
  - **Study completed**
  - **TR in progress (Q4 2021)**
  - **Next steps – confirm interest and approach for CRMs update**



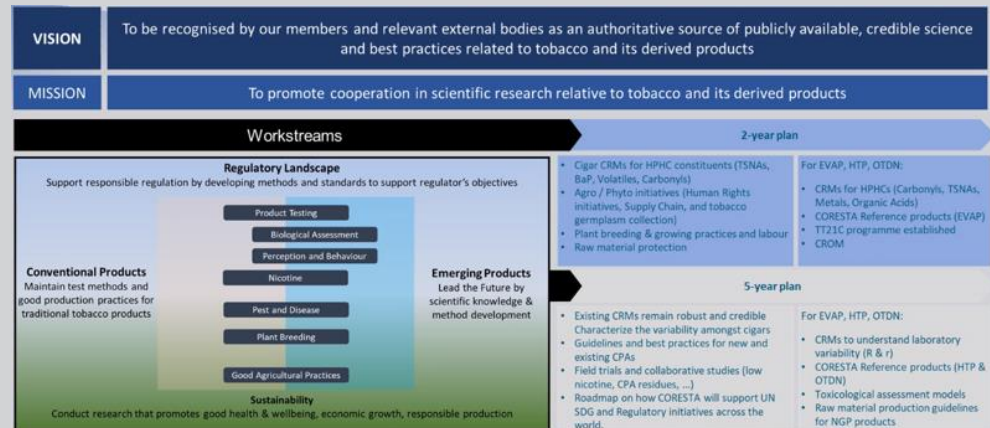
- ❖ **P313: Survey on Cigarette Ignition Propensity Testing Protocol**
  - **Project lead: Hiromoto Yamazaki**
  - **Survey by Official Delegates completed**
  - **Draft presentation created**
  - **Next step - Presentation at the ISO/TC 92/SC 1/JWG 15 meeting**



# SA Sub-Group Future studies

Workstream	Potential future project
Reference Products	NWIP for CM10
Cigarette smoke methods	P244 – VLN – follow up on product availability - <u>decision</u> on next steps Semi-volatiles – small scale feasibility – <u>decision</u> if the study goes ahead (NWIP)
Cigar smoke HPHC methods	Characterisation of UKy cigar smoke HPHC

- ❖ Review of SA SG projects
- ❖ Update 2-year and 5-year plans
- ❖ Scheduled for November 2021 SA meeting





# Acknowledgements

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



# Thank you for your attention

*From Yama, Rana, Thomas, Anthony and Jana*