



Heated Tobacco Products (HTP) Task Force: CORESTA Update

- **Coordinator: Helena Digard**
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- **Secretary: Jason Flora**
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HTP – SSPT2021 Virtual Conference – Oct 2021



HTP Task Force History

- ❖ **October 2018 (Kunming, China) CORESTA Congress discussion and engaged interest in the potential for a HTP Task Force**
- ❖ **March 2019 (Paris, France): HTP Workshop confirmed the need for a HTP Task Force and developed objectives**
- ❖ **June 2019 (London, England): Inaugural HTP TF meeting**
- ❖ **October 2019 (Hamburg, Germany): 2nd HTP TF meeting**
- ❖ **April 2020 (Virtual): 3rd HTP TF meeting**
- ❖ **October 2020 (Virtual): 4th HTP TF meeting**
- ❖ **February 2021 (Virtual): 5th HTP TF meeting**
- ❖ **October 2021 (Virtual): 6th HTP TF meeting**



Objectives

- 1. Establish standardized terminology and definitions that encompass all categories of Heated Tobacco Products.**
- 2. Define one or more specific approaches and regimes for the generation and collection of emissions for Heated Tobacco Products.**
- 3. Define and agree on priority compounds to be analysed (or not); review current CRM suitability, edit, or develop methods for Heated Tobacco Products.**



Work in Progress: Building 5 year plan

❖ At this stage discussion topics:

- **Main focus: Targeted analytes in emissions**
 - Extending and prioritising current targeted analytes list
 - ◆ Tobacco specific
 - ◆ HTP specific
- **Non-targeted analysis**
 - Highly specialised
 - Complex and multiple approaches
 - Potential to develop “Best Practices”
- **HTP sub-category reference products**

➤ **Potential specific tobacco related toxicants:**

- Nicotine (potentially other alkaloids and form (whether this should consider: aerosol pH?))
- CO, NO, NO_x
- PAHs (Benzo[a]pyrene)
- Carbonyls
- TSNA_s
- Volatiles
- Ammonia
- Carbon Black
- Other constituents: pyridine, dimethyl trisulfide, acetoin, methylglyoxal
- Metals (raised in other sections)



Objective 1:
Establish standardized terminology and definitions that encompass all categories of Heated Tobacco Products.

Workstream Lead: **Jason Flora**

❖ Heated Tobacco Product (HTP)

- A product containing a tobacco substrate that is designed to be heated and not combusted by a separate source (e.g., electrical, aerosol, carbon, etc.) to produce a nicotine containing aerosol.



Sub-Categories

- ❖ **Electrically Heated Tobacco Product (eHTP)**
- ❖ **Aerosol Heated Tobacco Product (aHTP) – also known as a hybrid**
- ❖ **Carbon Heated Tobacco Product (cHTP)**
- ❖ **Other: Sub-categories that may heat tobacco but are currently out of scope:**
 - **Waterpipe Heated Tobacco Product (wpHTP)- Shisha/Hookah**
 - **Loose-leaf heating tobacco products (e.g. PAX)**

HTP-259-CTR_Std-Terminology-Recommendations-HTP-Emissions_July2020



Objective 2:

Define one or more specific approaches and regimes for the generation and collection of emissions for Heated Tobacco Products.

Workstream Lead: **Jason Flora**



Technical Report key points

Summarised in Technical Report: Heated Tobacco Products (HTPs): Standardized Terminology and Recommendations for the Generation and Collection of Emissions

HTP-259-CTR_Std-Terminology-Recommendations-HTP-Emissions_July2020

Conditioning and Laboratory Conditions:

- eHTP and aHTP consumables should be temperature equilibrated in sealed packs.
- cHTPs should be temperature and humidity conditioned (ISO 3402).
- Testing environment according to ISO 3402.

Puffing Regimes: Aerosol generation regimes based on

- aHTP: ISO 20768 – 55/3/30
- eHTP and cHTP: ISO 20778 – 55/2/30

- ❖ **Draft CRMs developed and ready for TF review.**
- ❖ **Proficiency study for basic analytes will use standardised approach for sample conditioning, testing environment, aerosol generation and collection**
 - **2 eHTP variants**
 - **1 aHTP variant**
 - **1 cHTP variant**
- ❖ **~ 16 laboratories participating**
- ❖ **Data for ACM yields may be used to validate CRMs**



Objective 3:

Define and agree on priority compounds to be analysed (or not); review current CRM suitability, edit, or develop methods for Heated Tobacco Products.



Proficiency Study: Basic Analytes, CO, NO and NOx

❖ Analytes:

- Glycerol, propylene glycol, nicotine, CO, NO, NOx and
- ACM (DML for aHTP)

❖ Study Coordinators: Takatsugu Hyodo & Taryn Winner

- **Protocol Author:** Maxim Belushkin
- **Statisticians:** Hsiao-Pin Liu & Jesse Thissen

❖ Four products:

- eHTP - Philip Morris and British American Tobacco
- aHTP - Japan Tobacco
- cHTP - RJ Reynolds Tobacco

❖ 16 laboratories participated

**WORK IN
PROGRESS**
Stats analysis in
progress
Report due end
2021



- ❖ **Conduct a collaborative study to determine if CRM N°88, *Determination of Water Activity of Tobacco and Tobacco Products* is fit for use for HTP consumables.**
- ❖ **Study Leads: Hannah Grisevich and Irfan Gunduz**
- ❖ **Protocol to be drafted Hannah Grisevich and Irfan Gunduz**
- ❖ **9 laboratories shared interest in participating**
- ❖ **Conduct study in parallel with carbonyls study**
 - **Same products to be distributed for both studies**

- ❖ **To conduct a study to determine the carbonyls method and develop a CRM.**
- ❖ **Study Lead: Cyril Jeannet**
- ❖ **Working group of 14 HTP TF members formed**
- ❖ **Focus: 8 carbonyls on HC list**
- ❖ **Proposed method drafted**
- ❖ **Small ring-trial to be organised**



Key Activities and Next Steps

- ❖ **Basic analytes and CO, NO, NO_x: Study in progress**
- ❖ **Puffing regime CRMs drafted, finalization pending study results**
- ❖ **Studies for Water Activity and Carbonyls – under development**
- ❖ **HTP TF 5 year plan:**
 - **Focus: targeted analytes methods**
 - **Areas for further discussion identified (e.g. reference products)**
- ❖ **Alignment with ISO technical advisory committee - ISO/TC 126/WG 22, tobacco heating systems.**



Thank-you to HTP TF members for your continued support

If you have any questions,

Or

**If you are interested in participating in HTP TF activities please
contact:**

- Helena Digard and Jason Flora**