



Priority Action Report

Materials (Trace)

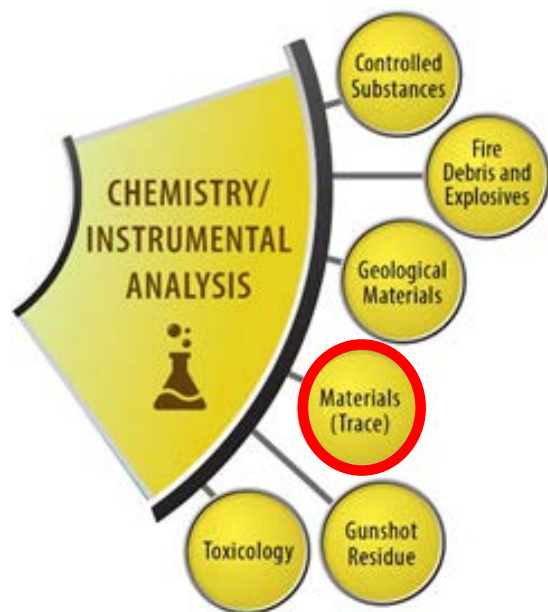
Chemistry/Instrumental Analysis

Susan Gross, Chair

February 14, 2017



Materials (Trace)



The subcommittee on Materials (Trace) will focus on standards and guidelines related to examination and interpretation of physical evidence that may result from the transfer of small or minute quantities of materials (e.g., hairs, fibers, paint, tape, glass).



Subcommittee Leadership

Position	Name	Organization	Term	Email
Chair	Susan Gross	Minnesota BCA	3	sue.t.gross@state.mn.us
Vice Chair	Diana Wright	FBI Laboratory	4	diana.wright@ic.fbi.gov
Executive Secretary	Cheryl Lozen	Michigan State Police	2(3)	lozenc@michigan.gov



Subcommittee Members



#	Name	Organization	Term	Email
1	Jodi Blakely Webb	FBI Laboratory	4	jodi.webb@ic.fbi.gov
2	David A. Green	Lake County (Ohio) Crime Lab	3	david.green@lakecountyohio.gov
3	Andria Hobbs Mehlretter	FBI Laboratory	4	andria.mehlretter@ic.fbi.gov
4	Tammy Jergovich	Georgia Bureau of Investigation	2 (3)	tammy.jergovich@gbi.ga.gov
5	Sandy Koch	Penn State University	3	slk336.psu.edu
6	Christopher S. Palenik	Microtrace LLC (Illinois)	4	cpalenik@microtracellc.com
7	Sandy Parent	TX Dept of Public Safety Crime Lab	3	sandy.parent@dps.texas.gov
8	Chip Pollock	Sacramento County (California) District Attorney's Office Laboratory	3	pollockc@sacda.org
9	Jennifer L. Remy	North Carolina State Crime Laboratory	3	jremy@ncdoj.gov
10	Chantelle Taylor	Arkansas State Crime Laboratory	2 (3)	chantelle.taylor@crimelab.arkansas.gov
11	Tatiana Trejos	Florida International University	4	trejost@fiu.edu
12	Robyn Weimer	Virginia Dept of Forensic Science	3	robyn.weimer@dfs.va.gov



Subcommittee Members continued



#	Name	Organization	Term	Email
13	Kathy Boone	Indiana State Police Laboratory	2	kboone@isp.in.gov
14	Lara Mosenthin	Kentucky State Police	2	lara.mosenthin@ky.gov
15	Amanda Forster	National Institute of Standards and Technology	4(2)	amanda.forster@nist.gov
16	Randall Nelson	Tennessee Bureau of Investigation Crime Laboratory	3	randall.nelson@tn.gov
17	John Reffner	John Jay College, CUNY	3	jreffner@jjay.cuny.edu
18	Candie Shegogue	FBI Laboratory	3(1)	candie.shegogue@ic.fbi.gov
19	Cedric Neumann	South Dakota State University	3	cedric.neumann@sdstate.edu
20	David Northrop	Washington State Patrol Crime Laboratory	3	david.northrop@wsp.wa.gov
21	Celeste Grover	Oregon State Police –Forensic Sciences Division	3	celeste.grover@state.or.us
22	Jerome Workman	Unity Scientific, MA and National University, CA USA	4	JWorkman@unityscientific.com



Materials (Trace) Subcommittee





Subcommittee Liaisons

Position	Name
QIC Liaison	David Green
HFC Liaison	Andria Mehlretter
LRC Liaison	John Reffner
KAVI Liaison	Chantelle Taylor





Task Group Chairs

Task Group	Name
Interpretations	Andria Mehlretter
Outreach and Strategic Plan	Sandy Parent
Fibers	Jen Remy
Glass	Jodi Webb
Hairs	Sandy Koch
Paint	Diana Wright
Tape	Tammy Jergovich
Research	Tatiana Trejos
Terminology	Amanda Forster



Affiliates



#	Name	Organization
1	Mark Ahonen	Indiana State Police
2	Jason Beckert	MicroTrace
3	Richard Bisbing	Retired (McCrone)
4	Julie Bitter	NIST
5	Maureen Bottrell	FBI
6	Andrew Bowen	US Postal Inspection Service
7	Muriel Correa	Oklahoma State B of I
8	Jeff Dake	Defense Forensic Science Center
9	Gavin Edmonstone	Centre of Forensic Sciences
10	Mary Eng	NY City Police Department
11	David Flohr	Defense Forensic Science Center
12	Josh Friedman	FBI
13	Dana Greely	Hamilton Cty Coroners Office
14	Katie Igowsky	MN BCA
15	Alan Kainuma	Honolulu Police Department
16	Doug Klapec	ATF

#	Name	Organization
17	Daniel Mabel	Cuyahoga Cty Medical Examiners Office
18	Jennifer Malone	Wyoming State Lab
19	Paul Martin	CRAIC Technologies
20	Mike Martinez	Bexar Cty Criminal Investigation Laboratory
21	Michelle Mercer	Monroe Cty Crime Lab
22	Amy Michaud	ATF
23	Cyril Muehlethaler	University of Quebec
24	Christine Pinto	Los Angeles County Sheriff's Department
25	Will Randle	Missouri State Hiway Patrol
26	Mark Sandercock	Royal Canadian Mounted Police
27	William Schneck	Washington State Patrol
28	Stephen Stone	Washington State Patrol
29	Mike Trimpe	Hamilton Cty Coroner's Office
30	Peter Weis	Federal Criminal Police Office, Germany



Summary of Priority Projects



Priority	Working Title of Document
High	Standard Practice for Interpretation and Report Writing in Forensic Comparisons of Trace Materials
High	OUTREACH Strategic Plan for Materials (Trace)
High	PCAST Response regarding Hair Examinations
High	E2330 Standard Test Method ICP-MS for glass E2926 Standard Test Method XRF for glass E2927 Standard Test Method LA-ICP-MS for glass E1967 Standard Test Method for the Automated Determination of RI of Glass Samples E3085 Standard Guide for using Infrared Spectroscopy in Tape Examinations E1610 Standard Guide for Forensic Paint Analysis and Comparison E2937 Standard Guide for using Infrared Spectroscopy in Forensic Paint Examinations Standard Practice for Forensic Human Hair Examination Training E2228 Standard Guide for Microscopic Examination of Textile Fibers E2224 Standard Guide for Forensic Analysis of Fibers by IR Spectroscopy E2225 Standard Guide for Forensic Examination of Fabrics and Cordage Tape training document E2808 Standard Guideline for using MSP for forensic paint examinations E2809 Standard Guideline for Using SEM/EDS in Forensic Paint Examinations Forensic Human Hair Examination Guidelines Paint training document Tape general guide



Topic 1: Trace Evidence Interpretation Document



Document Title: Standard Practice for Interpretation and Report Writing in Forensic Comparisons of Trace Materials

Scope: Document describes the information that must be included in trace evidence written reports for interpretation of the overall results of comparative examinations.

Objective/rationale: to provide recommendations and requirements to the trace evidence community regarding how to interpret and describe the significance of the overall results of a comparative examination.

Task Group Name: Trace Evidence Interpretation

Task Group Chair Name: Andria Mehlretter

Task Group Chair Contact Information:

andria.mehlretter@ic.fbi.gov

Date of Last Task Group Meeting: February 2, 2017



Priority 1: Interpretation Document



Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
Send out entire document to subcommittee, SAC and RC for comment		Andria Mehlretter/ Cheryl Lozen	March 7, 2017
Task group discuss comments and edit document		Entire task group	April 18 – 21, 2017
Send document out for vote in subcommittee to go to ASTM		Andria Mehlretter / Cheryl Lozen	May 15, 2017
Send document out to vote in SAC to go to ASTM		Susan Gross / Cheryl Lozen	July 2, 2017
Send document to ASTM			





Topic 2: Trace Evidence Strategic Plan and Outreach Initiative

- Identify the perception, reality and needs of the Trace Evidence (TE) community, which will determine our strategic planning goals.
- Determine opportunities to promote TE by communicating its significance to ensure preservation of the field and ultimately move TE forward.
- Create educational material to be distributed to various levels of the community (e.g., crime scene analysts, law enforcement agencies, labs (without trace), court systems, etc.).

Task Group Name: Trace Outreach

Task Group Chair Name: Sandy Parent

Task Group Chair Contact Information:

sandy.parent@dps.texas.gov

Date of last Task Group Meeting: Email discussions



Priority 2: Outreach task group

- Primary focus is to create educational material regarding trace evidence from the crime scene to the court room and continuously promote trace evidence.

Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
Finish revision of Crime Scene Field Guide and send to subcommittee for review		Sandy Parent	February 2017
Publish guide and make available to Crime Scene Personnel			



Priority 2: Strategic Plan task group

- Identify the perception, reality and needs of the community which will determine our strategic planning goals, which will be highlighted in our Strategic Action Plan. This task group will continue to identify opportunities to enhance TE by communicating the significance of what we do to ensure the preservation of our field and ultimately move TE forward.

Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
Review Attorney Survey		Robyn Weimer	April 1, 2017
Determine which survey results should be included in strategic plan		Entire task group	April 18 – 21, 2017
Write strategic plan for Trace		All	December 2017



Topic 3: Fiber Documents

Document Titles:

E2224 Standard Guide for Forensic Analysis of Fibers by IR

E2225 Standard Guide for Analysis of Fabrics/Cordage

E2228 Standard Guide for Micro Exam of Textile Fibers

Fiber training

Scope: Standard guides for different fiber techniques

Task Group Name: Fibers

Task Group Chair Name: Jen Remy

Task Group Chair Contact Information: jremy@ncdoj.gov

Date of last Task Group Meeting: February 10, 2017



Priority 3: Fiber Documents



Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
E2224 (IR of fibers) - being revised with comments received from public comments of E2937 Paint IR and ASTM comments for Tape IR.		Lara Mosenthein	January 31, 2017
E2228 (Micro exams of textiles) - Sent to ASTM		Jen Remy	Balloting at ASTM
E2225 (fabrics/cordage) - Passed subcommittee with comments. Revise and revote prior to ASTM.		Jen Remy	(In-person meeting April 2017)
Fiber training guide	SDO-300	Jen Remy	



Topic 4: Hair Documents

Document Titles: Hair training document

Human hair examination document

Scope: Provide standard for training in human hair comparisons as well as a guideline for the examination of human hair comparisons

Task Group Name: Hair

Task Group Chair Name: Sandy Koch

Task Group Chair Contact Information: slk336.psu.edu

Date of last task group meeting: February 1, 2017

Topic 4: Hair Documents

Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
PCAST Response to additional literature written and posted			December 14, 2016
Hair training document sent to ASTM	SDO -700	Jen Remy	Ballot closed Jan 16
Hair examination document out for comment to Sub, SAC, RC	SDO-300	Sandy Koch	Comments due Feb 1
Edit Hair examination document		Entire task group	In-person meeting (April 2017)



Topic 5: Glass Documents

Document Title: E1967 Standard Method for RI

E2927 Standard Method for LA-ICP-MS of glass

E2330 Standard Method for ICP-MS of glass

E2926 Standard Method for XRF of glass

Scope: Standard test methods for different types of glass analysis

Issues/Concerns: Updated document with comments from subcommittee, SAC, RC, FSSB and NIST

Task Group Name: Glass

Task Group Chair Name: Jodi Webb

Task Group Chair Contact Information:

jodi.webb@ic.fbi.gov

Date of Last Task Group Meeting: Meeting via email



Priority 5: Glass Documents



Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
E1967 submitted to ASTM	RA-375	Tatiana Trejos	Editing after ASTM comments
E2927 Passed ASTM. Subcommittee/ SAC vote for OSAC Registry	RA-375	Jose Almirall	March 2017
E2330 at ASTM with edits	RA-1600	Randall Nelson	Ballot closed Jan 16
E2926 Passed ASTM. Subcommittee /SAC vote for OSAC Registry	RA-1600	Tatiana Trejos	March 2017
Glass training guide being written	SDO-300	Jodi Webb	



Topic 6: Paint and Tape Documents (1)

Document Title:

E1610 Standard Guide for Forensic Paint Analysis and Comparison
E2937 Standard Guide for Using IR in Forensic Paint Examinations
E2809 Standard Guide for SEM for Forensic Paint Analysis
E2808 Standard Guide for MSP for Forensic Paint Analysis
Standard Guide for IR for Forensic Tape Analysis

Scope: Standard guides for different paint and tape techniques

Task Group Name: Paint/Tape

Task Group Chair Name: Diana Wright

Task Group Chair Contact Information:

diana.wright@ic.fbi.gov

Date of last task group meeting: January 24, 2017



Priority : Paint and Tape Documents



Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
Send E1610 to ASTM after SAC vote		Diana Wright	January 31, 2017
Send E2937 to ASTM after SAC vote		Diana Wright	January 31, 2017
E3085 IR of Tape. Passed ASTM. Subcommittee/SAC vote for OSAC Registry	SDO 700	Diana Wright	March 2017
E2809 SEM of Paint – subcommittee revising		Diana Wright	In-person meeting (April 2017)
E2808 (MSP of paint) – task group editing		Robyn Weimer	In-person meeting (April 2017)



Topic 6: Paint and Tape Documents (2)

Document Title: (SDO-09) Standard guide for tape training
Standard guide for paint training
Standard guide for forensic tape analysis

Scope: Standard practice for training in paint and tape
Standard guide for forensic tape analysis

Task Group Name: Paint/Tape (2)

Task Group Chair Name: Tammy Jergovich

Task Group Chair Contact Information:

tammy.jergovich@gbi.ga.gov

Date of last task group meeting: February 1, 2017



Priority : Paint and Tape Documents



Task Group/Subcommittee Action Plan

Planned Actions	OSAC Process Stage (e.g., SDO 100)	Assignee	Estimated Completion Date
Submit tape training document to SAC for ASTM approval		Chantelle Taylor/ Susan Gross	February 15, 2017
Paint training document out for comment to subcommittee, SAC, RC		Tammy Jergovich / Cheryl Lozen	February 28, 2017
Submit Tape Training document to ASTM		TBD	March 1, 2017
Write tape general guide document		Tammy Jergovich	In-person meeting (April 2017)



Research & Development Needs Identified

- Development of an Integrated and Multidisciplinary Approach for the Advancement of Data Collection, Data Management and Data Analysis to Aid Interpretation of Trace Evidence
- Evidence of Combined Information Value of Microscopic Comparisons and Mitochondrial DNA Analysis for Hair Examinations
- <https://www.nist.gov/topics/forensic-science/osac-research-development-needs>
- Research Task group will be reconvening in 2017 to identify more research needs



Additional Items of Interest

- **MATERIALS webpage**

<https://www.nist.gov/topics/forensic-science/materials-trace-subcommittee>

- **Baseline documents**

<https://www.nist.gov/topics/forensic-science/materials-trace-subcommittee>

- **PCAST Response**

https://www.nist.gov/sites/default/files/documents/2016/12/16/osac_materials_subcommittees_response_to_the_presidents_council_of_advisors_on_science_and_technologys_pcast_request_for_additional_references_-_submitted_december_14_2016.pdf

- **New Task Group – Terminology**

- **Members/Affiliates** - We will be replacing some 3 year term members next Fall. We are also adding affiliates when needed. If interested, keep application current within OSAC for ease of our reference.





Priority Action Report

Materials (Trace)

Chemistry/Instrumental Analysis

Susan Gross, Chair

February 14, 2017

