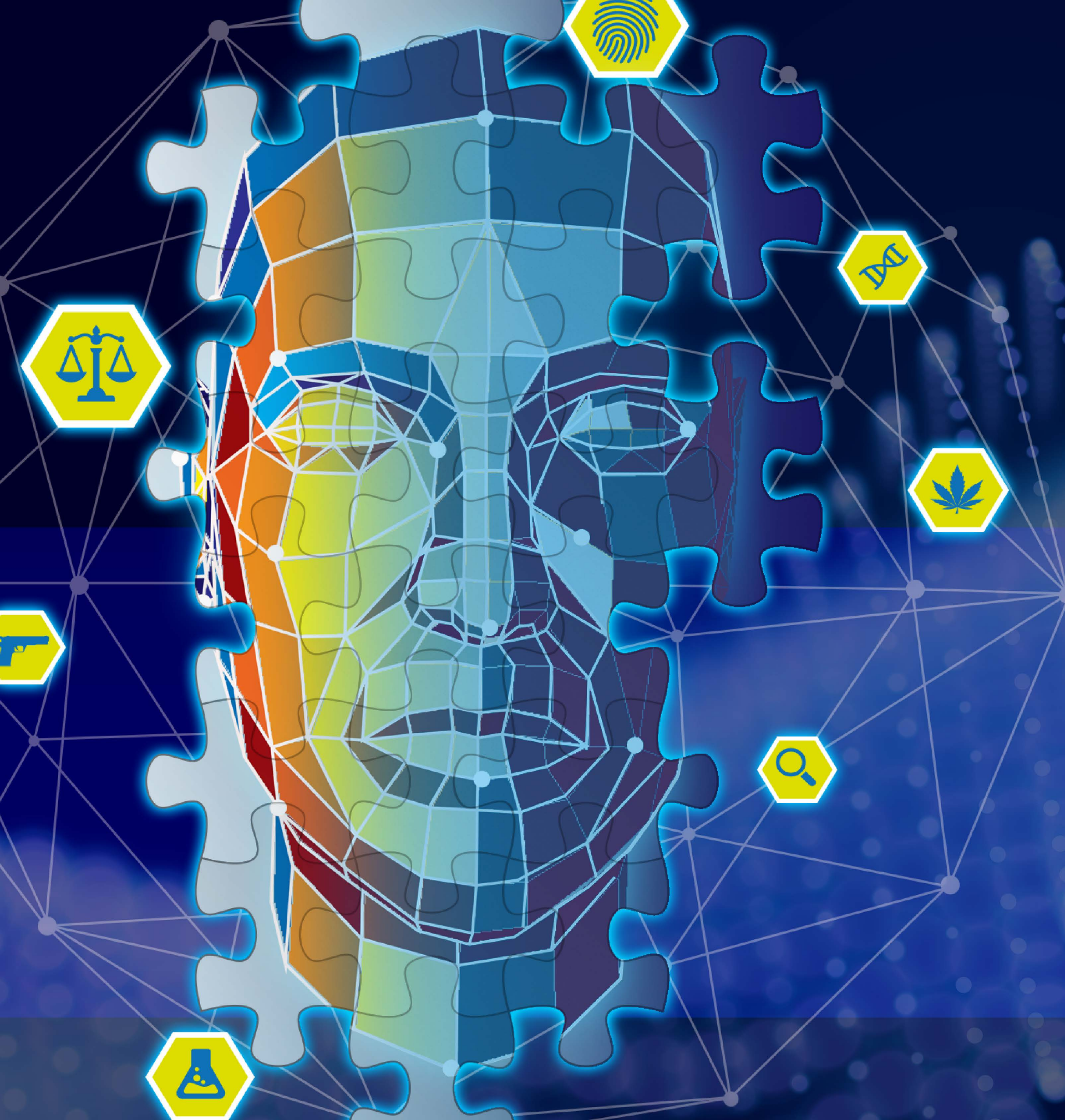




JABATAN KIMIA MALAYSIA
DEPARTMENT OF CHEMISTRY MALAYSIA

2022-2024 Achievements & Milestones

September 2025

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PRESIDENT'S REMARKS

It gives me great pleasure to introduce a new initiative that embodies the collective spirit and unwavering dedication of our community, a commemorative booklet that meticulously chronicles the achievements and milestones of all our workgroups from 2022 to 2024. This publication is more than a record of accomplishments; it is a testament to the synergy, innovation, and resilience that have propelled us forward in the face of evolving challenges. By capturing these defining moments, we not only honor the remarkable progress we have made, but also inspire future endeavors rooted in excellence, collaboration, and the relentless pursuit of advancement in our shared mission.



Nor Aidora Saedon
AFSN President 2024-2026

MESSAGE FROM THE AFSN BOARD MEMBER

As part of our efforts to keep everyone connected and informed, this initiative aims to compile and share AFSN's key activities and milestones from all Workgroups to be shared with all member institutes. By doing so, we hope to ensure everyone is aligned with our shared vision and stays up to date with the exciting developments taking place across the network.

AFSN BOARD MEMBERS

"Achievements in 2022"

The background of the slide features a light blue grid. On the left side, there are several faint, stylized DNA double helix structures. On the right side, there are faint molecular structures consisting of interconnected nodes and lines, resembling a network or a chemical structure. The overall theme is scientific or technological.

New Workgroup Formation

Forensic Medicine Workgroup (FMWG)

Formed: March 2022

Scope: Examination and interpretation of physical injuries; Post-mortem examination



Dr Joseph Palmero

Chairman

Philippine National Police
Forensic Group, Philippines



Dr He Guanglong

Vice Chairman

Institute of Forensic Science,
Ministry of Public Security,
People's Republic of China



Dr Yudy Yudy

Secretary

Indonesian Association of
Forensic Pathologist, Indonesia



Dr Gorthep Thepsitthar

Secretary

*Central Institute of Forensic
Science, Thailand*

**With the formation of FMWG, AFSN has now
10 Technical Workgroups and Committee**



Sharing of knowledge



QDWG

Journal Club

Date: 30 March 2022

Speakers: Ms Ngor Yi Hui, Mr Wong Chee Seng and Ms Nellie Cheng from Health Sciences Authority, Singapore



IDWG
TXWG

Joint Webinar

Growing Challenges in Cannabinoids Analysis

Date: 7 June 2022

6 Speakers from:

- Department of Chemistry, Malaysia
- Health Sciences Authority, Singapore
- Institute of Forensic Science, China



Joint Webinar by AFSN Illicit Drugs and
Toxicology Workgroup

Growing Challenges in Cannabinoids Analysis

Hosted Virtually using MS Teams by:

Chair: Ms Angela D. Salvador (IDWG) and Ms Moy Hooi Yan (TXWG)

Vice Chair: Ms Lim Jong Lee Wendy (IDWG) and Dr Fathiah A.
Zubaidi (TXWG)

Traditionally, the typical forms of cannabis encountered by forensic drug testing laboratories are live plant, dried plant material or resin. The common cannabinoids encountered in cannabis are delta-9-THC, CBN, CBD with low levels of delta-8-THC.

However, in recent years, there have been rapid advances in cannabis plant cultivation techniques and an increase in cannabis-containing products, such as, pharmaceutical products, edibles, vapes or essential oil. With the expansion of the cannabis industry fueled by the legalisation of cannabis use in many parts of the world, the need for reliable, effective methods and instrumentations to analyse cannabinoids and their isomers in various matrixes increases.

Meeting the unique challenges of analysis of cannabinoids in this ever-evolving regulatory environment is no small feat. Hence, the IDWG and TXWG are delighted to bring in speakers who will be sharing their experiences in the analysis of cannabinoids in various matrixes.

We look forward for your support to this webinar.

Sincerely,

IDWG and TXWG Committee



Date: 7 June 22 (Tuesday)

Time: 2 p.m. to 4 p.m. (Singapore
Time, UTC +8)

This workshop is opened only for
members from the AFSN member
institutes.

MS Link to attend



<https://go.gov.sg/afsnccannabiswebinar>

Important Announcement

Login ½ hour early.

Login Name to be:
Organization Name_ Registered
Name e.g. HSA_ Wendy Lim

Upcoming Events

2 – 5 November 2022
14th AFSN Annual Meeting and
Symposium

QASC

Scientific Session

Application of International Quality Management in Forensic Science Laboratories

Date: 21 June 2022

4 Speakers from:

- Institute of Forensic Science, People's Republic of China
- Health Sciences Authority, Singapore

11



TEWG

Scientific Session

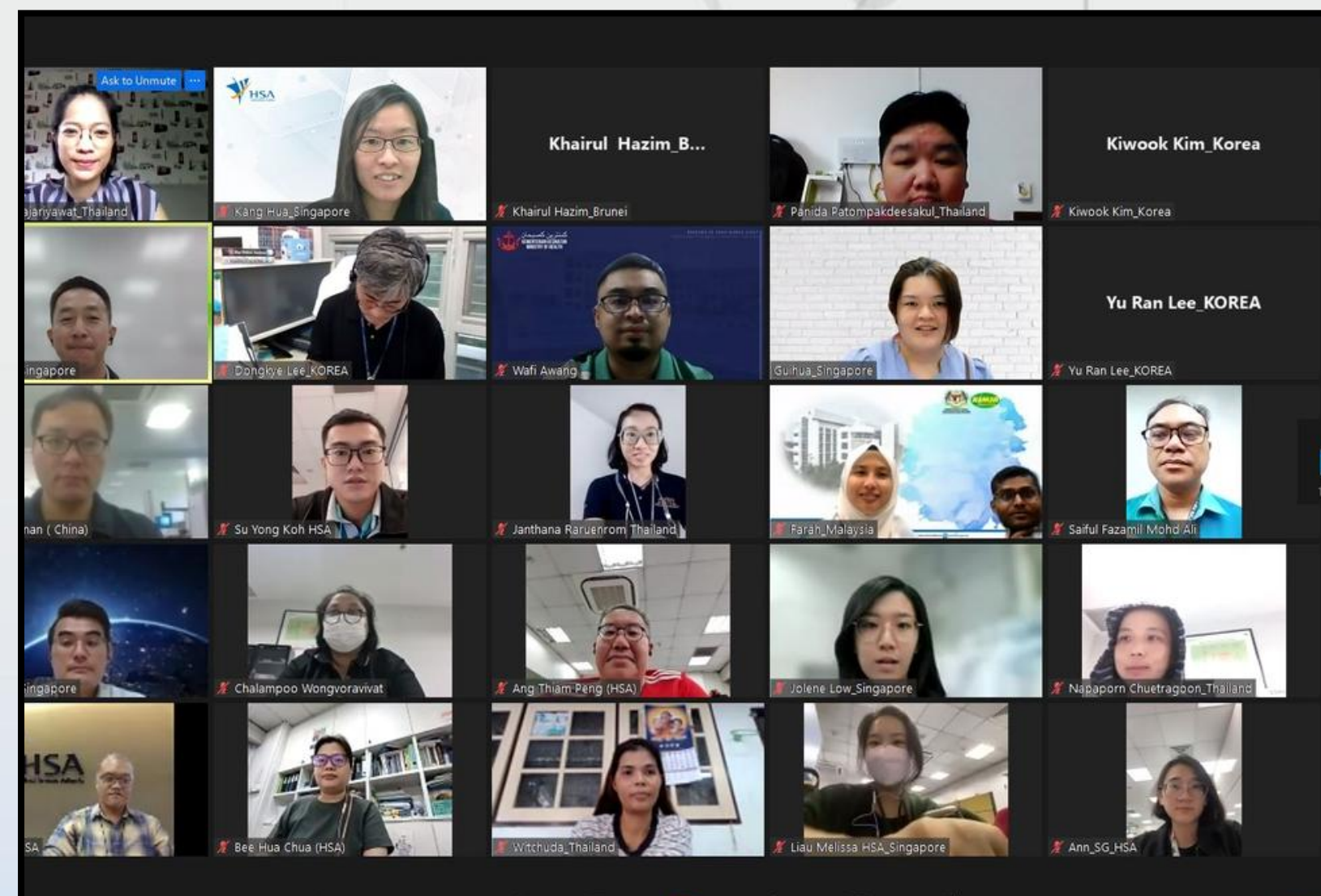
Chemical Analysis of Unknowns/Materials

Date: 13 July 2022

Program:

- Presentations on latest development of instrumental techniques in chemical analysis by experts from vendors (MS, SPE & Raman Spectroscopy).
- Sharing by forensic labs from 7 countries on case studies & challenges
 - Singapore, Malaysia, Korea, China, Thailand, Indonesia, Brunei

12

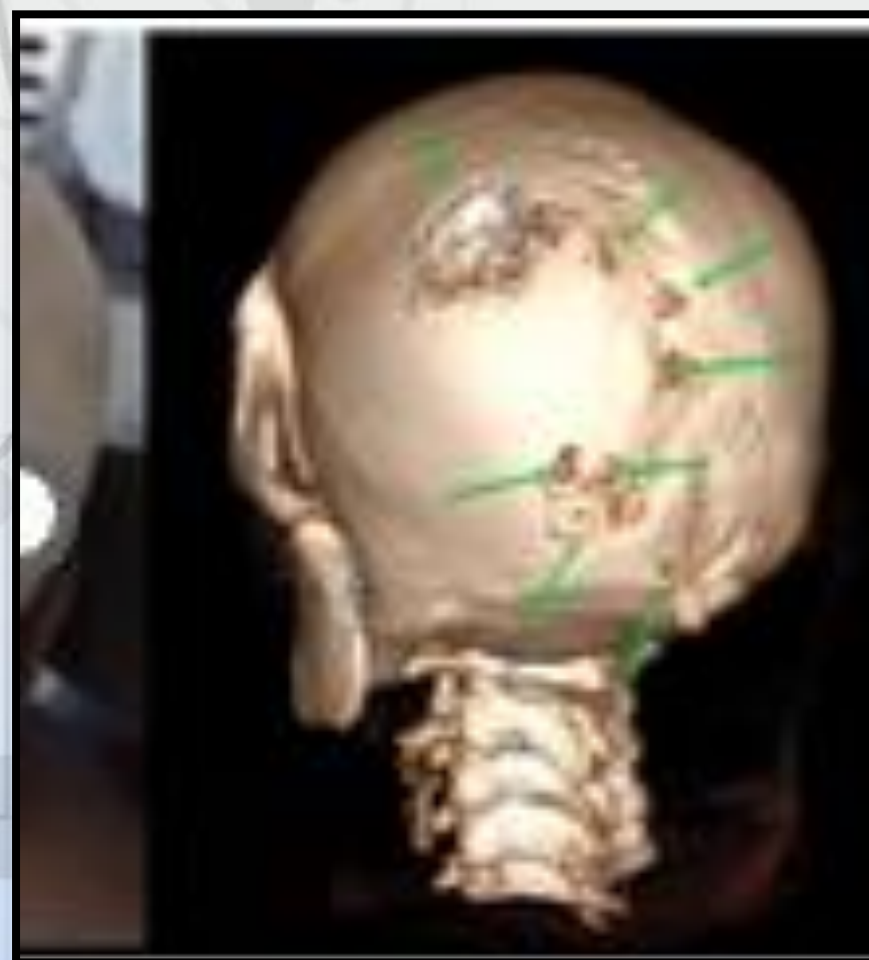


FMWG

Date: 25 July 2022

Bring Your Case Forum

Participants:
Practitioners from People's
Republic of China, Indonesia,
Thailand, Malaysia and Philippines



TEWG

8th National Conference on Forensic Trace Evidence

Date: 21 - 22 September 2022

Program: Novel technologies & applications in trace evidence; stable isotopes; forensic geology

Mr Lim Thiam Bon, TEWG Chair, was invited by IFS, China, to give a keynote lecture on “*Trace Evidence in Singapore’s Context*”



Forensic Science Symposium 2022

Date: 3 – 5 October 2022

Organizers:

1. AFSN IDWG
2. European Network of Forensic Science Institutes (ENFSI)
3. United Nations Office on Drugs and Crime (UNODC)
4. United States Drug Enforcement Administration (US DEA)

- More than 900 participants
- From over 30 countries attended

Ms Angela D. Salvador and Ms Wendy Lim (Chair and Vice-chair of IDWG)

worked with colleagues from ENFSI, US DEA and UNODC for forensic laboratories to explore scientific solutions to current challenges in international drug control and provide a platform for the timely sharing of experiences.



Forensic Science Symposium 2022

Session 1: Methamphetamine: A Global Threat

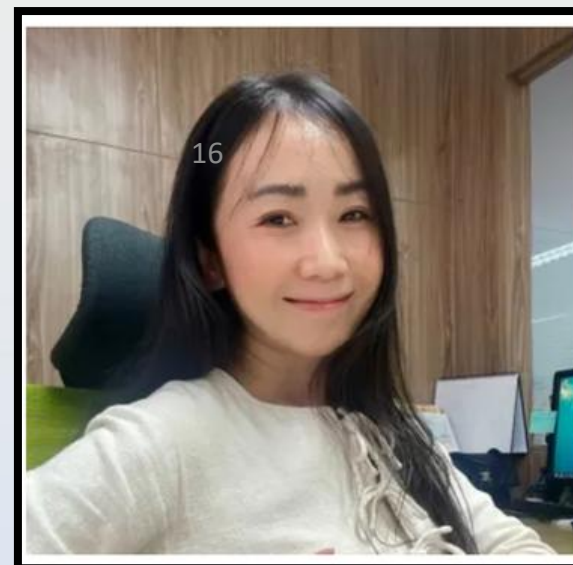
– Strengthening Intelligence, Monitoring and Detection

Host: Ms Angela D. Salvador and Ms Wendy Lim (Chair and Vice-chair of IDWG)

Speakers from IDWG, UNODC, INCB, US DEA and Switzerland



Ms Erlana Nindya Maulida
*National Narcotics Board,
Indonesia*



Ms Tassawan Korsetthaphong
*Office of Narcotics Control Board,
Thailand*



Ms Angela D. Salvador
*Philippine Drug Enforcement Agency,
Philippines*

DNAWG

Webinar

Bringing you Back to Basics of Mixture Interpretation and Forensic Quality Standards

Date: 25 October 2022

Speakers:

Dr Michael Coble

Associate Professor and the Interim Executive Director, Center for Human Identification, University of North Texas Health Science Center, USA

17

Miss Anna Davey

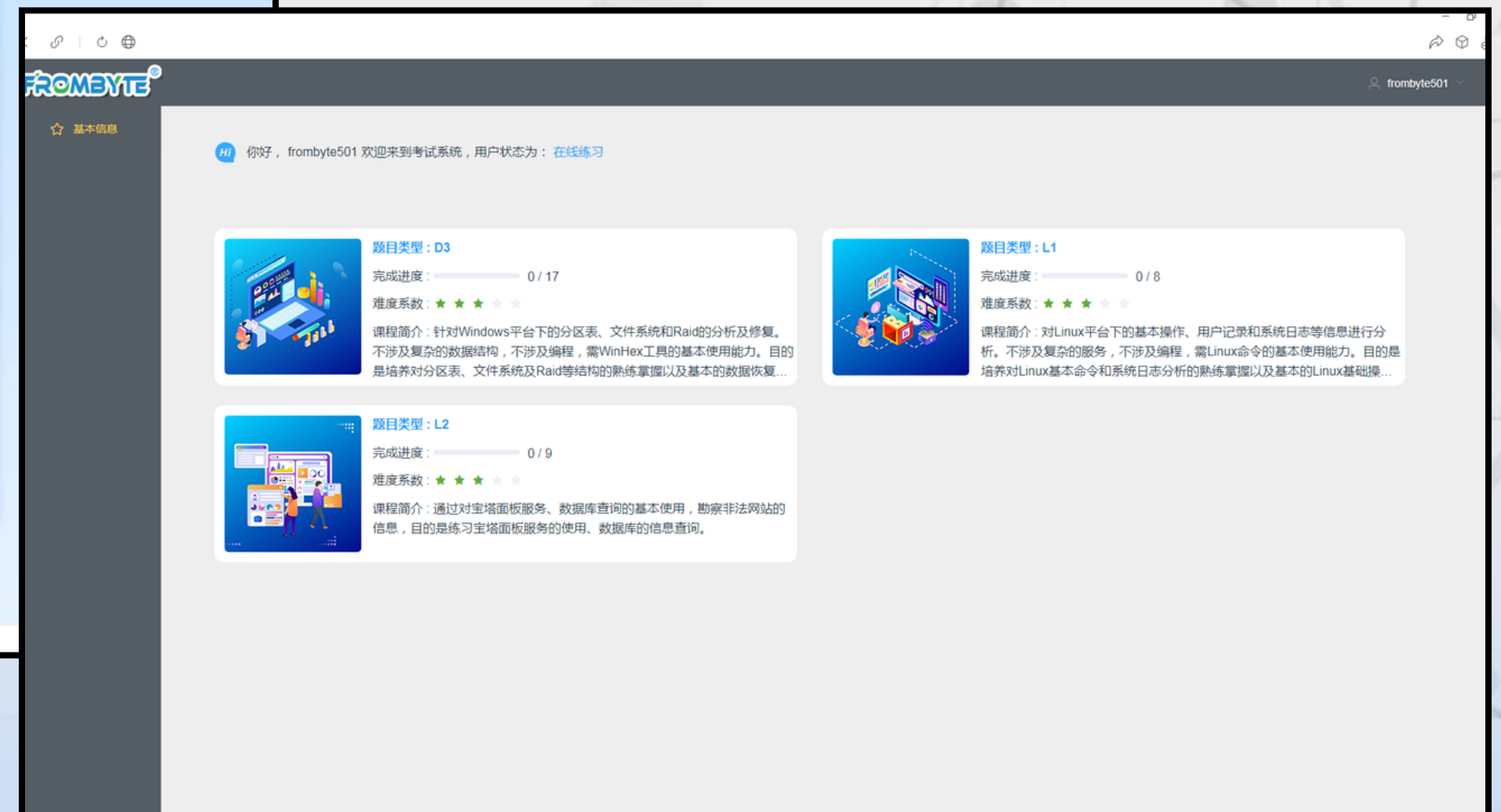
Founder and Director, Forensic Foundations, Australia



DFWG

Website

Created a website on digital forensic technology for learning and training



Publication of ForensicAsia



AFSN President's Address

Dear colleagues and friends,

Greetings to all colleagues in Asia and around the world!

It was such a pleasure to virtually meet so many of you during the 13th AFSN Annual Meeting and Symposium hosted by the Philippines National Police Crime Laboratory on 14-15 October, 2022 and pre-conference events from 11-13 October. The event, a first ever fully virtual conference for AFSN, had attracted more than 1,500 participants from 35 countries, and we also had 10 parallel scientific sessions for the workgroups and committee.

The Board held fruitful discussions with the workgroups and committee steering committee members and together, we strategized the following three areas for going forward:

Key Decisions and Strategies for Going Forward

To ENHANCE training and sharing	To STRENGTHEN communication amongst members	To PLAN for future Annual Meeting and Symposium
- Sharing through AFSN newsletter ForensicAsia and each WG/C secure sharing platform ForensicAsia portal - Training through WG/Cs ✓ Half yearly scientific session in formats such as webinars, workshops, bring your own case sessions, and introduction of new technology by vendors ✓ Create guidelines and best practices manual ✓ Conduct at least one collaborative study a year (To collaborate with QASC if necessary) - Please feel free to send interesting bulletins, newsletters or case studies that you would like to share with all AFSN members to our AFSN Secretariat Ms Nellie Cheng for distribution	- Within WG/C ✓ Keep updated database of members' contacts ✓ Include members in discussion and decisions to solicit ideas for workshop and events ✓ Use online questionnaire as a fast and efficient way to collect data ✓ Communicate regularly (such as monthly) via emails or other media to provide updates on activities - For member institutes where English is not commonly used ✓ Appoint focal persons in each institute for ease of communication ✓ Attend meeting as a group to help each other ✓ Encourage colleagues to improve English through online or other courses	- Secured commitment from Board Members to host meetings for the next 3 years: ✓ 2022: Indonesia ✓ 2023: Malaysia ✓ 2024: Thailand - AFSN will avoid clashing of meeting dates with other international conferences - AFSN will invite Presidents of other networks/organisations when possible to attend our meeting for exchange of ideas and collaboration - Future funding model will be decided, such as collecting registration fee for annual meetings

2022 has been a re-normalising year, where the world is slowly returning to pre-pandemic norms, with some regions resuming earlier than others. AFSN has had a busy calendar for the year, where the Board met twice in March and July, and also had communication sessions with the workgroups/committee steering committees on the activities and events for the year. I am very pleased to share that a new technical workgroup – Forensic Medicine Workgroup (FMWG), Chaired by Dr Joseph Palmero, was officially formed on 2 March this year with the scope of the workgroup as "Examination and interpretation of physical injuries; post-mortem examination". I hope that FMWG will become the platform for forensic pathologists within our member institutes to share knowledge, and also to collaborate with other sister networks such as APMLA and INPALMS.

- New **Issue no. 12** published online, October 2022.
- 3 technical articles and 3 case studies, with 3 articles on New Psychoactive Substances.
- American Society of Crime Laboratory Directors (ASCLD) Forensic Research Committee (FRC) Initiatives from the international scene.

Strengthening Forensic Practice

20



DNAWG

Collaborative Exercise

7th AFSN Inter-Laboratory **DNA Exercise on Kinship Analysis** – results will be presented in Jakarta



7th AFSN Inter-Laboratory DNA Exercise

Kinship Analysis

Juliana Sim
DNA Database Laboratory
Health Sciences Authority
Singapore

3 November 2022

All Rights Reserved, Health Sciences Authority



7th Inter-Laboratory DNA Exercise Study Design

Objective

To evaluate standard kinship analysis among the member institutes.

Scenario

A massive explosion erupted at a petrochemical refinery. At least 5 workers were killed and more than 10 went missing. A number of unrecognisable bodies were recovered by the local authorities and their samples were sent to your laboratory for identification through kinship testing. Blood samples from the next-of-kins (NOKs) were provided for reconciliation purpose.

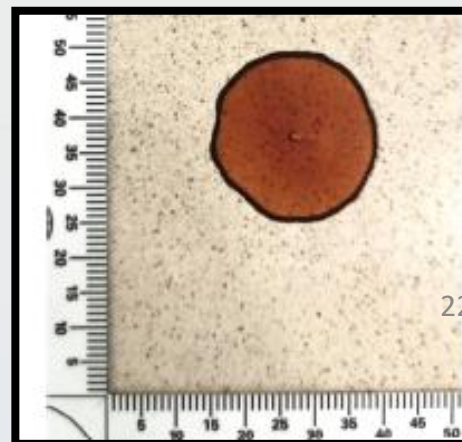
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CSIWG

Collaborative Exercise

Bloodstain Pattern Analysis

– results will be presented in Jakarta



Bloodstain Pattern Analysis (BPA) Workshop

Introduction, Classification and
Characteristics

Phua Zai Rong
3 Nov 2022



Collaborative Exercises

QDWG

Stamp Impressions Examination

- Results will be presented in Jakarta



TEWG

1st Paint
2nd Glass
6th Fibre





AFSN Board Members 2022 -2024

Institute /Country

President

Police Brigadier General Constancio Chinayog Jr

Philippine National Police Forensic Group (PNP), Philippines

Vice President

Mdm Halimah Binti Abdul Rahim

Department of Chemistry (KIMIA), Malaysia

Past President

Dr Angeline Yap

Health Sciences Authority (HSA), Singapore

Board member

Dr Lisda Cancer

Department of Police Medicine of the Indonesian National Police (INP), Indonesia

Board member

Mr Zhao Qiming

Institute of Forensic Science (IFS), Ministry of Public Security, People's Republic of China

Board member

Dr Park Nam Kyu

National Forensic Service (NFS), Republic of Korea

Board member

Asst Prof Worawee Waiyawuth

Central Institute of Forensic Science (CIFS), Thailand

“The only source of knowledge is experience.”

"Achievements in 2023"



CRIME SCENE INVESTIGATION WORKGROUP 2023 ACTIVITIES



Crime Scene Investigation Workgroup

Footwear Impression & BPA Collaborative Exercises

Aug – September 2023

ASIAN FORENSIC SCIENCES NETWORK

Bloodstain Pattern Analysis Collaborative Exercise 2023

Bloodstain Pattern Analysis Collaborative Exercise 2023

Participant code:

Dear colleagues,

Please find enclosed the questionnaire and relevant materials relating to the 2023 Bloodstain Pattern Analysis Collaborative Exercise. Your assigned participant code is at the top left of this page.

Follow the instructions carefully and fill in your responses using the attached questionnaire. We recommend that the Adobe Acrobat Reader application be used to fill in the responses, although any PDF application should also work.

Please email your results by **31 August 2023**, including any relevant supporting documents that you wish to attach in a standard format e.g. .pdf, .docx, to:

Phua_Zai_Rong@hsa.gov.sg

For any correspondence, please also state your participant code in the email title.

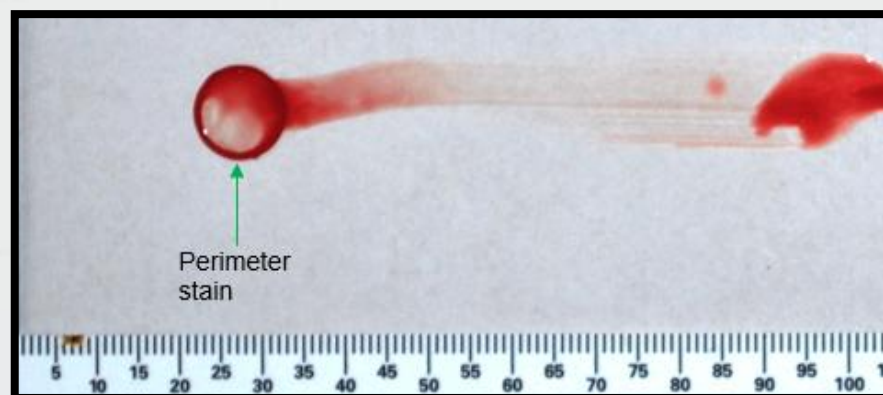
If you have any questions regarding the test at any point in time, I am happy to help at the above stated email address.

Best regards,

Phua Zai Rong

Health Sciences Authority of Singapore

Forensic Chemistry and Physics Laboratory



22 (+33%) submissions received

ASIAN FORENSIC SCIENCES NETWORK

Footwear Impressions Analysis Collaborative Exercise 2023

Footwear Impressions Analysis Collaborative Exercise 2023

Participant code:

Dear colleagues,

Please find enclosed the questionnaire and test questions relating to the 2023 Footwear Impressions Analysis Collaborative Exercise. Your assigned participant code is at the top left of this page.

The material to be compared may be downloaded from:

Outside mainland of China	https://go.gov.sg/csiwgfw
Mainland of China	https://pan.baidu.com/s/1v8Jse14w_pOZF5xNIVmp8g code: zpd9

Follow the instructions carefully and fill in your responses using the attached questionnaire. We recommend that the Adobe Acrobat Reader application be used to fill in the responses, although any PDF application should also work.

Please email your results by **31 August 2023**, including any relevant supporting documents that you wish to attach in a standard format e.g. .pdf, .docx, to:

IFS_CSIWG@126.com

For any correspondence, please also state your participant code in the email title.

If you have any questions regarding the test at any point in time, I am happy to help at the above stated email address.

Best regards,

Lin Min

Institute of Forensic Science,
Ministry of Public Security, China

22 submissions received



AFSN CSI Workgroup Bloodstain Pattern Analysis 40h Basic Course

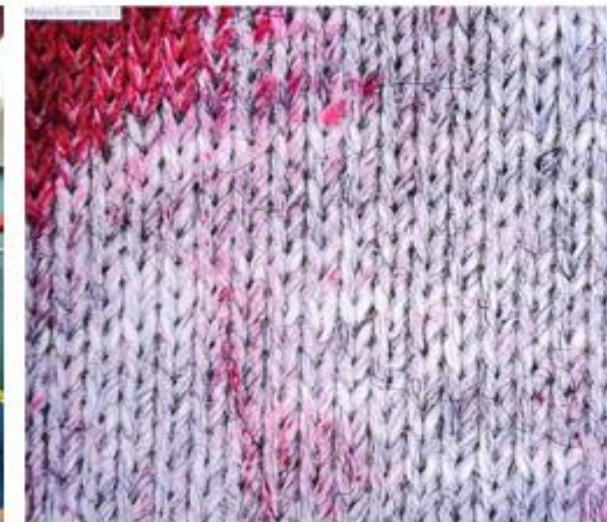
6 & 7 September 2023

- Introduction and history of BPA
- Physical properties of blood and wounds
- Chemical tests
- Bloodstain pattern recognition and documentation

9 – 11 September 2023

- Practical exercises and pattern creation
- Mock scene

Participants conducted experiments and practical examinations over 3 days at KIMIA Malaysia





DIGITAL FORENSICS WORKGROUP

2023 ACTIVITIES

Activities of 2023

2023 AFSN Annual Meeting and Symposium

Date : 11-15 Sep 2023 in Kuala Lumpur, Malaysia



Activities of 2023

Collaborative exercise vehicle speed determination from video footage



The CE yielded good results, with the six participating institutes demonstrating close accuracy, z-score of 2.



Workshop on Introduction to Traffic Crash Reconstruction



16 participants in hands-on workshop covering crash scene evidence and practical training on command-line video analysis tool.

Activities of 2023



Technical sharings showcasing advances in vehicle forensics, audio forensics, cybersecurity, and AI technologies.



DNA WORKGROUP.

2023 ACTIVITIES

PAST ACTIVITIES



8th AFSN Inter-Laboratory DNA Exercise

- Health Sciences Authority, Singapore
 - 19 member institutes : 7 countries
 - increase of 10 participants

Survey of MPS in Asia's Forensic Laboratories

36

- UP Diliman, Philippines
 - 13 participants

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PLATINUM



SELER



BOOTH / WORKSHOP



foster+freeman



GERSTEL
MAINTAINS LABS VIBRAC



NEXUS
ANALYTICS



Regula
Forensic evidence solutions



Waters

WILEY

CURRENT ACTIVITIES

WORKSHOPS (2)

- The Power of NGS and FIGG
- Detecting more evidence at the Crime Scene

INVITED SPEAKERS (2)

- Significance of Forensic Finding & Testimony in the Court of Law
- Shining Light and casting Shadows on Forensic DNA Advances

ORAL (25)

- 25 with 6 countries

POSTER

- 35

APPLICATION TALK BY VENDOR

- Qiagen
- ThermoFisher
- Foster Freeman
- Gordon Thomas Honeywell



2023- 2024 ACTIVITIES

Exercises

- 9th Inter Lab
- Laboratory Protocols Survey

Webinar

- Quality
- Analysis protocols

Collaboration

- UNT HSC
- NGS
- Member Institutes



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SILVER

ThermoFisher
SCIENTIFIC

GOOLD / WORKSHOP



FORENSCOPE

foster+freeman



Waters

WILEY



FORENSIC MEDICINE WORKGROUP

2023 ACTIVITIES

Participants: 25

Countries represented: 6

- 1. Philippines: Phil. National Police-Forensic Grp.
- 2. Indonesia: Universitas Airlangga
- 3. Malaysia: National Institute of Forensic Medicine
- 4. South Korea: National Forensic Service
- 5. Thailand: Central Institute of Forensic Science
- 6. China: Institute of Forensic Science, Ministry of Public Security

Photo with
some
participants



Activities

	Presenter	Topic
1	Dr. Mohd Shah Mahmood	DVI: New Perspective with Current Technology
2	Dr. He Guanglong	DVI Operations in China
3	Dr. Nurul Kharmila Abdullah	Forensic Medicine in Malaysian Medical Education
4	Dr. Ahmad Hafizam bin Hasmi	High Risk Autopsy



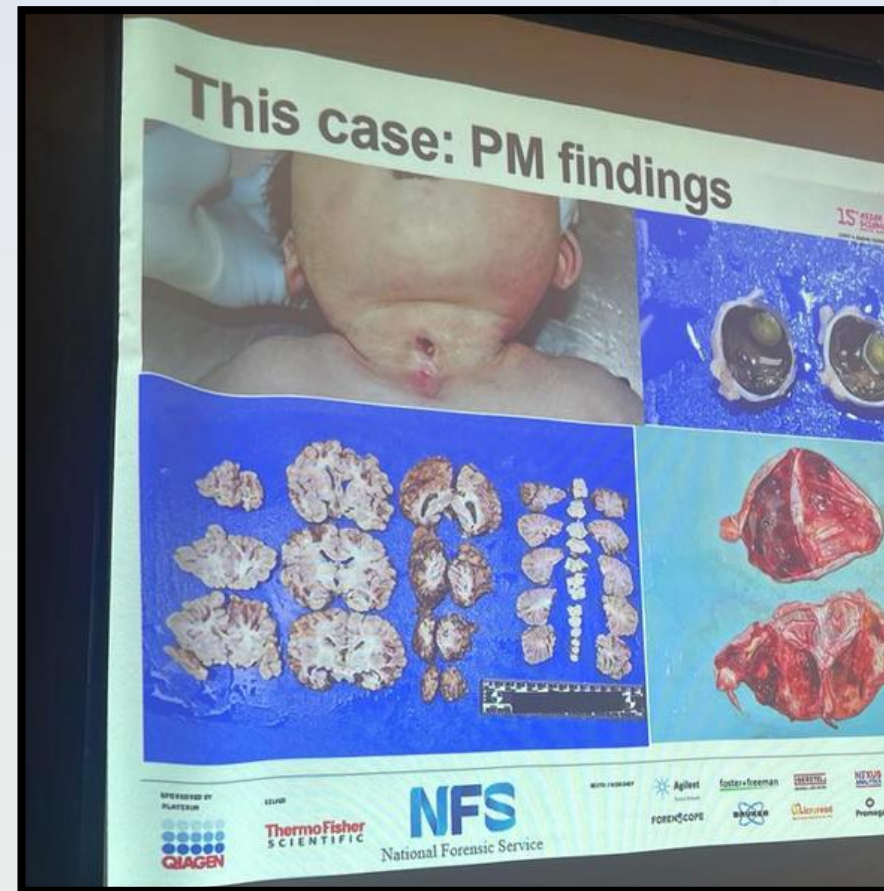
6 Poster Presentations

7 Oral Presentations

Election of new set of Steering
Committee members

Gen. Constancio T. Chinayog,
AFSN President
also attended one of the
FMWG Sessions

45





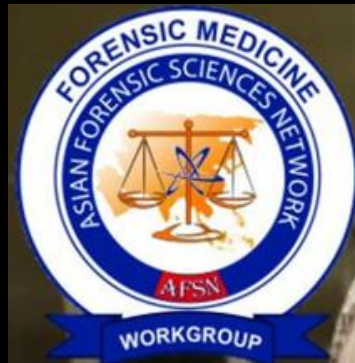
Awarding of Certificates
and souvenirs for the presentors.

Newly elected FMWG Steering Committee



Chairman	Dr. Wisarn Worasuwanarak	Thailand
Vice Chairman	Dr. He Guanglong	China
Secretary	Dr. Yudy	Indonesia
Secretary	Dr. Sohyung Park	South Korea

Some of our virtual conferences in 2023



BRING YOUR CASE FORUM

Date: March 29, 2023, 5:00 – 6:00 PM (Singapore time)
Via Zoom
Meeting ID: 261 630 4872
Passcode: POMELO

Title: An Unusual Suicide Case of Asphyxiation by Ligature Around the Thorax.
Presenter: Dr. Goeun Lee
Institution: National Forensic Service (South Korea)

48

Title: Unnatural or Natural?
Presenter: Dr. Ahmad Hafizam bin Hasmi
Institution: Department of Forensic Medicine, Hospital Kuala Lumpur

Activate Windows
Go to Settings to activate



Dr. Benvagoub Massinissa
Asso. Professor, Forensic Medicine,
Law and Ethics
University Amr thelidji
Laghouat, Algeria

Topic: Death of An Accused in A Court
After the Announcement of the Verdict



Dr. Kamel Yacine
Forensic Doctor
Forensic Medicine Dept.
Mustapha University Hospital
Algiers, Algeria

Topic: Algerian Forensic Medicine



ASIAN FORENSIC SCIENCES NETWORK
FORENSIC MEDICINE WORKGROUP

Scientific Forum

July 5, 2023

4:00PM - 5:00PM (Singapore time)

Zoom meeting ID: 981 8183 9895
Passcode: FMWG2nd

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FINGERPRINT WORKGROUP

2023 ACTIVITIES



Current Members

17 members(from 10 countries): Singapore, Malaysia, Thailand, China, Korea, Philippines, Indonesia, Kazakhstan, Timor-Leste, Myanmar, Mongolia

2 invited members (no voting right): korea, Australia

member of steering committee

chair: Rongliang MA (China)

vice-Chair: absent

Secretaries: Dr Liu Shiquan (China)

Pol. Maj. Rafael B Roxas JR (Philippines)



Achievements for the year

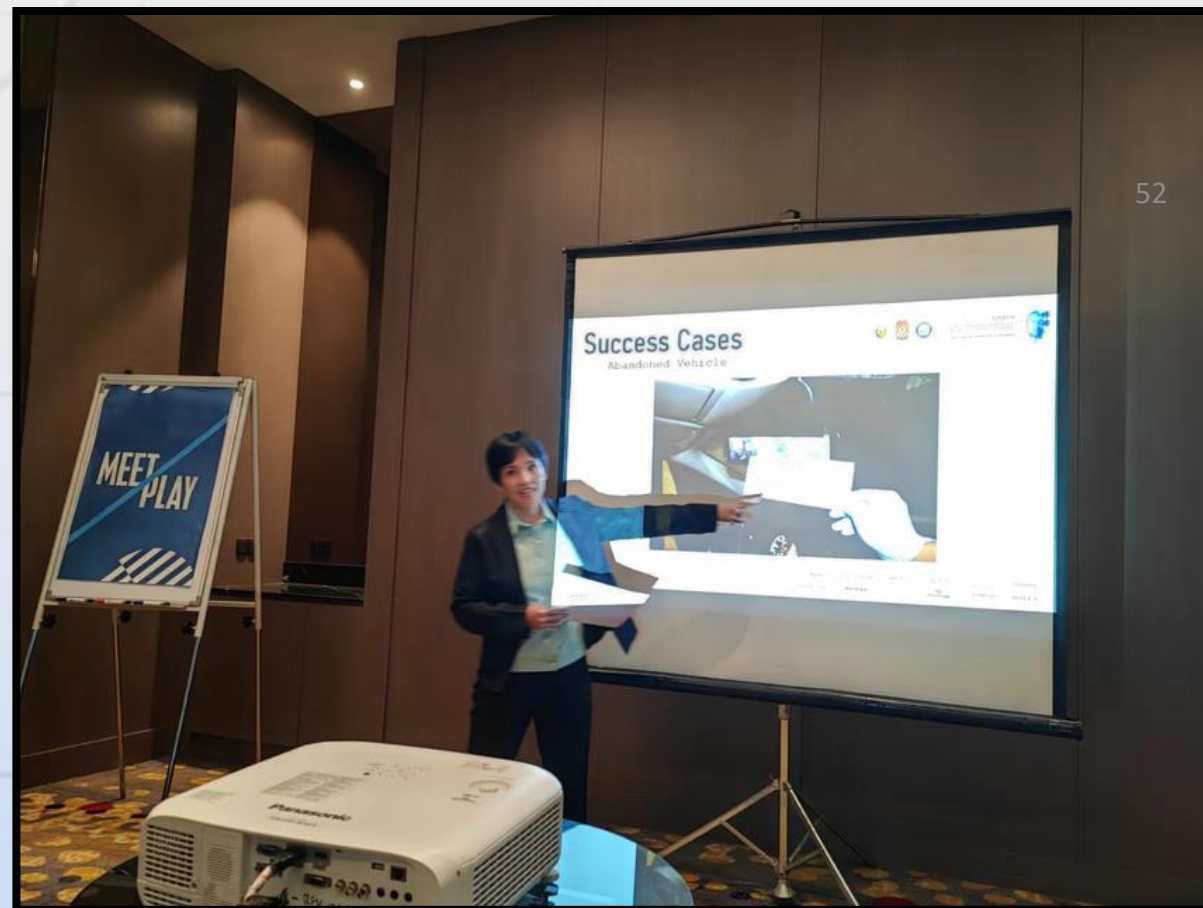
- Two Interested members from Mongolian Police applied the membership for FPWG(waiting for approved)
- One academic speech “**The Sydney declaration – Revisiting the essence of forensic science through its fundamental principles**” on **2022 November**.

by Prof. Claude ROUX, the President of International Association of Forensic Science. Director of Centre for Forensic Science,
University of Technology Sydney AUSTRALIA



Schedule for this meeting

- 1 oral presentation [?]
- Solving Crimes at Your Fingertips: AFIS Success Stories in Swift Identification of Suspects
- presented by Liz Ann Sucgang from the Philippine National Police Forensic Group.





2 posters

1. The Latent Fingerprint Analysis by “VeriFinger 12.0” Software

Duangnate Pipatsatitpong*, Siraprapha Klamkliang*,
Pairoa Praihirunkit

Graduate Program of Forensic Science, Faculty of Allied
Health Sciences, Thammasat University, Pathum Thani
12120, Thailand.

2. Synthesis of Magnetic Fluorescent Silicon Composite Materials For Latent Fingerprints Detection

• Shuoyun Wei, Meimei Cui, Liying Ma *from Chinese
University of Politics and Law*



No business meeting was held due to the absence of group members, but current problems and future plans have been discussed by the participants.

Current problems

1. Less International Communication makes the connection of members difficult.
2. Less funding makes organizing meeting difficult.
3. The development of more modern forensic techniques such as electronic evidences and CCTV footage make fingerprint less important in crime investigation.



Plans for next year

1. will have regular meetings and other activities.
2. will share practices between group members such as difficult fingerprint identification, etc.
3. will have new members from Malaysia, the Philippines and Singapore.
4. To invite Prof. Chritophe CHAMPOD, to give an presentation named "Implementation of algorithms in pattern and impression evidence".
5. To organize an academic meeting in China.
6. To revise the Term⁵⁵ of FPWG.
7. To change some of the members of the Steering committee.



Thank you very much.
Happy the Mid-Autumn Festival!





ILLICIT DRUGS WORKGROUP

2023 ACTIVITIES

AFSN Training Workshop, July 2023

HSA partnered AFSN (Illicit Drugs Workgroup and Toxicology Workgroup) to conduct training and share knowledge and insights on analysis of cannabis and new psychoactive substances (NPS) in drugs and biological specimens, as well as the laboratories' best practices.

- **Onsite participants:** 5 forensic scientists from 3 national laboratories in Brunei Darussalam, Malaysia and Philippines
- **Online Lectures:** 9 lectures were conducted in hybrid format and had about 400 online participants from 28 countries.

Already Conducted, and may conduct upon request from many institutes



Hair Analysis Workshop



Cannabis Training





14 Oral,
10 Posters,
8 Country Presentations

Ms. Emily D.
Lockhart/DEA as the
trainer on Clan Lab

2 Guest speakers from
AFP

2 Guest speakers from
UNODC

Group Photo taken at 2023 AFSN Meeting in KL, Malaysia

FORENSIC SCIENCE SYMPOSIUM

FORENSIC SCIENCE SOLUTIONS FOR EMERGING CHALLENGES IN
INTERNATIONAL DRUG CONTROL

OCTOBER 10-12th 2023

AFSN, ENFSI, US DEA, and UNODC are pleased to announce the third series of joint online symposia for forensic laboratories to explore scientific solutions to emerging challenges in international drug control.

10
OCT

Amphetamine-type stimulants- Recent developments in clandestine manufacture and composition

11
OCT

Emerging landscapes- Understanding and responding to new psychoactive substances

12
OCT

Challenges posed by novel cannabis products

REGISTRATION DETAILS AVAILABLE IN AUGUST

SAVE THE DATE!



**United
Nations**

Session 2: Emerging landscapes – understanding and responding to new psychoactive substances

*October 11, 2023 – 12:30 – 15:30 pm CET
will be hosted by :*

*Dr Vanitha Kunalan and Ms Wendy Lim
(Chair and Vice-chair of AFSN-IDWG)*



QUALITY ASSURANCE & STANDARDS COMMITTEE 2023 ACTIVITIES

Survey of Quality Framework Practices in IDWG members

- From April to May 2023, a set of survey questions was sent to the IDWG & QASC committee members of the AFSN.
- The survey aimed to gather information on the practice of the quality framework in the seized drugs discipline.
- The information gathered will help us to better understand the state of quality assurance practices in the illicit drug laboratories among AFSN member institutes.
- This will allow us to identify good practices and any areas for improvement so as to align our future activities to our needs.

Scope of Survey

- Competency of Personnel
- Equipment & Consumables
- Collection, Analysis, Interpretation, Reporting
- Procedures, Protocols, Variations
- Quality Management

Areas for improvement

- Incorporate ethical practices and criminal law and testimony into the training program
- Implement suitable verification checks on reference materials used for routine drug analysis
- Incorporate estimation of MU for quantitative analysis
- Full assessment of the performance characteristics in method validation for quantitative analysis for new methods
- Explore digitalisation and computerised Laboratory Information Management System (LIMS)

Joint Workshop by IDWG/TXWG/QASC

10 – 14 July 2023

- **5-day Laboratory Training Workshop:** jointly organised by HSA and AFSN Illicit Drugs Workgroup, Toxicology Workgroup and Quality Assurance & Standards Committee.
- **Objective:** Provide insights and practical knowledge on laboratory best practices as well as testing of cannabinoids and new psychoactive substances in both drug samples and biological specimens.

Joint Workshop by IDWG/TXWG/QASC

10 – 14 July 2023

- 5 Forensic scientists from 3 National Labs: Brunei Department of Scientific Services, Malaysia Department of Chemistry and Philippines PDEA attended physically.
- ~400 online participants from 28 countries attended 9 online lectures, including quality assurance in illicit drugs laboratory.



QASC program in 15th AFSN Annual Meeting and Symposium

10 – 14 July 2023

- Invited Ms Anja Einseln in QASC workshop on:
 - Root Cause Toolbox
 - Risks & Opportunities
- Six oral presentations in various aspects on quality assurance;
- One session on ethics in forensic science.

Election QASC Committee

Chair	Mr. Hua Feng	Institute of Forensic Science, Ministry of Public Security, China
Vice-chair	Dr Lui Chi Pang	Health Sciences Authority, Singapore
Secretary (1)	Ms. Minerva S Sagum	DNA Analysis Lab, NSRI, University of Philippines, Philippines
Secretary (2)	Ms. Fahimahtul Aqilah Murni	Department of Scientific Services, Brunei Darrusalam





QUESTIONED DOCUMENT WORKGROUP 2023 ACTIVITIES

Agenda

1. QDWG Steering Committee 2021-2023
2. New members
3. Updates on 15th AFSN Annual Meeting and Symposium
4. Our work 2022-2023
5. Election
6. QDWG Steering Committee 2023-2025
7. Any other business





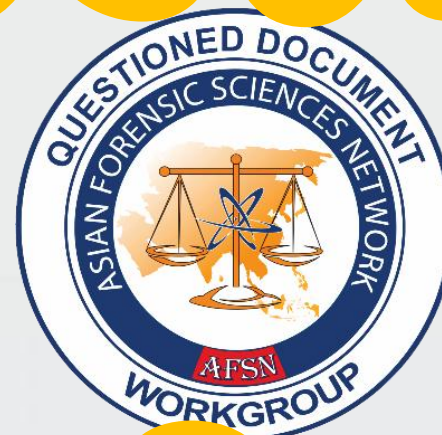
QDWG Steering Committee 2021-2023

Thank
you

Ms Wan Rahimah
KIMIA, Malaysia

Wang Jiguan
IFS, China

Naila
HSA, Singapore



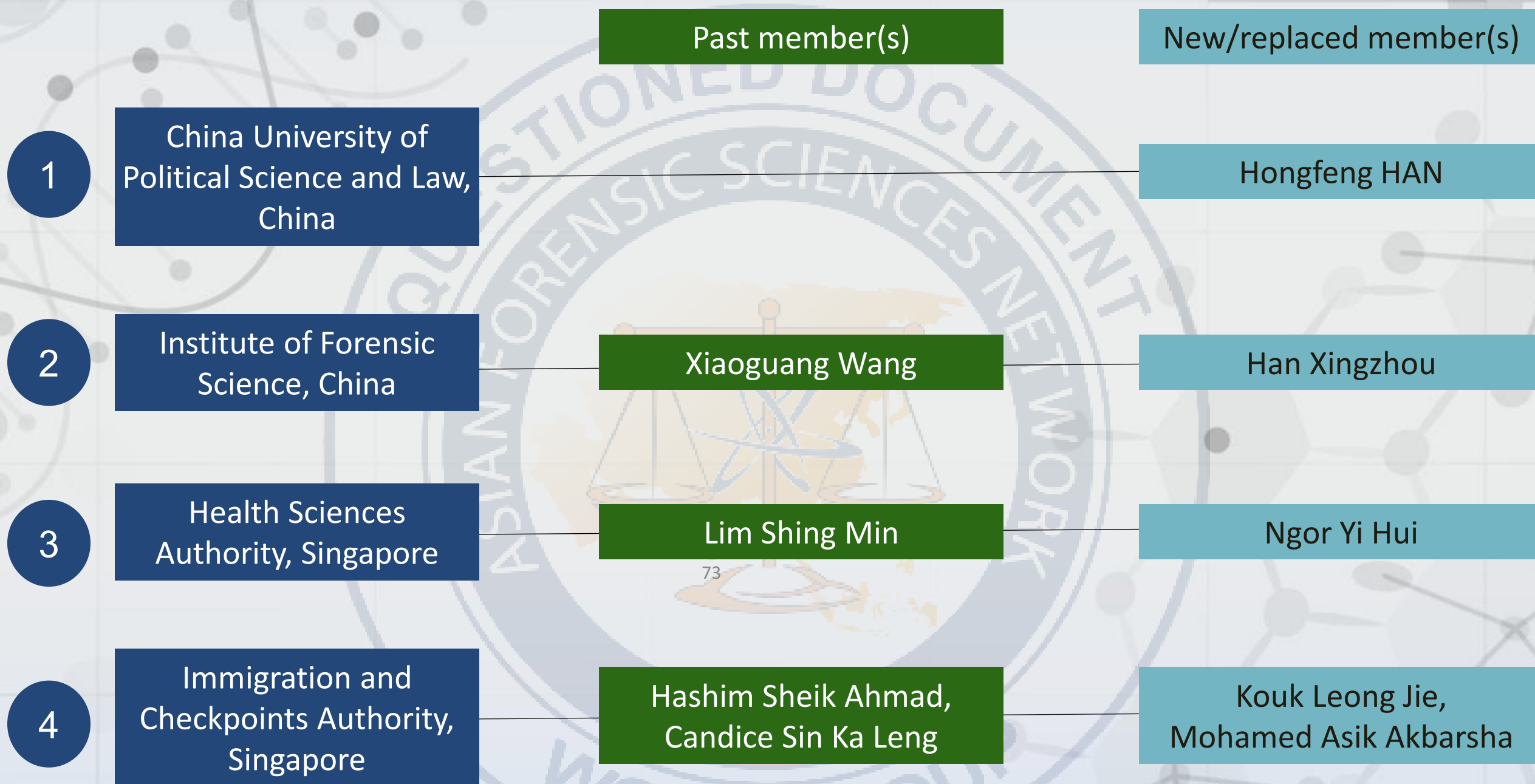
Dr. Da
IFS, China

Dr Li Chi Keung
KGL, HKSAR, China

Ms Jovelyn
Maggay
PNP, Philippines



New members



Past member(s)

New/replaced member(s)

1

China University of Political Science and Law, China

Hongfeng HAN

2

Institute of Forensic Science, China

Xiaoguang Wang

Han Xingzhou

3

Health Sciences Authority, Singapore

Lim Shing Min

Ngor Yi Hui

4

Immigration and Checkpoints Authority, Singapore

Hashim Sheik Ahmad, Candice Sin Ka Leng

Kouk Leong Jie, Mohamed Asik Akbarsha



New members



ASIAN FORENSIC SCIENCES NETWORK

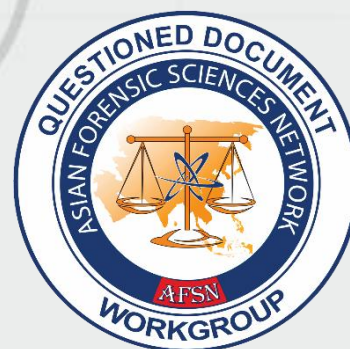
TERMS OF REFERENCE FOR WORKGROUP AND COMMITTEE

Clause 4.2 ii

Each member institute can nominate up to **two** representatives to be members of each Workgroup/Committee.



Updates on 15th AFSN Annual Meeting and Symposium



**QDWG
Invited Speaker**

QDWG Invited Speaker Dr Tomasz Dziedzic



Tomasz Dziedzic, PhD, ORCID: 0000-0002-1942-6007, expert in the field of forensic handwriting and document examination at the Institute of Forensic Research in Krakow, Poland. Chairman of the European Network of Handwriting Examiners (ENFHEX), a working group of the European Network of Forensic Science Institutes (ENFSI). From 2018 to 2020 the Lead of a team of international researchers who developed the first Best Practice Manual for forensic examination of Digitally Captured Signatures (DCS). Author of research papers and conference presentations, a large part of which was dedicated to DCS, and a trainer in this field. Member of the Advisory Committee for Assessments at the Netherlands Register of Court Experts (NRGD).

Workshop

An Introductory Guide to the Forensic Examination of Digitally Captured Signatures

Date: September 11, 2023 (Monday)

Time: 2:00 pm – 5:30 pm

*Please bring along a laptop

Lecture

Best Practice in Forensic Handwriting Examination – a New Approach

Date: September 12, 2023 (Tuesday)

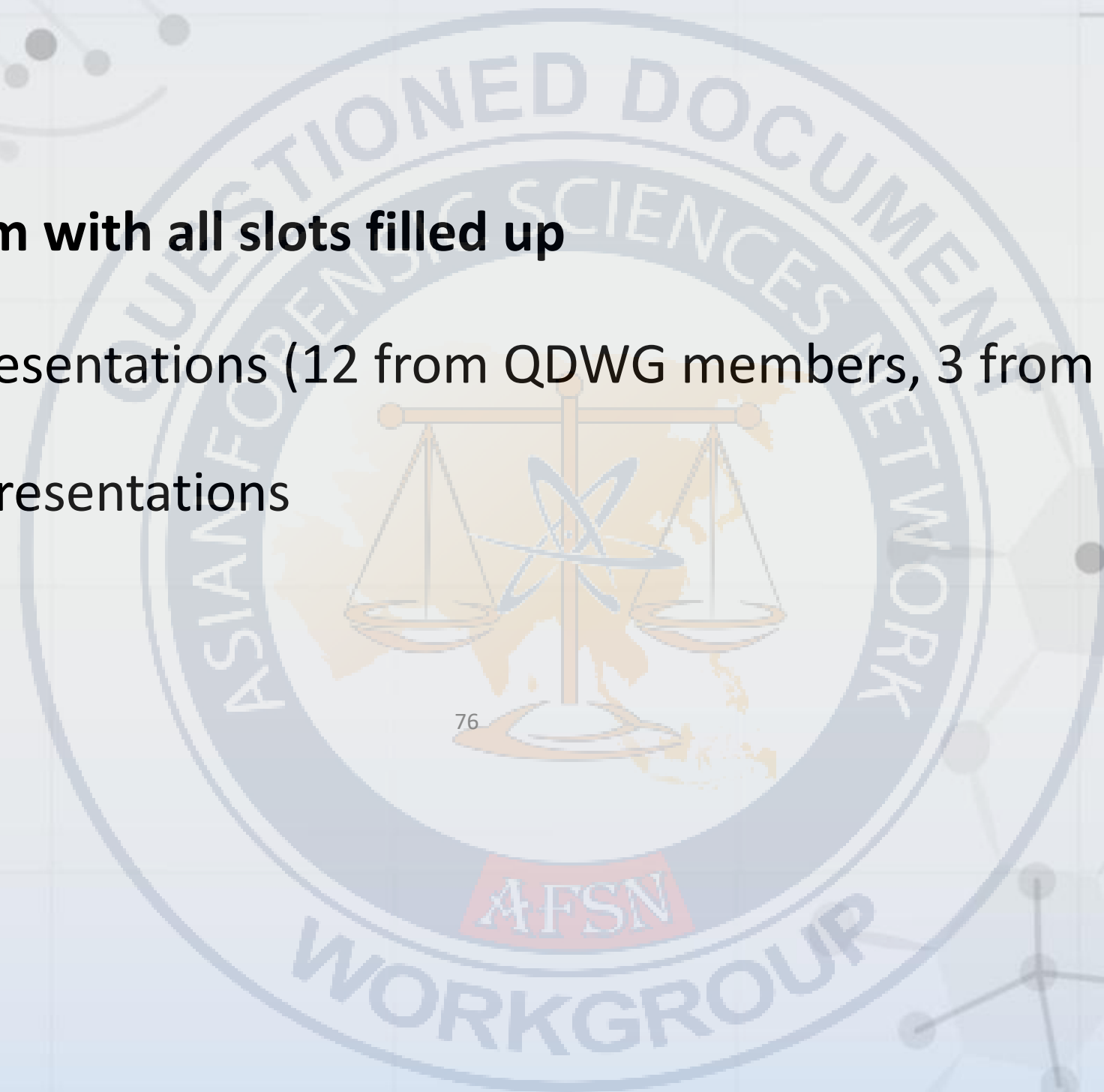
Time: 2:00 pm – 3:20 pm



Updates on 15th AFSN Annual Meeting and Symposium

Full program with all slots filled up

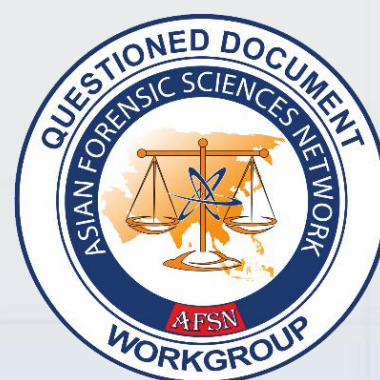
- 15 Oral Presentations (12 from QDWG members, 3 from vendors)
- 4 Poster Presentations





Our work 2022-2023

International Scene



Partner Organization

- QDWG was one of the Partner Organizations
- Nellie introduced our WG to the community



Asian Forensic Sciences Network
Questioned Document Workgroup
(AFSN QDWG)

Nellie Cheng
Chair, AFSN QDWG





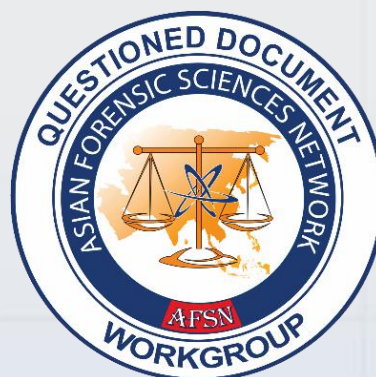
Our work 2022-2023

International Scene



Round Table – FDE: Challenges for the future

Speakers: Chi Keung LI, Carolyn Moldez-Pitoy,
Iskandar Azaman



Partner Organization

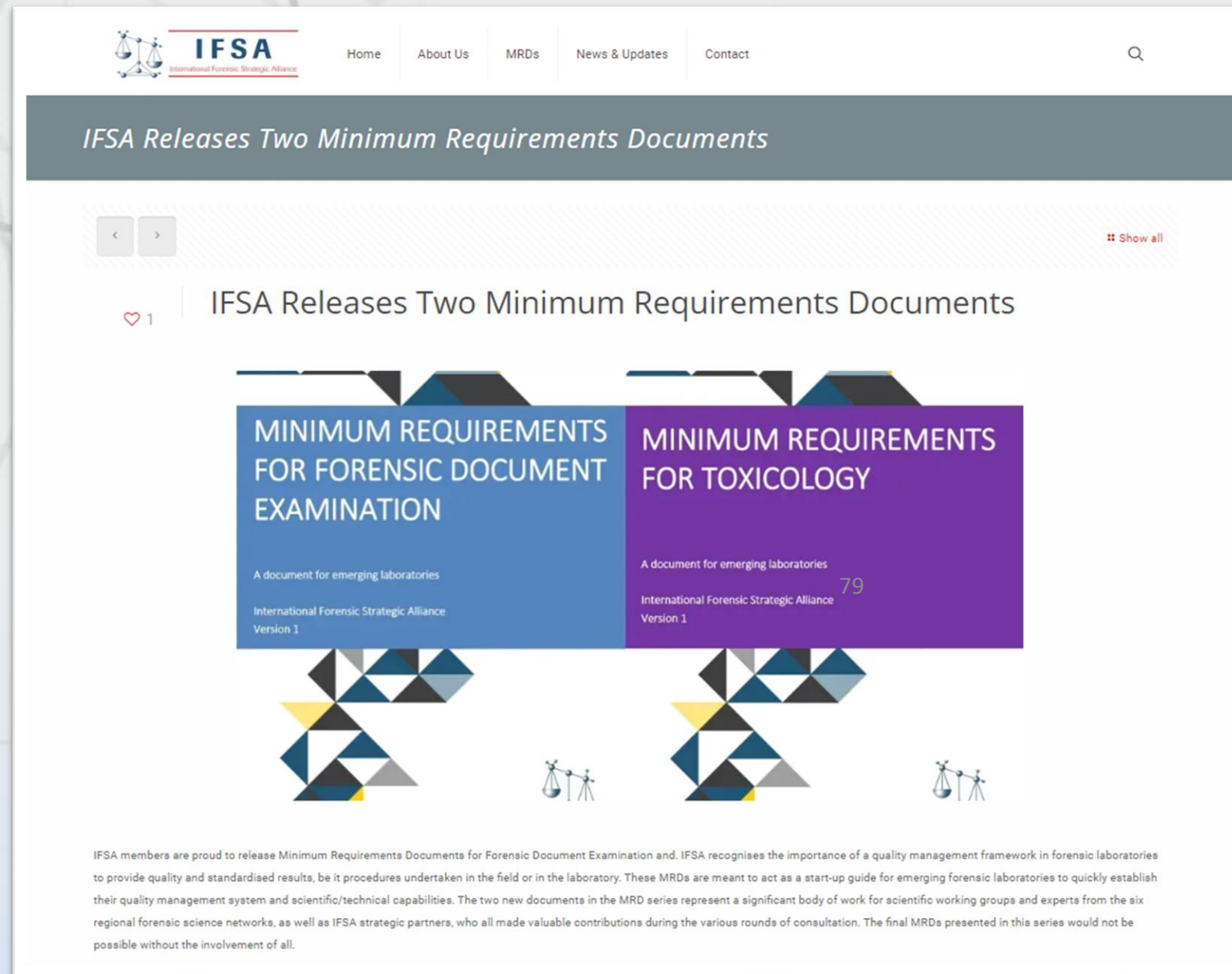
Scientific Session

⁷⁸
Presentations from QDWG members



Our work 2022-2023

International Scene



- International Forensic Strategic Alliance (IFSA) released Minimum Requirements for Forensic Document Examination in June 2023
- QDWG provided inputs to this document



Our work 2022-2023

Knowledge Sharing



**Asian Forensic Sciences Network
Questioned Document Workgroup (QDWG)
Collaborative Exercise 2023
Examination of Alteration**



- 8 institutes signed up for the participation of CE⁸⁰
- 7 returns



Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

Background:

- Both Romanized Malay and English use 26 alphabet letters (a to z) in their composition of words.
- Examinations of questioned Romanized Malay handwriting using a writer's specimen English handwriting (and vice versa) have been conducted over the years.

Problem statement:

- Do the alphabet letters in the two languages share common characteristic features and they can be used for comparison?



Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

Plan:

- Recruitment of Writers:
 - Age: Above 18 (*Reasons: (1) legal age to obtain consent (2) exhibiting more stable handwriting features*)
 - Education: Received education in both English and Romanized Malay
 - Number: Target to collect known handwriting from more than 100 writers



Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

Collection of Handwriting

Asian Forensic Sciences Network Questioned Document Workgroup (AFSN QDWG) is conducting a survey on the characteristics of English handwriting and Romanised Malay handwriting of writers of:

- 18 years old and above,
- have received education in both English and Romanised Malay.

You are invited to participate in the survey by copying three short passages with the ballpoint pen provided. The approximate time needed is about 10 minutes.

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Please note that the handwriting collected will be securely stored and only anonymised data (not traceable back to individual participants) will be shown during reports, presentations, or publications.

Thank you for your participation!

The Steering Committee has prepared a handwriting specimen collection form



Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

(1) Consent form

CONSENT FORM

By signing the below consent, you are authorising (i) collection, access to, use and storage of your handwriting and data collected in this form by the researchers, for the purposes of the study; and (ii) disclosure of such data to, and use and storage by the researchers and relevant third parties, for the purposes of the study.

Only anonymised data (not traceable back to individual participants) will be shown during reports, presentations, or publications. Your identity will remain confidential.

I _____ understand that the information collected from me will only be used for the purpose of scientific research.

Consent to participate in the study:

☐ Yes, I agree to participate in this study.

☐ No, I do not agree to participate in this study.

I hereby give my consent to the collection of my handwriting and data as indicated on the Data Collection Sheet at ANNEX 1.

Name of Participant Signature Date



Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

(2) Data Collection Sheet

ANNEX 1: Data Collection Sheet

1. Gender: Female / Male

2. Year of Birth: _____

3. Nationality: _____

4. Ethnicity: _____

5. Which hand(s) you use to write?

- ☐ Left hand
- ☐ Right hand
- ☐ Both hands

6. Highest education level you have received:

- ☐ Primary School⁸⁵
- ☐ Secondary School
- ☐ Junior College
- ☐ Tertiary Institute (Polytechnic, University etc)

7. Languages that you have learnt to write:

- ☐ Romanised Malay (No. of years: _____)
- ☐ English (No. of years: _____)
- ☐ Arabic (No. of years: _____)
- ☐ Chinese (No. of years: _____)
- ☐ Tamil (No. of years: _____)
- ☐ Others
Please state: _____
(No. of years: _____)



Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

(3) Passages

- One in English
- Modified “London Letter”

1.

This letter is addressed to everyone in the company:

Mr. D. Lloyd and I will be going for a business trip from 27th November to 2nd December. Our trip will bring us to London, Vienna, Berlin and then Athens. I hope we can visit the House of Colonel Parry, at 1496 Zermott St. when we transit in Switzerland. We can take the ‘Y.X.’ Express train 3580 and alight at King James Blvd. station. The good news is, I expect us to reach on Tuesday or Wednesday.

Dr. L. McQuaid and Robt. Unger, Esq. will arrive at Turin tonight and are going to stay there for a week.

Things are quiet in Rome. Letters from Chas E. Fuller tell us that he has left Rome but he can join us in Greece.

He should be able to meet us before he goes off.



Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

(3) Passages

- Two in Romanised Malay

2.

Surat ini ditujukan kepada semua orang dalam syarikat:

Encik D. Lloyd dan saya akan pergi untuk perjalanan perniagaan dari 27 November hingga 2 Disember. Perjalanan kami akan membawa kami ke London, Vienna, Berlin dan kemudian Athens. Saya harap kita boleh melawat House of Colonel Parry, di 1496 Zermott St. apabila kita transit di Switzerland. Kita boleh menaiki kereta api Ekspres 'Y.X.' 3580 dan turun di King James Blvd. stesen. Berita baiknya, saya menjangkakan kita akan sampai pada hari Selasa atau Rabu.

Dr L. McQuaid dan Robt. Unger, Esq. akan tiba di Turin malam ini dan akan tinggal di sana selama seminggu.⁸⁷

Keadaan di Rom sunyi. Surat daripada Chas E. Fuller memberitahu kami bahawa dia telah meninggalkan Rom tetapi dia boleh menyertai kami di Greece.

Dia sepatutnya dapat berjumpa dengan kita sebelum dia pergi.

3.

Dari mana asal kamu, Xavier? Kamu buat apa di sini?" Kakak saya seorang doktor. Gajinya cukup untuk kehidupan harian kami. Cita-cita saya adalah menjadi seorang doktor. Saya sungguh gembira dapat banyak mempelajari tentang ilmu Bahasa Melayu. Saya yakin saya dapat belajar tulisan rumi Bahasa Melayu dengan baik jika lebih tekun.

"Faham tak apa yang saya katakan?" Rancangan saya nanti, ingin bersiar-siar di Kuala Lumpur. Namun, saya memerlukan lebih usaha ataupun "Extra effort" untuk mempelajari tulisan rumi Bahasa Melayu. Tadi, saya ada mendengar cerita kamu ketika sedang makan malam. Jika bekerja keras untuk mencapai cita-cita, pengorbanannya tidak akan sia-sia. Usahanya akan menjadi kebahagiaan terindah dalam kehidupannya nanti.

Murid-murid kini, ada yang belajar bahasa Melayu dan Indonesia. Qasidah merupakan salah satu puisi Arab. Walaupun alat music (muzik) tiupan vuvuzela sangat bising kedengarannya, masih ada yang menggemarnya. Zaman dahulu, qasidah adalah sebagai satu bentuk hiburan yang disukai. Orang-orang kampung gemar menyertainya. Qalam pula adalah alat tulis tradisional kaum arab. Pelajar yang berbagai aliran rancak mempelajari Bahasa Melayu. Harap mereka berusaha gigih untuk mencapai cita-citanya. Vokabulari mereka akan meluas semakin hari. Yakinlah di satu hari mereka akan mahir dengan bahasa itu. Mereka semestinya mengatur waktu yang bijak untuk menjayakan semua aktiviti itu.



Our work 2022-2023

Collaboration and Cooperation

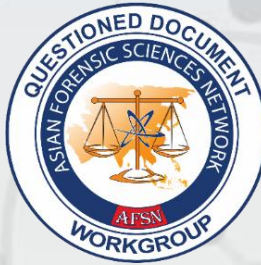
QDWG research study on handwriting

Invitations to participate

- Handwriting collection
- Handwriting features analysis
- Data treatment
- Writing of paper for publication



Election



Confirmed candidates for QDWG Steering Committee (2023-2025)

Position	Name	Institute
Chair	1. Nellie Cheng	Health Sciences Authority, Singapore
Vice-Chair	1. Wan Rahimah 2. Han Xingzhou	Department of Chemistry, Malaysia Institute of Forensic Science, Ministry of Public Security, People's Republic of China
Secretary	1. Qin Da 2. Jovelyne Maggay	Institute of Forensic Science, Ministry of Public Security, People's Republic of China Philippine National Police Forensic Group, Philippines
Member	1. Meenakshi Mahajan 2. Bing Li 3. Li Chi Keung	Regional Forensic Science Lab, NR, Dharamshala, District Kangra (HP), India China University of Political Science and Law, Beijing, People's Republic of China Hong Kong Government Laboratory, HKSAR, People's Republic of China



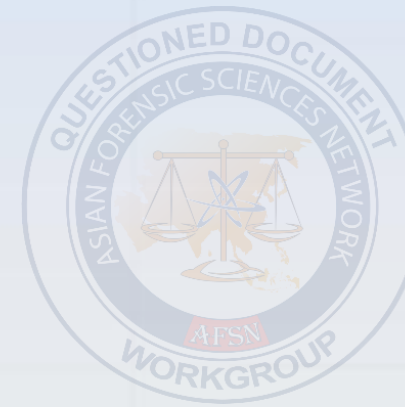
No elections
needed



For election



Election



ASIAN FORENSIC SCIENCES NETWORK

TERMS OF REFERENCE
FOR WORKGROUP AND COMMITTEE

According to the AFSN Terms of Reference for WG/C Section 4 to 6 on Membership, Steering Committee and Subcommittee, and Voting:

- Each member institute shall have only **one** vote.
- Decisions made through voting process are based on a simple majority. In cases where the votes are equally divided, the vote of the Chairperson is decisive.



Election

Election for the position of Steering Committee Member



Dr Meenakshi Mahajan, Regional Forensic Science Lab,
NR, Dharamshala, District Kangra (HP), India



Dr Bing Li, China University of Political Science and Law,
Beijing, People's Republic of China

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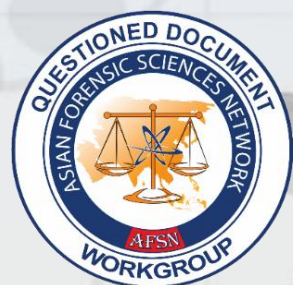
Elected



Dr Li Chi Keung, Hong Kong Government Laboratory,
HKSAR, People's Republic of China



QDWG Steering Committee 2023-2025



Chair

**Ms Nellie
Cheng**
Health
Sciences
Authority,
Singapore



Vice-Chair

**Mdm Wan
Rahimah**
Department of
Chemistry,
Malaysia



Vice-Chair

**Dr Han
Xingzhou**
Institute of
Forensic
Science,
People's
Republic of
China



Secretary

Dr Qin Da
Institute of
Forensic
Science,
People's
Republic of
China



Secretary

**Ms Jovelyne
Maggay**
Philippine
National Police
Forensic
Group,
Philippines



Member

Dr Li Chi Keung
Hong Kong
Government
Laboratory,
HKSAR,
People's
Republic of
China

Terima Kasih



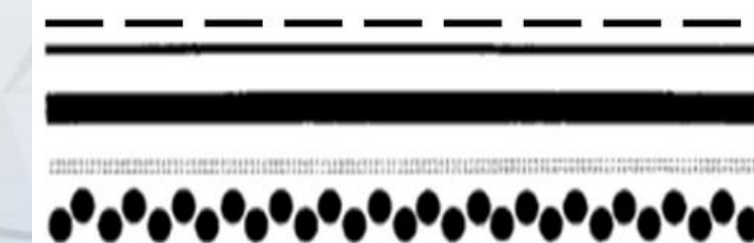
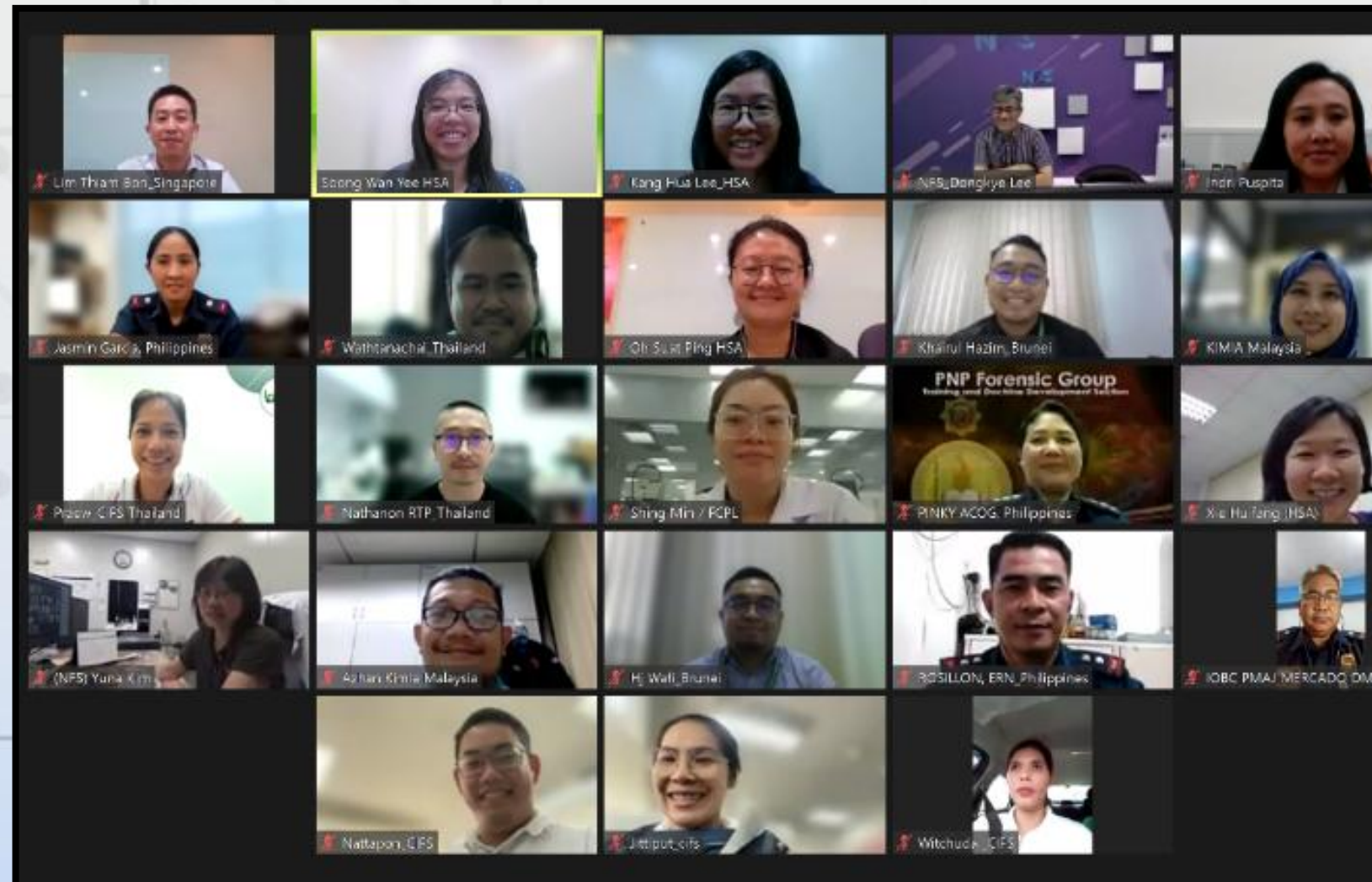


TRACE EVIDENCE WORKGROUP

2023 ACTIVITIES

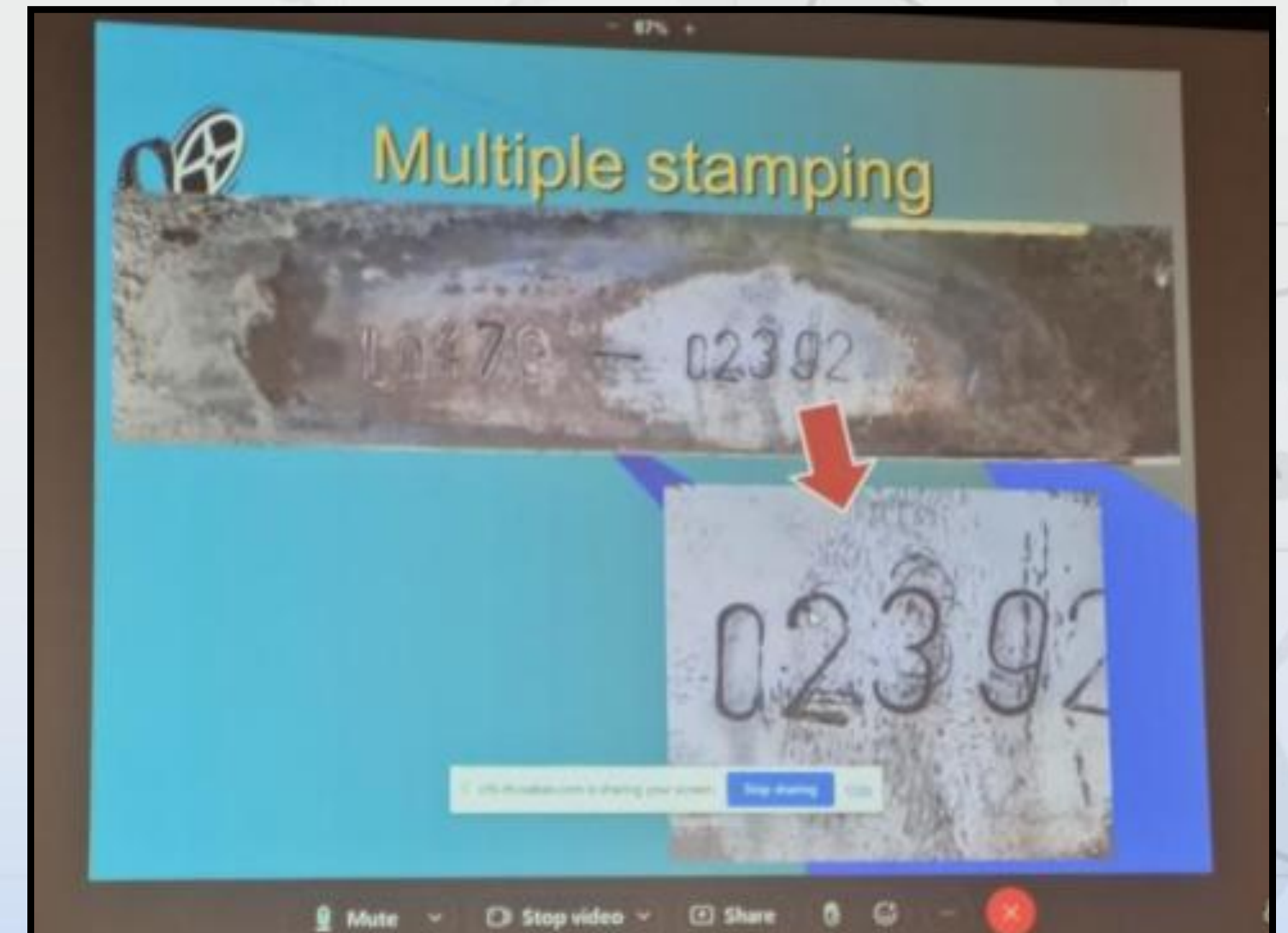
AFSN TEWG Tape Sharing session

- As part of the initiative of 2023, TEWG and Forensic Chemistry & Physics Laboratory, Singapore organised the “**TEWG TAPE SHARING SESSION**” on 12th Jul 2023.
- A workshop titled “**Introduction to Forensic Examination & Comparison of Pressure Sensitive Tape**” was conducted by Ms Oh Suat Ping, Singapore. There were also speakers from different AFSN member institutes sharing on case studies and challenges faced by their laboratories in the tapes analysis work.
- Approximately 60 participants from Thailand, Malaysia, Singapore, Brunei, Korea, Indonesia, Philipines and China attended this online session.



Training programme: The Serial Numbers & VIN restoration

- **Mr Saiful Fazamil**, Director of Criminalistics Division (KIMIA), also the **Vice Chair of TEWG**, was invited to conduct a virtual technical training to the staff in CIFS on **28 June 2022**.
- Objective: to prepare examiners for a new service that offers vehicle identification, particularly the verification of VIN and engine numbers, and restoration of obliterated serial numbers.
- **15 participants**, consisting of forensic scientists from the Firearm and Physics Evidence Examination Section and the Crime Scene Investigation Section attended the training.



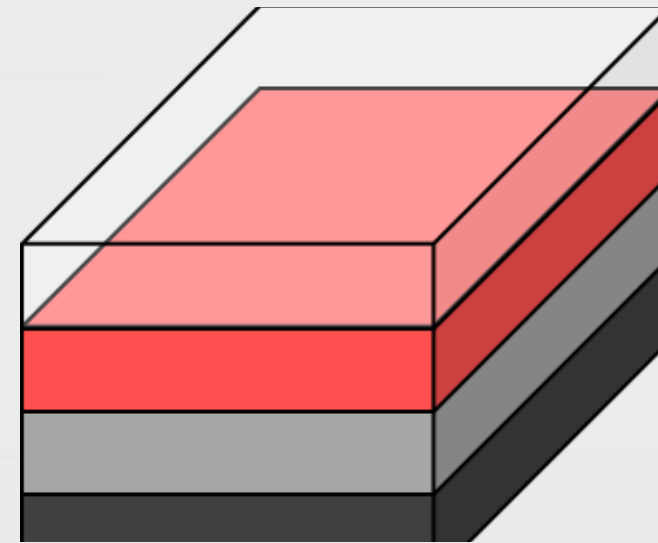
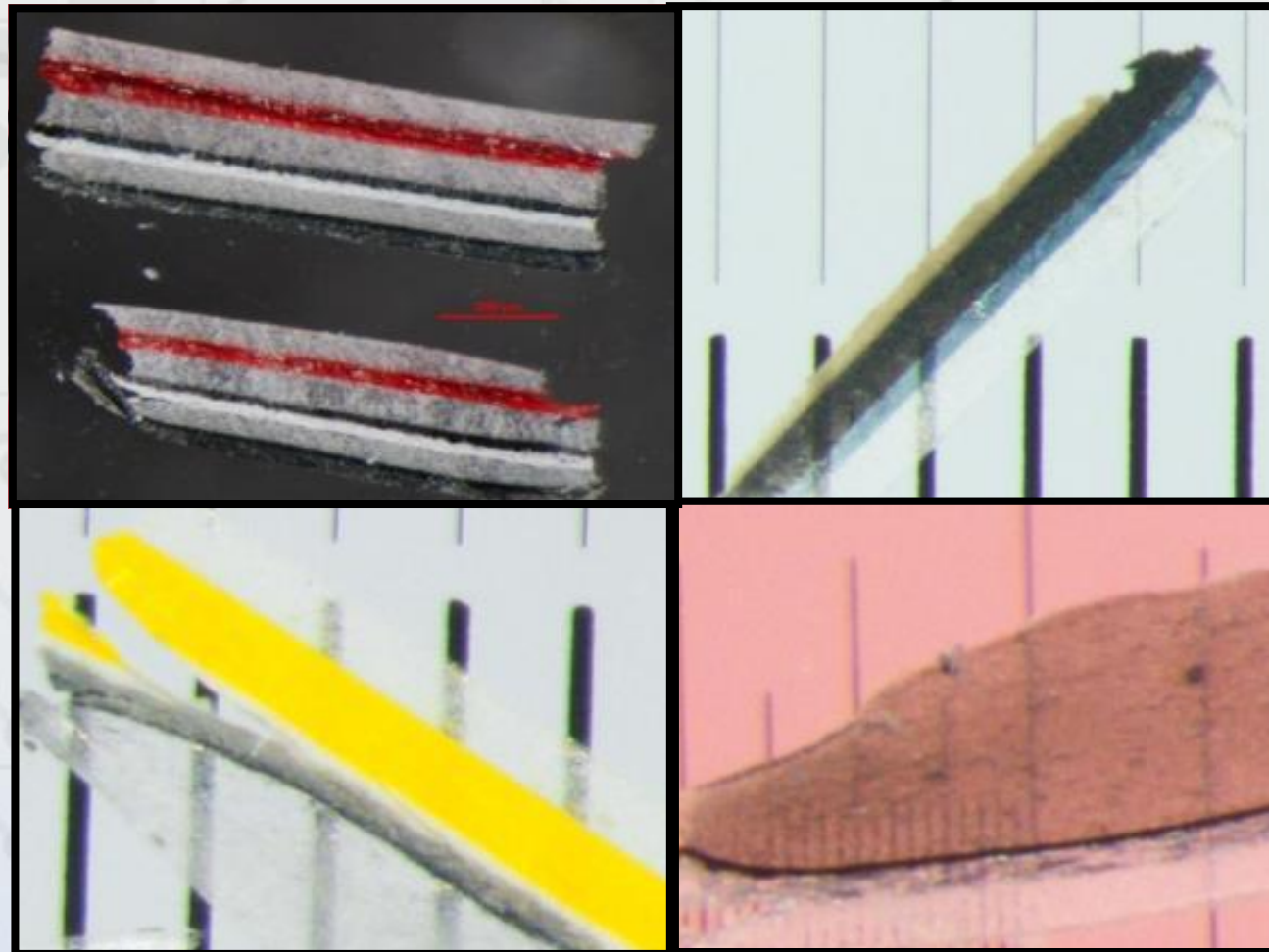
Workshop: Practical Paint Analysis & Database

- A pre-symposium workshop titled “**Practical Paint Analysis & Database**” was conducted by Mr Lim Thiam Bon, **the Chair of TEWG**, to the 10 participants from the Department of Chemistry, Malaysia.
- This is an effort of TEWG to educate trace examiners and enhance knowledge in the realm of trace evidence analysis and interpretation among the members of AFSN.

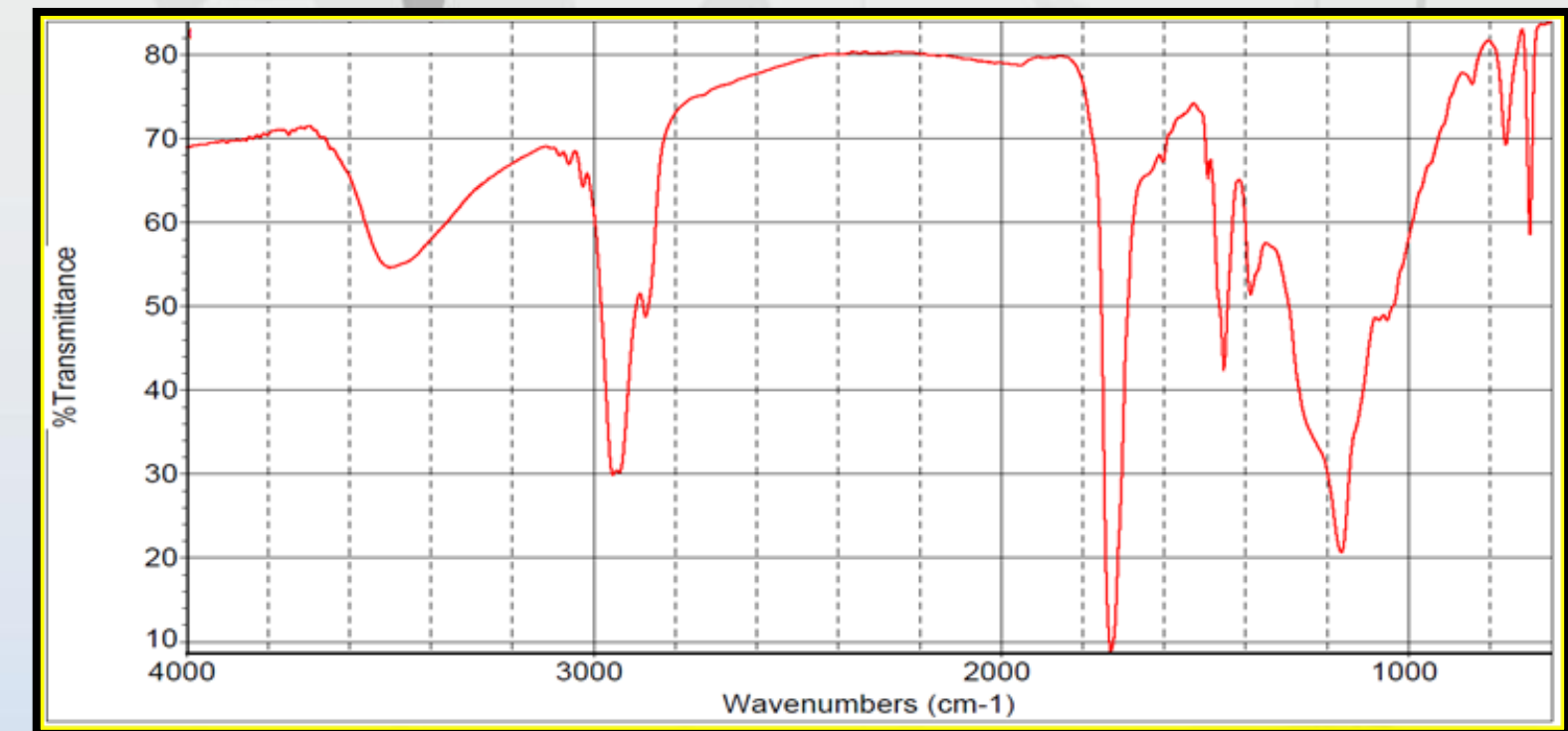


Workshop: Practical Paint Analysis & Database

- The workshop shared the overview of vehicle paint composition and analysis, spectral interpretation of paint components, the use and value of vehicle paint databases in providing intelligence information and acting as a tool to strengthen evaluation/interpretation of vehicle paint evidence.

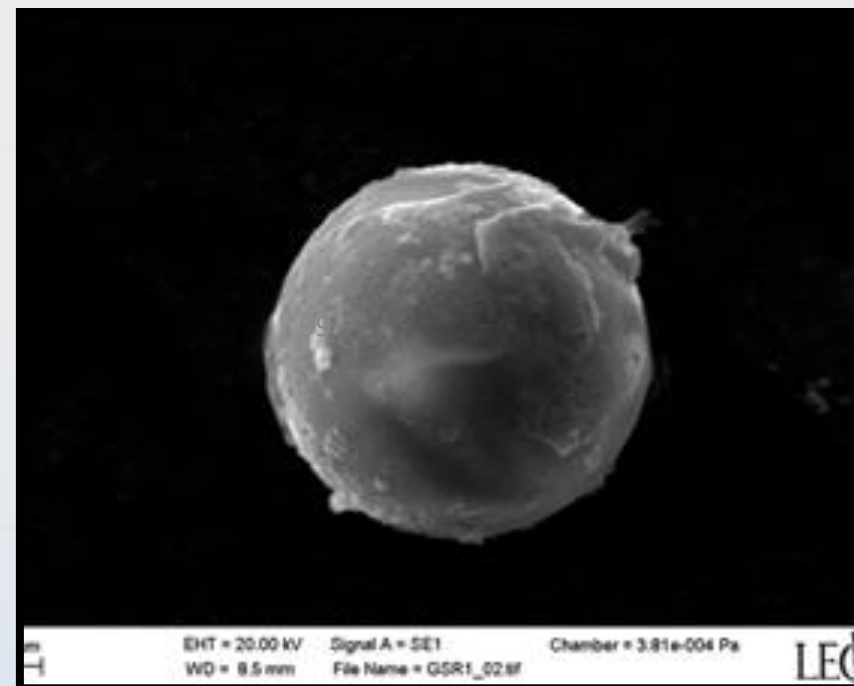
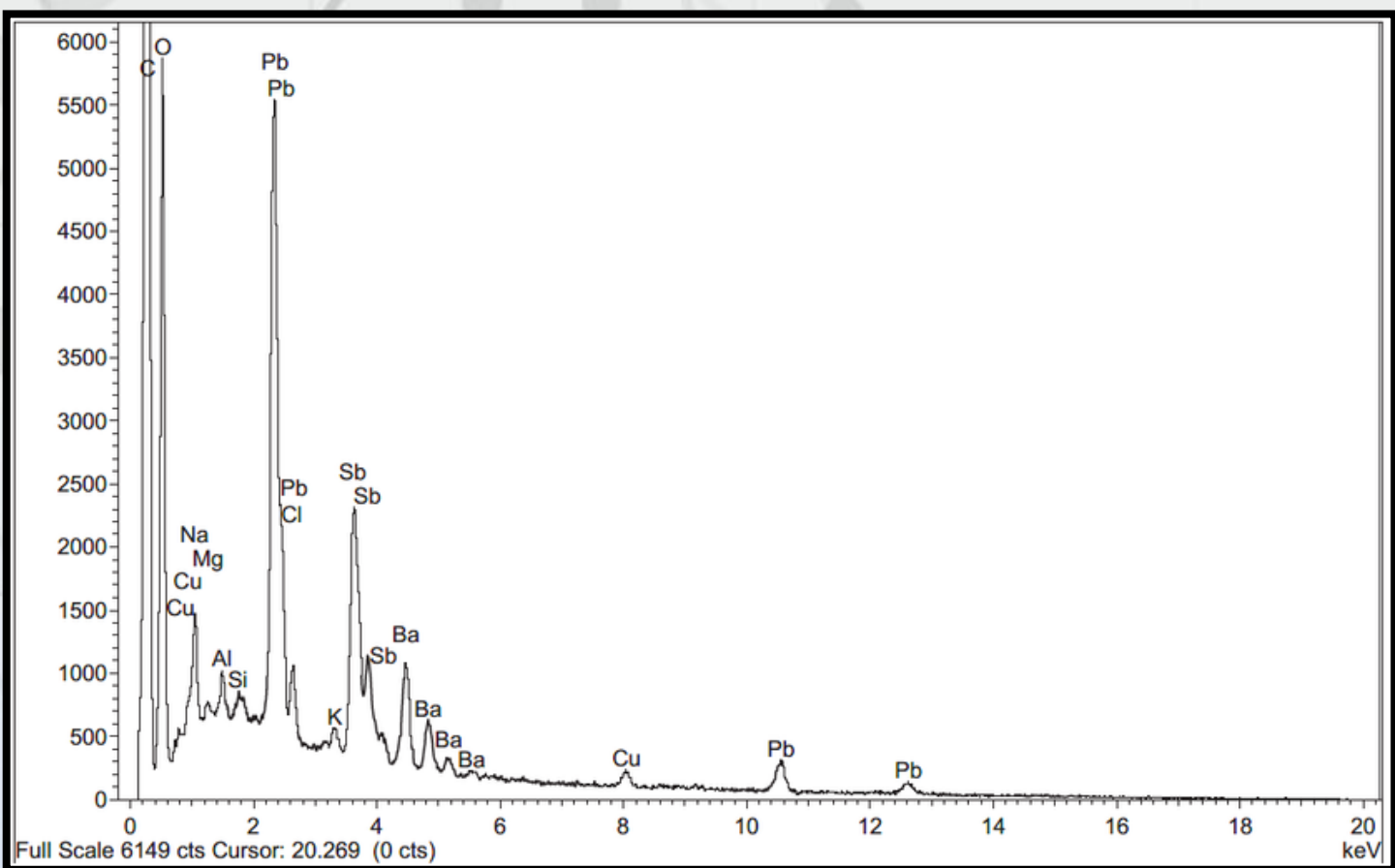


Clearcoat	OT2	} Topcoats
Colourcoat	OT2	
Surfacer	OU1	} Undercoats
Primer	OU2	
Substrate	SUB	



Collaborative Exercise: Gunshot Residues Analysis

- The first collaborative exercise of **gunshot residues analysis** was administered by the Department of Chemistry, Malaysia.
- Through this exercise, it is hoped that a comprehensive study on practice and technical approaches in the analysis of gunshot residues would enhance lab's capability and encourage collaborations among member institutes in this area of analysis.
- The results were shared in this AFSN Symposium.



AFSN TEWG Scientific Session 2023

- The TEWG scientific session saw an increase of abstracts submission. Altogether, there were 16 oral presentations and 4 posters.
- A variety of areas of trace evidence presented which are related to soils, fire debris analysis, home-made firearms, explosives, black powder, cosmetics, gunshot residues, serial numbers restoration, cable ties, etc, with the use of advanced technology such as IRMS, micro-XRF, spectrophotometer, among others.



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TOXICOLOGY WORKGROUP

2023 ACTIVITIES

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I. Update of 2023 AFSN Lab Training Workshop

Jointly organized by Health Sciences Authority (HSA) and the AFSN IDWG, TXWG and QASC

Date: 10 – 14 Jul 2023

Asian Forensic Sciences Network Training
Workshop 2023

Toxicology Workgroup • Illicit Drugs Workgroup • Quality Assurance & Standards Committee

This workshop aims to provide participants with valuable insights and practical knowledge on laboratory best practices as well as testing of cannabinoids and new psychoactive substances in both drug samples and biological specimens.

Date: 10 – 13 July 2023
Format: Zoom Webinar
Time: Refer to programme below

Registration by : 23 June 2023
Scan the QR code or go to <https://go.gov.sg/afsn-2023-workshop>

Date	Time (GMT+8)	Topic
10 July 2023	1500 – 1700	Quality - the way to move forward
11 July 2023	1400 – 1500	Analysis of Cannabinoids in Health products
	1500 – 1600	Analysis of Cannabinoids in Edibles and Blood
	1600 – 1700	A Fully Automated Workflow for Quantitative Analysis of Cannabinoids in Urine
12 July 2023	1000 - 1100	Analysis of NPS in drug samples: Challenges, Laboratory Approaches and Legislative Control
	1100 - 1200	Analysis of NPS in drug samples: Techniques used for Identification
	1500 – 1700	Analysis of NPS in Biological Specimens: Challenges, Laboratory Approaches and Result Interpretation
13 July 2023	1430 – 1530	Method Validation for Seized Drugs
	1530 – 1630	Method Validation for Biological Samples Analysis

- **9 hybrid lectures** on laboratory best practices, method validation, automation, as well as testing of cannabinoids and new psychoactive substances in seized drugs, biological specimens, food and health products.
- **5 on-site participants** from KIMIA Malaysia (2), DSS Brunei (2) and PDEA Philippines (1)
- **~400 online participants** from 28 countries

Global Outreach	
Malaysia	91
Singapore	84
Indonesia	39
Philippines	34
Mexico	32
Hong Kong SAR	22
Thailand	21
Sri Lanka	19
Turkey	8
Brunei Darussalam	7
Romania	6
Paraguay	5
United States	5
Egypt	4
Iran	1
Armenia	3
Estonia	3
Korea, Republic of	3
Malta	3
Côte d'Ivoire	2
Portugal	2
Australia	1
France	1
Germany	1
Mongolia	1
Serbia	1
South Africa	1

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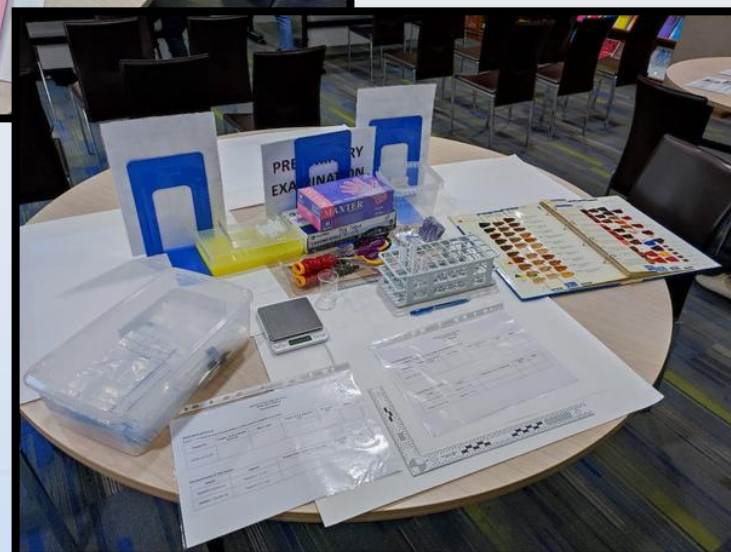
Jointly organized by Health Sciences Authority (HSA) and the AFSN IDWG, TXWG and QASC

Date: 10 – 14 Jul 2023

- **Hair workshop** on preliminary examination and processing of hair samples for drug analysis



By Chan Si Jia, Zhang HuiFen, Lim Cheng Min and Soo Chock Ying





Jointly organized by Health Sciences Authority (HSA) and the AFSN IDWG, TXWG and QASC Date: 10 – 14 Jul 2023



Webinars

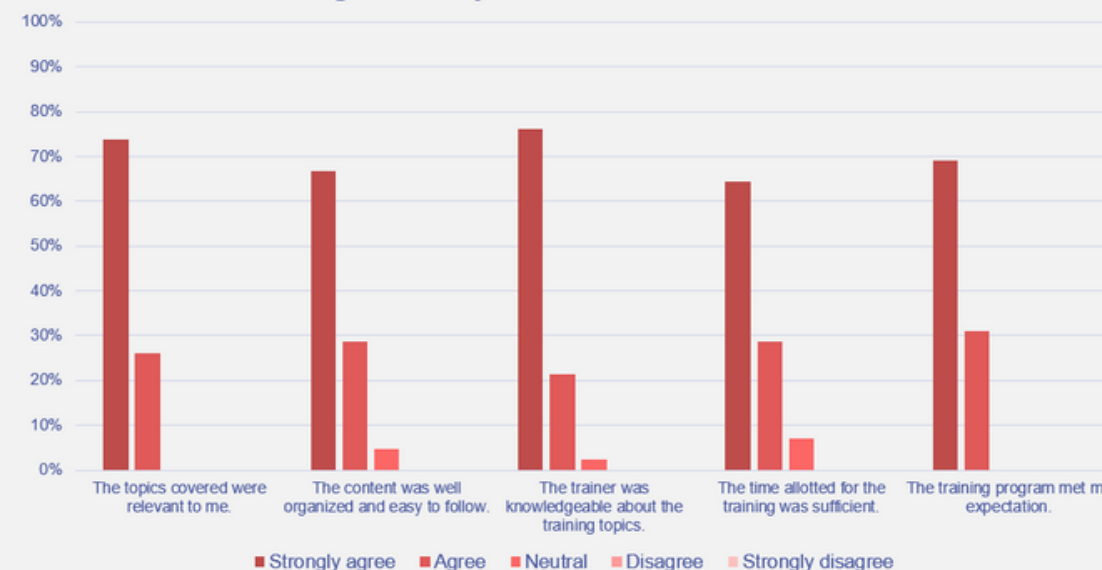
Presented by Shao Xing, Aisyah, Jordan Ong, Gina Chew, Evelyn Goh, Ching Yee and Dr Lui

Moderated by Wendy, Hooi Yan, Hian Twan and Grace

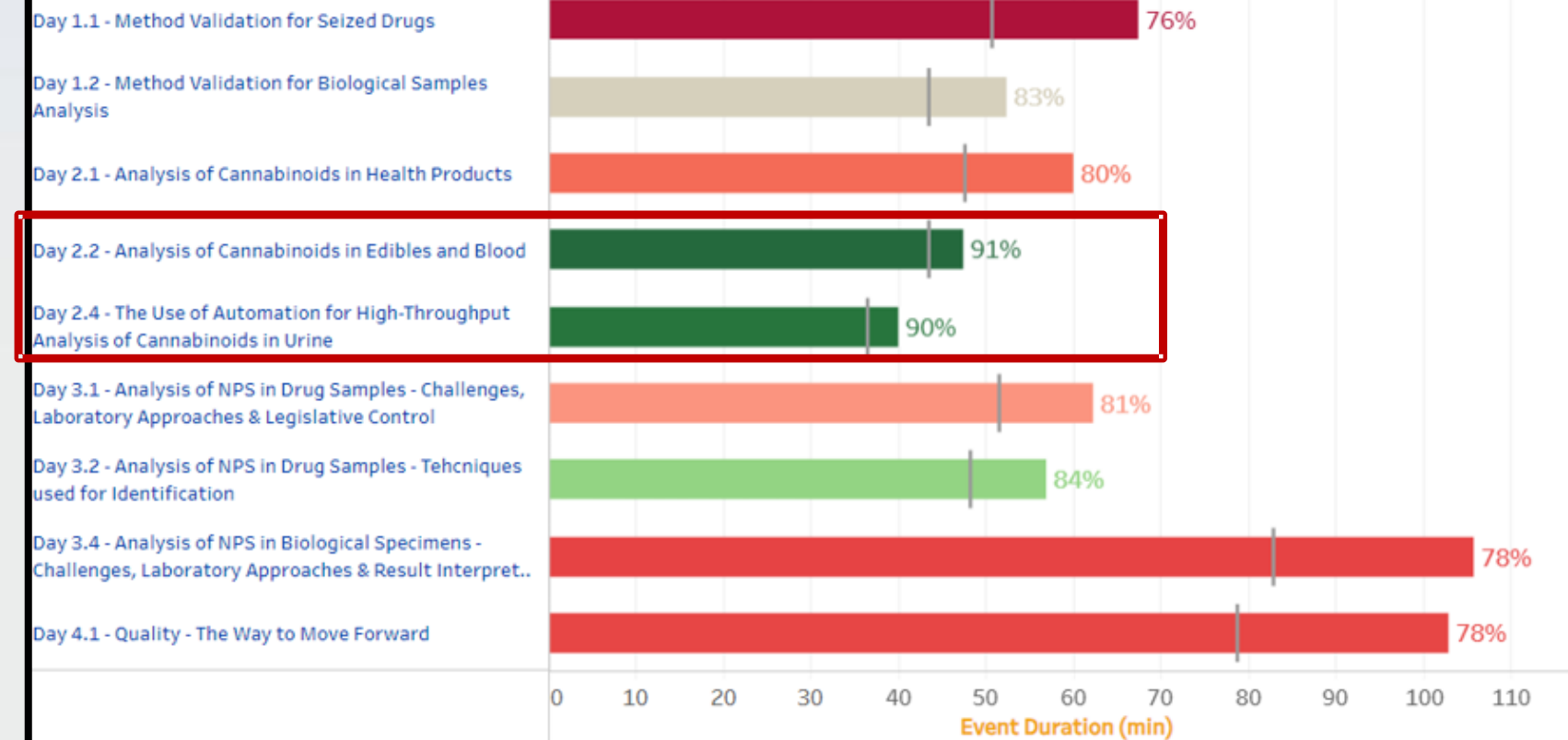


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AFSN training workshop 2023 feedback from AFSN members



Audience Retention



Analysis on NPS with instruments analysis

Alcohol analysis (includes Methanol and Ethanol) in biological specimens which includes the pharmacology and the data analysis.

Analysis of drug abuse in alternative specimen

Heavy metal analysis in clinical sample (blood, urine ..)

share your experience with analytical sources of error and brought solution

Alternative cost effective toxicology test.

more on method validation and qualitative analysis

El de los comestibles de cannabinoides pero más a fondo (The one about cannabinoid edibles but more in depth)

What topic would you like to see being covered in future workshop ?



II. Update of 2023 AFSN Annual Meeting and Symposium

Date : 11-15 Sep 2023 in Kuala Lumpur, Malaysia

- Hosted by KIMIA, Malaysia
- TXWG Invited Speaker: Assoc Prof Dimitri Gerostamoulos
- Workshop on hair drug testing
- 10 oral presentations: Malaysia, Singapore, Thailand, Philippines, UNODC
- 7 posters presentations: Indonesia, Singapore, Korea, Thailand
- 1 vendor talk: Gerstel LLP
- Case discussion with expert (a kickstart for mentorship)
- Pre symposium Workshops by Waters & Agilent Tech
- Participation: a lot better with the aid of online mode (notes and recording link for expert talks can be shared with other members)

PULLMAN 4 : TOXICOLOGY					
DATE	MONDAY 11 SEPT 2023	TUESDAY 12 SEPT 2023	WEDNESDAY 13 SEPT 2023	THURSDAY 14 SEPT 2023	FRIDAY 15 SEPT 2023
0830 - 1100	PRE SYMPOSIUM WORKSHOP	PLENARY SESSION 1 OPENING CEREMONY	PLENARY SESSION 3	PLENARY SESSION 4	PLANNED TOURS (TBC)
1100 - 1130			1000 - 1030 COFFEE BREAK & POSTER VIEWING	1000 - 1030 COFFEE BREAK & POSTER VIEWING	
1130 - 1200		PLENARY SESSION 2	10:30 - 12:00 High throughput drug screening in forensic toxicology by Dr Dimitri Gerostamoulos	10:30 - 12:00 Workshop on hair drug testing	
1200 - 1230			12:00 - 12:30 Vendor talk - Gerstel	Members sharing case issues for discussion	
1230 - 1400		LUNCH BREAK			
1400 - 1410		Welcome address by WG Chair	Postmortem drug interpretation in forensic toxicology by Dr Dimitri Gerostamoulos	CLOSING CEREMONY AFSN AGM MEETING	
1410 - 1425		Drugs & Driving – issues for forensic laboratories by Dr Dimitri Gerostamoulos			
1425 - 1440					
1440 - 1455					
1455 - 1510					
1510 - 1525		Oral 6			
1525 - 1540		Oral 7			
1540 - 15:55		Oral 1	Oral 8		
15:55 - 1610		Oral 2	Oral 9		
1610 - 1625		Oral 3	Oral 10		
1625 - 1640		Oral 4	Work Group Meeting		
1640 - 1700		Oral 5			
1700 - 1730		COFFEE BREAK			
1730 - 1830	WELCOME RECEPTION	Retreat			
1930 - 2300			OFFICIAL DINNER BY INVITATION ONLY		



II. Update of 2023 AFSN Annual Meeting and Symposium

Date : 11-15 Sep 2023 in Kuala Lumpur, Malaysia



2023 TXWG meeting @ Pullman Hotel, KL



Update and discussion Future TXWG Activities

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3. Updates and Discussion : Future Training Plans

i. Collaboration with IDWG & QASC for joint activity

Toxicology and drugs are closely related, good to continue collaborating with IDWG & QASC for joint activity e.g. joint webinar

- Topics of interest e.g. cannabinoids, NPS, method validation, drug testing in hair
- Quality Assurance..e.g proper validation techniques (established guidelines for biological specimens)



3. Updates and Discussion : Future Training Plans

i. Online member's sharing session

Representative from each country members to update & share the latest technique/approach in toxicology

- Techniques/methods of interest
- Specimen handling



3. Updates and Discussion : Future Training Plans

- **Dr Stephen Morley, consultant chemical pathologist & forensic toxicologist,** A/Prof University of Leicester, Head of Pathology School, Leicester Royal Infirmary, UK (invited speaker for AFSN TXWG in 2021 by CIFS, Thailand) had an informal visit to HSA on 11 Oct 2022
- He suggested the idea of having online mentorship to help the regional toxicologists in the area of toxicology interpretation

i. Online case discussion sessions with invited expert(s)

- Case studies for discussion
- Sharing case experience

Kick start the members sharing case issues for discussion with Assoc Prof Dimitri Gerostamoulos during 2023 AFSN TXWG



3. Updates and Discussion : Future Training Plans

i. TXWG programme for 16th AFSN Thailand, 2nd week of September 2024 (tentative), 3-day event

- Invited Speaker - Dr Dimitri and Dr Simon Elliott
- Country update e.g. challenges and technologies update from representative from each country member?
 - discussion of current problems that can lead to issues in future
- Workshop?

111

WG will send the survey to all participants for feedback on the 2023 TOX programme and proposal for 2024 TOX meeting in Thailand



4. Round the Table Discussion

1. Preferred timing for webinar/online discussion?

Suggestion from the members to avoid Monday and Friday, and prefer the webinar to be held in the afternoon (2-4pm), with no more than 1 hr.

1. Interested in participating the interlaboratory comparison study?

Encourage members to participate in UNODC International Collaborative Exercises (ICE) programme for biological specimen.



5. Election of position holder for 2024/2025

Members from 6 institutes (HSA, DSS, KIMIA, NRL, PNP and NBI) attended the business meeting, and casted their votes as follow:

S/N	Member Institute	Position
1	Health Sciences Authority (HSA), Singapore (Moy Hooi Yan)	Chair
2	Department of Chemistry (KIMIA), Malaysia (Fathiah A. Zubaidi)	Vice-Chair
4	Department of Forensic Medicine, Faculty of Medicine, Chulalongkorn University, Thailand (Dr Parath Thirati)	Secretary



PUBLICATION OF

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ForensicAsia

Publication of ForensicAsia

- New Issue no. 13 published online, August 2023.
- 9 technical articles and 3 case studies, with a number of articles on forensic biology.
- Including AFSN news, Members' news, New member institute and International scene.



AFSN President's Address

Dear colleagues and friends,

Greetings to all colleagues in Asia and around the world!

I am very pleased to share with you all about our recent endeavors to improve Forensic Science in this part of the Asia-Pacific region. This is an exciting time for our organization, as we continue to establish ourselves as leaders in the field and make strides toward advancing forensic science.

As we move forward, we desire for a more innovative and inclusive forensic community in the Asian Forensic Sciences Network through Information and Communications Technologies Development. Thus, the AFSN will be the avenue for the ten strong workgroups to orchestrate robust discussions and productive activities throughout the calendar year using interactive platforms such as WHOVA, ZOOM, MICROSOFT TEAMS, GOOGLE MEET, and many others.

The leadership of AFSN collectively stands to take the opportunity of an evolving society to redesign policies and practices and ensure that all member institutes and individuals are empowered to their full extent. Therefore, it is imperative that we continue to convene and interact in as many ways as possible. We will do this by harnessing the widely available digital platforms to conduct training, seminars, small group discussions, research, and meetings.

The Network has come a long way since its inception but there is still much work to be done. I, together with the members of the Board, intend to work on various projects and initiatives to ensure the

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WILEY

Best Paper of the Year 2023



Titles of 3 Papers selected by the Guest Editors

Comparison of DNA Yield and STR DNA Profiles for Different Components of Sperm Differential Extraction Method in Casework Samples

Determination of DNA Content from Three Types of Bone Sample to Establish the Bone Sampling Guideline for Missing Person and Unidentified Body Examination

The Detection of Methcathinone in Urine Samples after Consumption of Ephedrine or Pseudoephedrine

Best Paper of the Year 2023

Best Paper selected by the Board . . .

The Detection of Methcathinone in Urine Samples after
Consumption of Ephedrine or Pseudoephedrine

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*Ms Goh Mei Ling Evelyn, Ms Moy Hooi Yan and Dr Lui Chi Pang
Health Sciences Authority, Singapore*

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NEXUS
ANALYTICS



Regula
Schedules evidence updates



Waters

WILEY

**"One moment can change a day, one day can change a life,
and one life can change the world."**

"Achievements in 2024"



CRIME SCENE INVESTIGATION WORKGROUP 2024 ACTIVITIES



ASIAN FORENSIC SCIENCES NETWORK 2024

Annual Report

- **Workgroup events from the past four years**
- **Election of 2025/26 committee**
- **Future Plans**



ASIAN FORENSIC SCIENCES NETWORK 2019

Health Sciences Authority
Forensic Chemistry and Physics Laboratory

Sequencing events in Crime Scene Reconstruction

Crime Scene Investigation Work Group
11th AFSN Annual Meeting and Symposium, Ho Chi Minh City, Vietnam

Louis Koh, Forensic Scientist



Institute of Forensic Science, Ministry of Public Security,
P.R. China

A lossless scanning imaging method for getting the footprint of the crime scene

Weiping Liu, Maoluan Ding

2019.9.19

Crime Scene Investigation Workgroup

Meeting on Firearms/Shooting Reconstruction

25 June 2021





CERTIFICATE OF APPRECIATION

This certificate is presented to

Michael G. Haag

In grateful acknowledgment of his invaluable service rendered as
RESOURCE SPEAKER
during the 13th Asian Forensic Sciences Network Annual Meeting and Symposium
held virtually on October 12-15, 2021 with the theme "Forensic Science in the
Midst of Pandemic: Challenges, Lessons, and Best Practices" thereby
contributing to immeasurable to the success of the event.

Given this 15th day of October 2021



PMGEN ROLANDO HINANAY
Vice-President, AFSN
Chair, Organizing Committee



PBGEN PASCUAL G MUÑOZ JR
Director, PMP Crime Laboratory
Event Host



Research And Judgment Platform



Relying on the research and judgment platform of criminal technical information of Shandong province, they integrates the criminal technical information resources such as the crime scene investigation system, fingerprint system, footprint system, DNA database, video database, and electronic evidence to make information analysis, comparison, and comprehensive judgment, and then form the detection instructions, which will be handed over to county-level criminal investigation departments investigate further and arrest the suspects.

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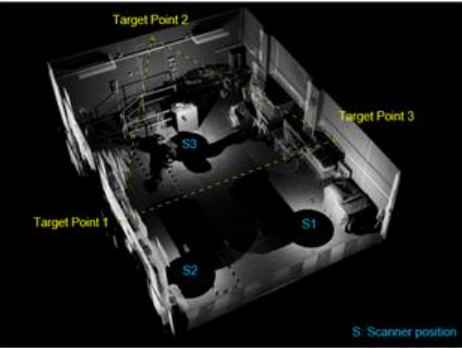
New Technologies
New Methods
New Challenges

Asian Forensic Sciences Network

10th Annual Meeting & Symposium

Conformance with ISO/IEC 17025

- Validation (Part II)




Registration Method	Relative range measured by Reference Instrument	Relative range measured by Scanner (m)	Difference in Relative Range (m)	Difference (%)
Target-based	104.469	104.487	0.018	0.017
Cloud-to-cloud	104.469	104.472	0.003	0.003

The following data was obtained from the Scanner (in metres):

	Target Points 1-2	Target Points 2-3	Target Points 3-1
Average	9.0874	9.0844	9.0885
Average (3 d.p.)	9.087	9.084	9.089
SD	0.0030	0.0025	0.0012
3SD	0.0090	0.0076	0.0035
Average -3SD	9.096	9.092	9.092
Average +3SD	9.078	9.077	9.085

Reference Standard

- Calibrated Electronic Total Station traceable to national standards

Integrated crime scene and evidence systems in Shandong province, China

Equipment traceability and validation procedures to meet ISO17025 requirements



ASIAN FORENSIC SCIENCES NETWORK 2024

Crime Scene Investigation Workgroup

FARO

VIRTUAL SESSION 

**3D Technology in
Forensic Applications**

For AFSN Members Only



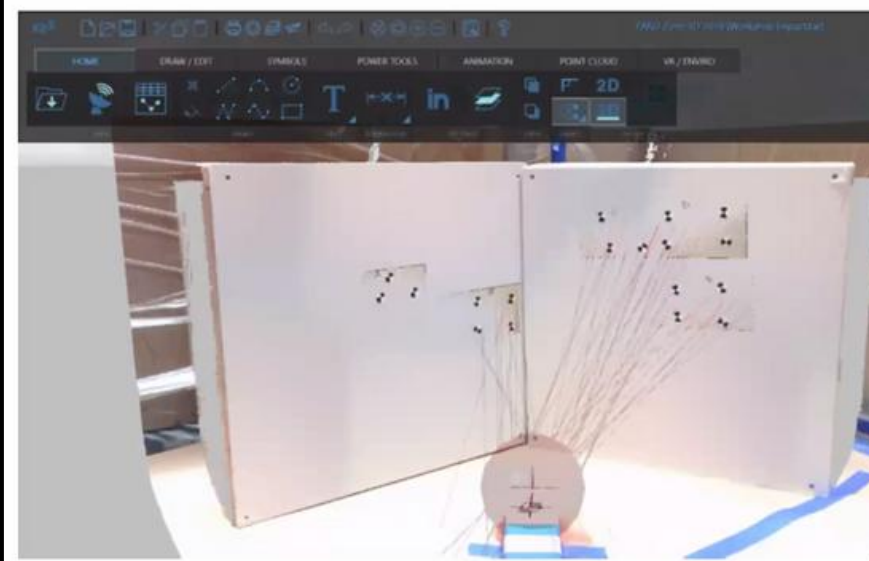
Webinar on 3D Technology in Forensic Applications,

123

Case: Officer Involved Shooti



FARO Zone 3D: BPA



SPEAKERS



David Dustin

Director of Industry Solutions - Public Safety, FARO

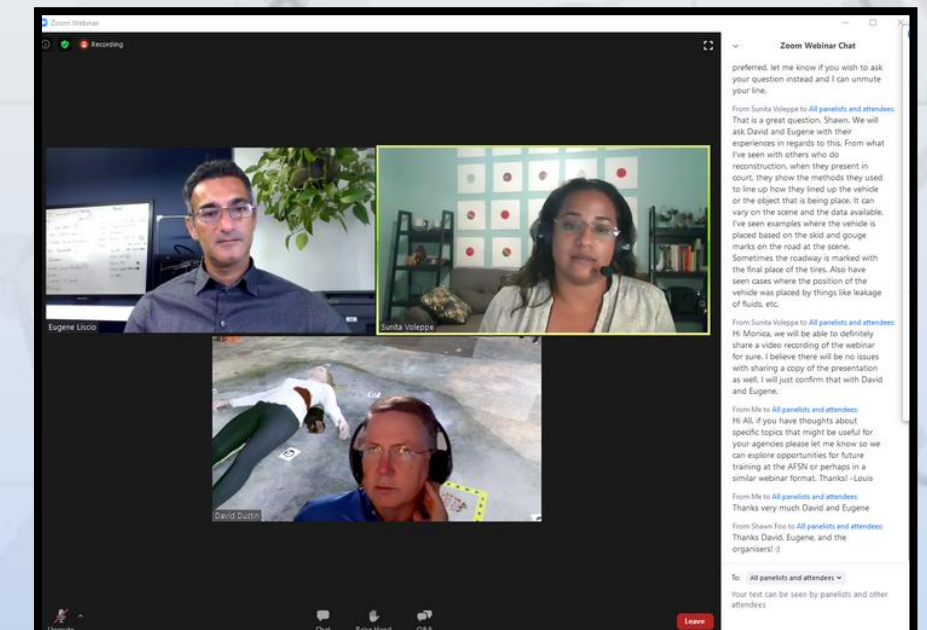
David Dustin is currently the Director of Industry Solutions – Public Safety. Before FARO, David had over a decade of experience providing forensic 3D services as the president of Dustin Forensics. He is an accomplished forensic trainer, courtroom expert, and self-admitted tech junkie. David brings years of practical experience and expertise to the use of 3D tech in public safety and forensics applications.



Eugene Liscio

3D Forensic Analyst, ai2-3D and Instructor

Eugene Liscio is a registered Professional Engineer in the Province of Ontario, Canada, and is the owner of ai2-3D, a consulting company specializing in 3D forensic documentation, analysis, and visualizations. Eugene has testified with interactive 3D crime scene models in court in both the US and Canada utilizing 3D technologies such as photogrammetry and laser scanning. He is also an Adjunct Professor at the University of Toronto Mississauga, where he teaches a 3D Forensic Reconstruction and Mapping course as part of the Forensic Sciences Program.





ASIAN FORENSIC SCIENCES NETWORK 2024

40-hour BPA Basic Course leading to basic BPA qualifications in pattern recognition for crime scene examination at KIMIA, Malaysia.





ASIAN FORENSIC SCIENCES NETWORK 2024

ISO17020 accreditation

Abraham AYSA, International Criminal Investigative
Training Assistance Program (ICITAP)

Quality Workshop – QASC x CSIWG | ISO17020

Why should CSI units get accredited?

Main Gateway for Forensic Evidence
Accredited Crime Scene Laboratories or Units increase confidence in their results by:

- Maintaining impartiality.
- Implementing internationally recognized best practices in their procedures and services.
- Demonstrating and maintaining professional competency.



Technical Article

Accreditation of Crime Scene Investigation under ISO17020:2012 Standard in Hong Kong

Ms Duen-yee Luk*, Mr Terence Hok-man Cheung, Mr Wai-nang Cheng, Mr Wai-kit Sze, Mr Man-hung Lo,
Mr Joseph Sze-wai Wong, Dr Chi-keung Li,
Government Laboratory, Hong Kong (SAR), People's Republic of China
*Email: dyluk@govtlab.gov.hk

Abstract

Crime scene investigation (CSI) is an important link in the criminal justice system as it serves as a bridge between establishing the happenings during an incident and possibly identifying the accountable persons, providing light in the dark. The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) collaborated to develop the ISO/IEC 17020:2012 standard to govern the quality of CSI, a branch of inspection activity. These protocols include the impartiality and competence of the crime scene investigators involved, contemporary recording of scene observations and data obtained, the correct use

Apart from providing crime-related laboratory testing services, FSDGL had been providing 24-hour comprehensive CSI service in Hong Kong for decades. To echo with the Laboratory's vision "To be recognised internationally as a laboratory providing world-class scientific services", the FSDGL had been preparing for ISO/IEC 17020:2012 accreditation for CSI since November 2020. This accreditation programme is under the Hong Kong Inspection Body Accreditation Scheme (HKIAS) operated by the HKAS. During the preparation, a gap analysis regarding discrepancies between the requirements in the ISO/IEC 17025:2017 and ISO/IEC 17020:2012 standards was performed. In addition, since FSDGL is seeking accreditation

<https://www.afsn.asia/ForensicAsia>



ASIAN FORENSIC SCIENCES NETWORK 2024

CSIWG Collaborative Exercises

Year	Participants
2022 (BPA)	16
2023 (BPA + Footwear)	22
2024 (BPA)	19

ASIAN FORENSIC SCIENCES NETWORK

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Bloodstain Pattern Analysis (BPA)

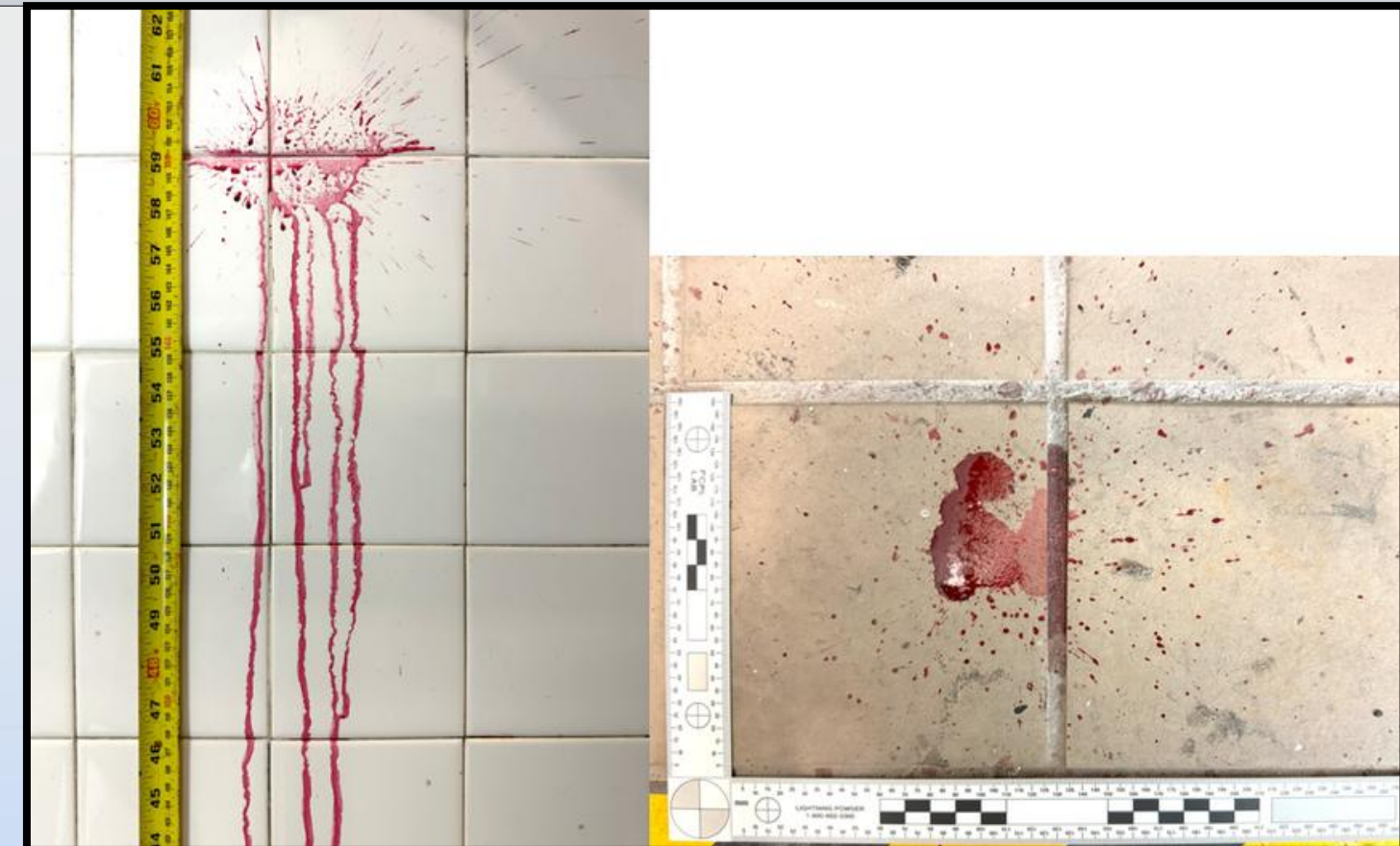
Collaborative Exercise 2024

Forensic Physics and Chemistry Laboratory

Mr Phua Zai Rong
Crime Scene Investigation Workgroup



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ASIAN FORENSIC SCIENCES NETWORK 2024

Plans:

- CSI Workgroup study trip in June 2025 on protocols and techniques (tentative: Beijing)
- Continuation of annual BPA collaborative exercise to promote discipline standardisation
- Training/attachment for members (tentative: Singapore)
- Work with IABPA translation committee on BPA terminology
- Liaise with more workgroups in the region on crime scene/ crime scene imaging/ BPA.



ASIAN FORENSIC SCIENCES NETWORK 2024



DAY 1



DAY 2



DIGITAL FORENSICS WORKGROUP

2024 ¹²⁹ACTIVITIES

New Office Bears



No.	Position Held	Name	Country	Institute
1	Chair	Kang Yanrong	China	Institute of Forensic Science,P.R.C
2	Vice Chair	Muhammad Zulkifly bin Mohd Isa	Malaysia	Royal Malaysia Police
3	Vice Chair	Amornrat Lekwichal	Thailand	Central institute of Forensic Science
4	Secretary	Grace Wong	singapore	Health Sciences Authority
5	Secretary	Zhang Yaoguo	China	Institute of Forensic Science, P.R.C
6	Special Secretary	Do Joon Jung	Korean	National Forensic Service, South Korea

Activities of 2024

1.Seminar in Beijing



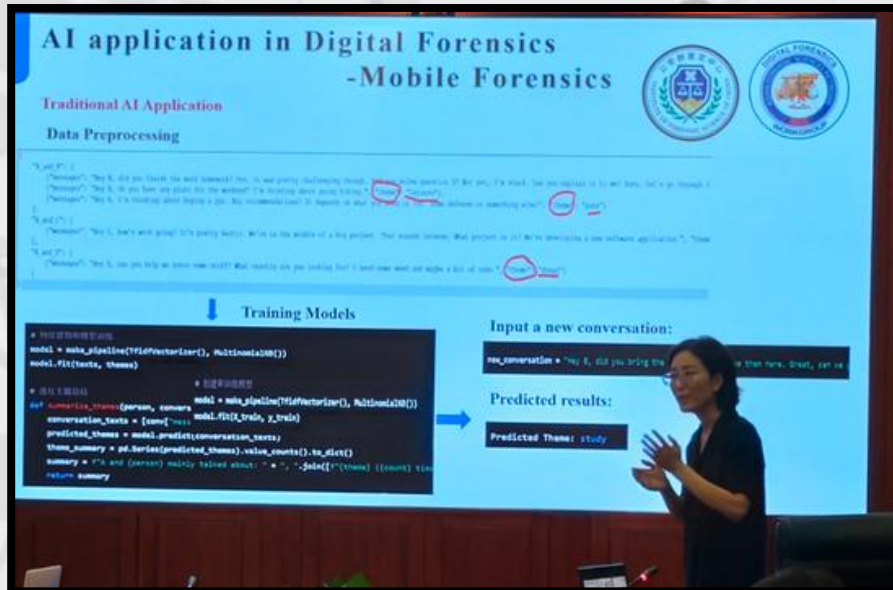
30 Experts from Singapore, Malaysia, Uzbekistan, Hongkong China, China attended the seminar on June 12-16

2024 Activities

2. Academic Exchange

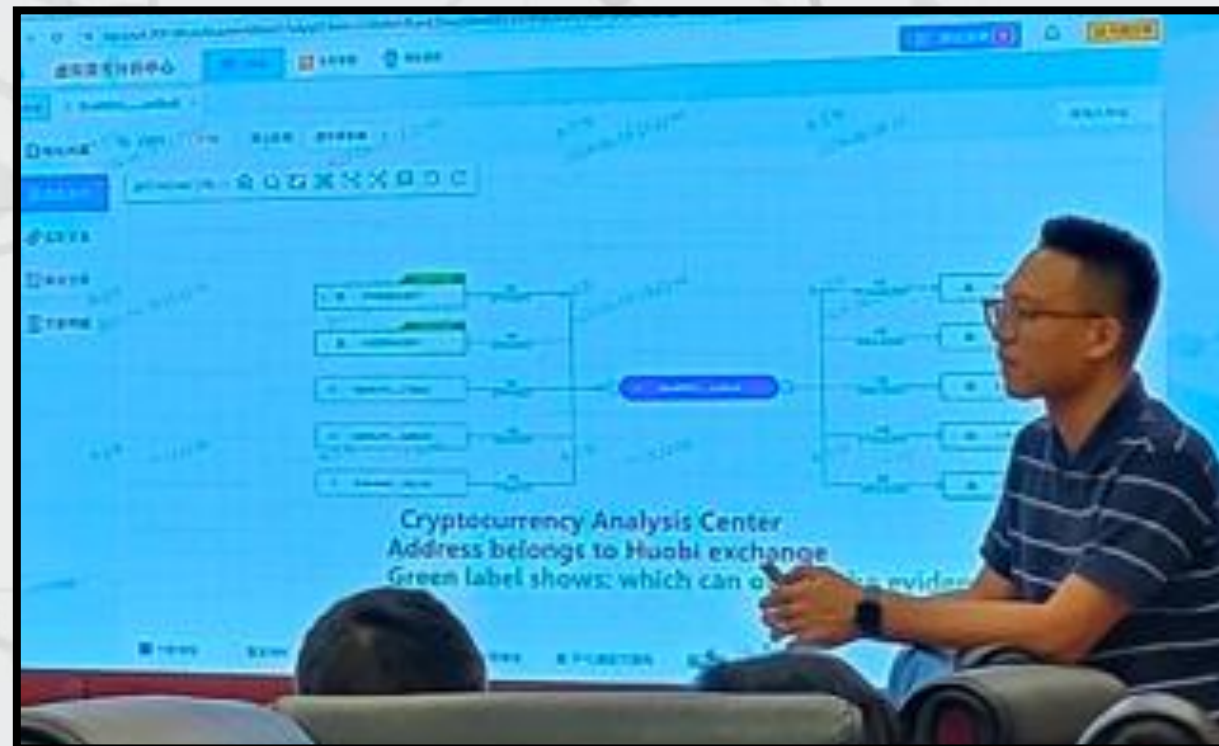


- 1). 3D Print
- 2). Fraud Crime
- 3). Lab Construction
- 4). Voice Recognition
- 5). digital data in traffic accident



2024 Activities

3. Technical Training



- Car Forensics
- Large Model
- Data Recovery
- Mobile Forensics

2024 Activities

4. Laboratory Visist



Toxicology Lab, Trace Evidence Lab, DNA Lab, Digital Forensics Lab...

2024 Activites



5. GreatWall Visit



Experiencing
Chinese History
and Culture.....

2024 Activites

6. Annual Meeting&Symposium



**36 Experts from
Thailand, Singapore,
Malaysia, South
Korea, China, Indonesia,
Timor-Leste.....attended
the meeting & symposium
17 oral presentation
3 posters**

2024 Activities

6. Annual Meeting & Symposium



2024 Activites

6. Annual Meeting&Symposium



2024 Activites

6. Annual Meeting&Symposium



2024 Activities

6. Annual Meeting & Symposium



Mobile Phone Artifacts From Data Extracted By Forensic TX1 Imager

Amornrat Lekwichai¹, Phatirarat Homkrajang¹, Sutavinee Limsuwan¹, Thanphong Intarasorn¹, Duangsamorn Choodeejan²

¹ Central Institute of Forensic Science, ² Department of Special Investigation, ³ dthof@gmail.com

ABSTRACT

The Tableau Forensic TX1 Imager is a digital forensic and data investigative device designed for computer forensic examinations by lawyers and digital forensic scientists. Its ability to examine devices such as HDDs and SSDs without compromising data integrity is crucial in digital science investigations. Digital forensic examiners can efficiently and accurately extract digital forensic data based on ongoing research to improve the efficiency and usability of mobile devices, and investigate further can be verified. This study focuses on analyzing mobile phone artifacts acquired by the TX1 Imager device from both Android and iOS operating systems.

INTRODUCTION

In the contemporary digital landscape, mobile phones have become integral tools that capture and store vast amounts of personal data and communication records. As mobile technology advances, the complexity of the data stored on these devices increases, necessitating sophisticated forensic tools capable of accurately and efficiently extracting and analyzing this information. Forensic tools TX1 Imager³ and Magnet AXIOM software⁴ are well-known for their capabilities in capturing data from both physical and mobile phones. The Forensic TX1 Imager is recognized for its advanced imaging techniques that capture data from both physical and logical sources on mobile devices⁴. Similarly, Magnet AXIOM is known for its comprehensive data extraction and analysis capabilities, supporting a wide range of mobile operating systems and device models⁵. The scope of this study is confined to mobile phone artifacts extracted from iOS and Android operating systems. These platforms are selected due to their widespread use and significant differences in their underlying architecture and data management practices⁶.

OBJECTIVE

To compare mobile phone artifacts extracted by using TX1 Imager and Magnet AXIOM Software.

METHODOLOGY

Comparative analysis of 5 artifact categories on different operating systems using TX1 Imager and Magnet AXIOM software for acquisition and analysis.

Brand	Model	Version	TX1 Imager	Magnet AXIOM
Brand: Apple	Model Number: A1586	Model name: iPhone 6	IOS version: 12.5.7	
Brand: Samsung	Model Number: SM-A750GN	Model name: Galaxy A7	Android version: 10.0	

RESULTS/FINDINGS

Artifact Category	TX1 Imager	Magnet AXIOM
Application Data	100%	100%
Call Logs	100%	100%
Contacts	100%	100%
Messages	100%	100%
Photos	100%	100%

DISCUSSION

From this study we found that iOS operating system: Both TX1 Imager and Magnet AXIOM software were capable of extracting a comprehensive range of data categories. However, Axiom demonstrated a superior ability to extract a larger volume of data compared to TX1. Conversely, Axiom demonstrates superior performance in extracting complex data, including application-specific data, cloud-based information, and encrypted volumes.

CONCLUSION

Data acquisition from iOS and Android devices presents significant challenges for Digital forensic examiners. TX1 Imager is well-suited for basic data extraction, such as contacts, call logs, and SMS. Conversely, Axiom demonstrates superior performance in extracting complex data, including application-specific data, cloud-based information, and encrypted volumes.

REFERENCES

1. Nakar, B., Prabhu, A., & Bharad, C. (2015). Guide to Computer Forensics and Investigations. Cengage Learning.
2. Nakar, B., & Prabhu, A. (2015). Guide to Computer Forensics and Investigations. Cengage Learning.
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6. Nakar, B. (2015). Mobile Device Forensics: Principles and Practice. CRC Press.

MOBILE APPLICATIONS SCAM: CASE STUDY

Amornrat Lekwichai, Ph.D¹, Duangsamorn Choodeejan²

¹Institute of Forensic Science, ²Department of Special Investigation, ³dthof@gmail.com

ABSTRACT

Mobile phone applications scam or fraud through mobile applications involves using a seemingly legitimate application to trick victims from users. This is a common pattern, such as Fake apps, apps with malware, apps that collect money without your permission, etc. Recently, Thailand is faced with a large number of fraudulent applications. Each year there are more and more victims. Lost a huge amount of money. It is considered a top problem that must be resolved and prevented. Department of Special Investigation and Central Institute of Forensic Science, both are agency under the Ministry of Justice. There are digital forensic laboratories responsible for analyzing evidence. In this article, we present an example of mobile phone forensic in case of mobile application scam. Both in the Android and iOS systems in the case of fraud through mobile applications. The victims lost a large amount of money in their account. From the results many evidence of fraud were found in various forms, such as sending fraudulent links through various pathways and chat applications, etc. Mobile Applications Scam, CIFS, DSI

INTRODUCTION

In the contemporary digital landscape, mobile phones have become integral tools that capture and store vast amounts of personal data and communication records. As mobile technology advances, the complexity of the data stored on these devices increases, necessitating sophisticated forensic tools capable of accurately and efficiently extracting and analyzing this information. Forensic tools TX1 Imager³ and Magnet AXIOM software⁴ are well-known for their capabilities in capturing data from both physical and mobile phones. The Forensic TX1 Imager is recognized for its advanced imaging techniques that capture data from both physical and logical sources on mobile devices⁴. Similarly, Magnet AXIOM is known for its comprehensive data extraction and analysis capabilities, supporting a wide range of mobile operating systems and device models⁵. The scope of this study is confined to mobile phone artifacts extracted from iOS and Android operating systems. These platforms are selected due to their widespread use and significant differences in their underlying architecture and data management practices⁶.

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Brand: Apple	Model Number: A1586	Model name: iPhone 6	IOS version: 12.5.7	
Brand: Samsung	Model Number: SM-A750GN	Model name: Galaxy A7	Android version: 10.0	

RESULTS/FINDINGS

Artifact Category	TX1 Imager	Magnet AXIOM
Application Data	100%	100%
Call Logs	100%	100%
Contacts	100%	100%
Messages	100%	100%
Photos	100%	100%

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2. Nakar, B., & Prabhu, A. (2015). Guide to Computer Forensics and Investigations. Cengage Learning.
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5. Nakar, B. (2015). Mobile Device Forensics: Principles and Practice. CRC Press.
6. Nakar, B. (2015). Mobile Device Forensics: Principles and Practice. CRC Press.

VIEW ON Bitcoin Illegal Transaction Detection Based on Machine Learning

JIANG Xianbo, YAN Shengdong, KANG Yanrong, XING Guidong, CHU Chuanhong, GUO Lili, LONG Yuan, ZHAO Lu, WANG Bo, ZHANG Yaoguo, BAO Menghu, ZHANG Qian, YANG Kunlin

Institute of Forensic Science, Ministry of Public Security (MPS), Beijing 100038, China

ABSTRACT

Bitcoin is a decentralized cryptocurrency, which is widely used in illegal transactions. This paper presents a machine learning-based method for detecting illegal transactions in Bitcoin. The method involves training a model using historical transaction data and applying it to new transaction data. The results show that the proposed method can effectively detect illegal transactions with high accuracy.

INTRODUCTION

Bitcoin is a decentralized cryptocurrency, which is widely used in illegal transactions. This paper presents a machine learning-based method for detecting illegal transactions in Bitcoin. The method involves training a model using historical transaction data and applying it to new transaction data. The results show that the proposed method can effectively detect illegal transactions with high accuracy.

FEATURE ENGINEERING STATUS

- Transaction Record-Based Feature Extraction
- Graph Embedding Methods
- Deep Learning for Feature Extraction

CLASSIFICATION ALGORITHMS STATUS

- Supervised Learning: Random Forest (RF), Support Vector Machine (SVM), and Multilayer Perceptron (MLP)
- Unsupervised Learning: K-means, One-Class SVM (OCSVM), and Local Outlier Factor (LOF)
- Ensemble Learning: Combining multiple algorithms to enhance model performance

CONCLUSION

The proposed machine learning-based method for detecting illegal transactions in Bitcoin is effective and accurate. Future research should focus on improving the model's performance and applying it to other cryptocurrencies.

VEHICLE SPEED ANALYSIS FROM BLACK BOX CASE STUDY

Duangsamorn Choodeejan¹, Amornrat Lekwichai, Ph.D²

¹Department of Special Investigation, ²Central Institute of Forensic Science

ABSTRACT

Black box data from collided vehicle were sent to Digital Forensic Section, Central Institute of Forensic Science for vehicle speed analysis. These data have different configuration of the devices, such as frame rate (frame/second), duration, including hash value. Metadata of both video files were examined prior calculated the vehicle speed. Formula $v=s/t$ was used to calculate the vehicle where V is the speed (km/h), S is the distance (meter), T is the duration (seconds). After examined, the result shown that vehicle speed values from both files were not significantly different. Therefore, it can be concluded that the configuration of the black box has no affected on the vehicle speed calculation. However, the acceleration value of the video file (Video speed up) must be included in the calculation of compensation.

CASE BACKGROUND

Two video files from the black box footage of the car accident were sent to the Digital Forensics Section, Central Institute of Forensic Sciences, for analysis of the vehicle's speed. After examining the two files, the digital forensic examiner found some issues such as frame rate, duration, and hash value. These factors were found to be the cause of the speed calculation error.

TOOLS

FTK-Imager 4.2.1.4 and ffmpeg version 2022-04-28-git-e07b15477 (Command Line)

STEP 1: SET REFERENCE POINTS IN THE VIDEO CLIPS

The Police officers and responsibilities person will conduct the simulation scenes and specifying location onto the map to show GPS coordinates and various distances.

STEP 2: CALCULATION OF VEHICLE SPEED USING THE FORMULA $v=s/t$ WHERE AS:

- V: Vehicle Speed (km/h)
- S: Distance between references Point 1 and 2 (Meter)
- T: Time taken to move from point 1 to point 2 (Second)
- 3.6: Conversion factor for convert a speed from m/s to km/h

STEP 3: TO PERFORM CHECKING METADATA ALL OF THE BOTH VIDEO FILES

Part 1: To verify Video's display in both Video files.
T: The time conducts from calculation based on timestamps that are shown in the both files, which from 23:52:55 to 23:53:30, total duration time 35 seconds.
(Formula $V = S/T \times 3.6$ (km/h), Calculation: $V = (800/35) \times 3.6$, $V = 82.285$ km/h, (approximately)

Part 2: To verify Metadata in both Video files.
File 1: Filename "672833868.482257.mp4"
S: (distance from Reference Point 1 to Reference Point 2 = 800 meters)
T: (time in seconds) details are as follows: Reference Point 1 starts at frame 159 and Reference Point 2 ends at frame 215. Therefore, the number of frames between Reference Point 1 and Reference Point 2 are 57 frames. Frames per second (FPS): 24 FPS. Time discrepancy between recording time and actual recorded time shown on the screen, where File 1 has a discrepancy of 15 times.
Substitute T = $(57/24) \times 15 = 35.55$, so approximately 35 seconds, Calculate: $V = (800/35) \times 3.6$, so approximately 82.285 km/h.

File 2: Filename "vidio.mp4"
S: (distance from Reference Point 1 to Reference Point 2 = 800 meters)
T: (time in seconds) details are as follows: Reference Point 1 starts at frame 796 and Reference Point 2 ends at frame 1076. Therefore, the number of frames between Reference Point 1 and Reference Point 2 are 281 frames. Frames per second (FPS): 23.98 FPS. Time discrepancy between recording time and actual recorded time shown on the screen, where File 2 has a discrepancy of 3.02 times.
Substitute T = $(281/23.98) \times 3.02 = 35.36$, thus approximately 35 seconds, Calculate: $V = (800/35) \times 3.6$, so approximately 82.285 km/h.

CONCLUSION

The configuration of the black box has no affected on the vehicle speed calculation. However, the acceleration value of the video file (Video speed up) must be included in the calculation of compensation.

2024 Activities

7. Business Meeting



Plan for 2025

1. On-Scene Academic Exchange

Organization: China

Place: Cities in China

Time: to be determined

2. Inter-Lab Proficiency Test

Organization: Hongkong, China

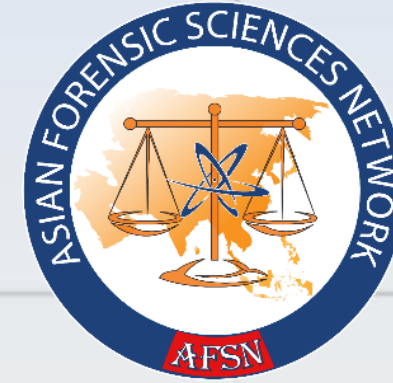
Time: October 2024- March 2025

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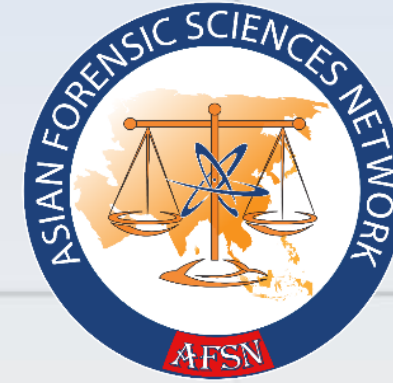
3. On-Line Digital Forensics Essentials & First Responders Training

Organization: Malaysia

Time: to be determined



Concluding Remarks



Special thanks to CIFS for meticulous planning and to AFSN for unwavering support.

Without your dedication, this event would not have been possible.

Special thanks to our hardworking team members, your commitment and teamwork have been invaluable. Your efforts have made a significant impact on the success of this gathering.



DNA WORKGROUP

2024 ACTIVITIES

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16th AFSN Meeting & Symposium in Thailand

1	Pre-conference Workshop	5 workshops (Thermo, Bruce, GTH, Qiagen, Promega)
2	Oral Presentations	21 oral from 11 countries
3	Poster Presentations	12 posters from 7 countries
4	Participation	Approx 150
5	Invited speakers	4 (US, UK, India, Spain)

Activities in 2024

9th Interlaboratory Exercise

- DNA collection
- “Evaluating the routine & 4N6FLOQSwabs™ between and within laboratories”
- 25 participant laboratories from 11 countries
- 32% increase year-on-year
- Largest number of participants so far

QASC x DNAWG Survey

146

- Gather information on the **practice** of the **quality framework** in the **Biology** discipline to **better understand** the state of quality assurance practices in the DNA laboratories among AFSN member institutes.
- Allow laboratories to **identify** good practices and any areas for improvement and **align** future activities to Workgroup's needs.
- 17 responses received

DNAWG Steering Committee 2025-2026

Chairman **HSA, Singapore** | *Ms. Juliana Sim*

Vice-Chairman **IFS, China** | *Dr. Hu Sheng*

Secretary
(Annual Meeting) **NFS, South Korea** | *Dr. Gangnam Jin*

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Secretary 1 **KIMIA, Malaysia** | *Ms. Siti Hajar Binti Hussin*

Secretary 2 **CIFS, Thailand** | *Mrs. Chanidapa Srinongwa*



Proposed Plans for 2024/2025

Quality Talk in early Nov 2024

8th Interlaboratory Exercise – Manuscript submission

10th Anniversary of Interlaboratory Exercise

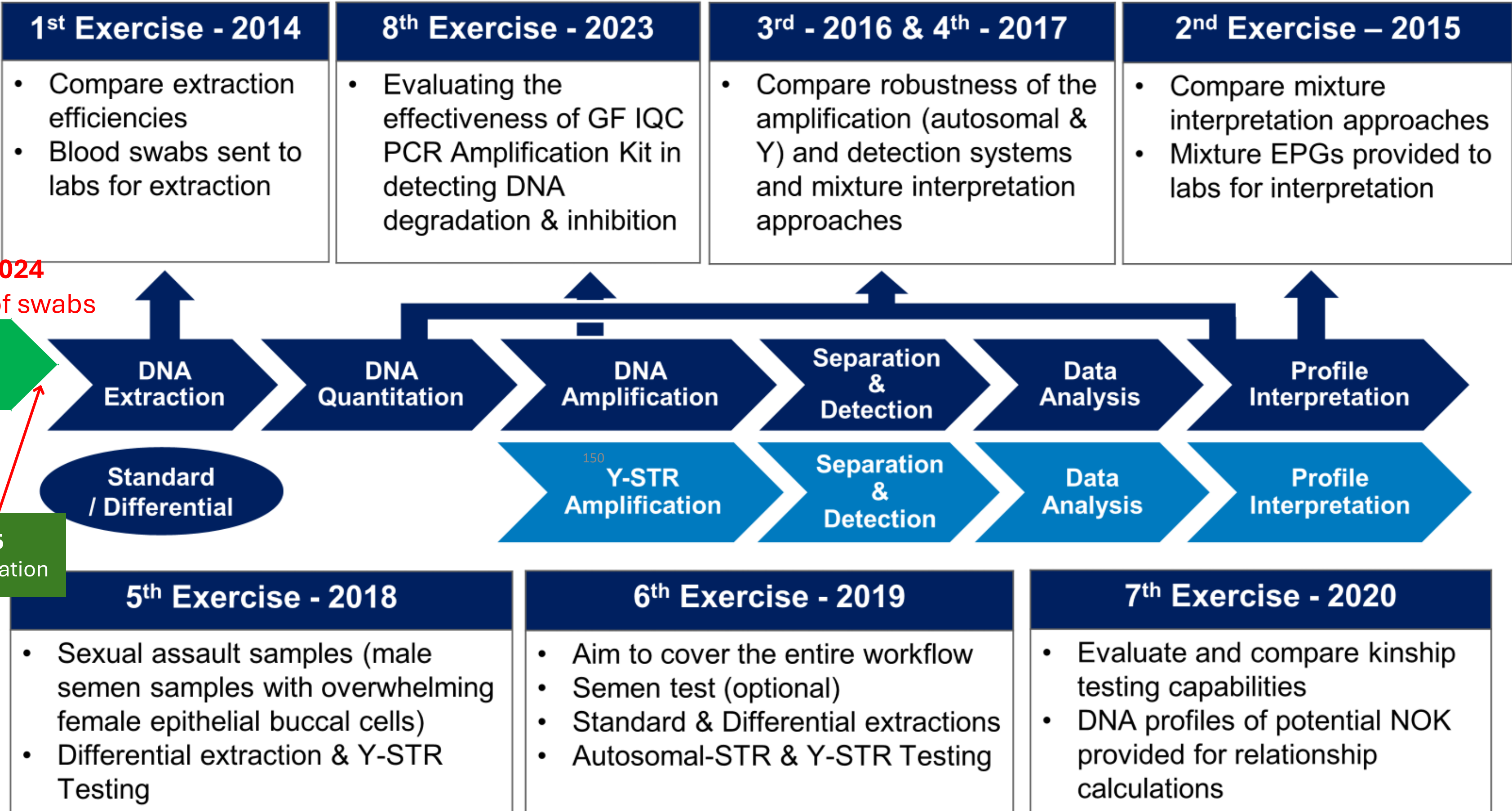
149

DNAWG Survey on workflow and processes

Webinar

Timeline of Interlaboratory Exercises

DNA Workgroup Interlab Exercises first started in 2014.





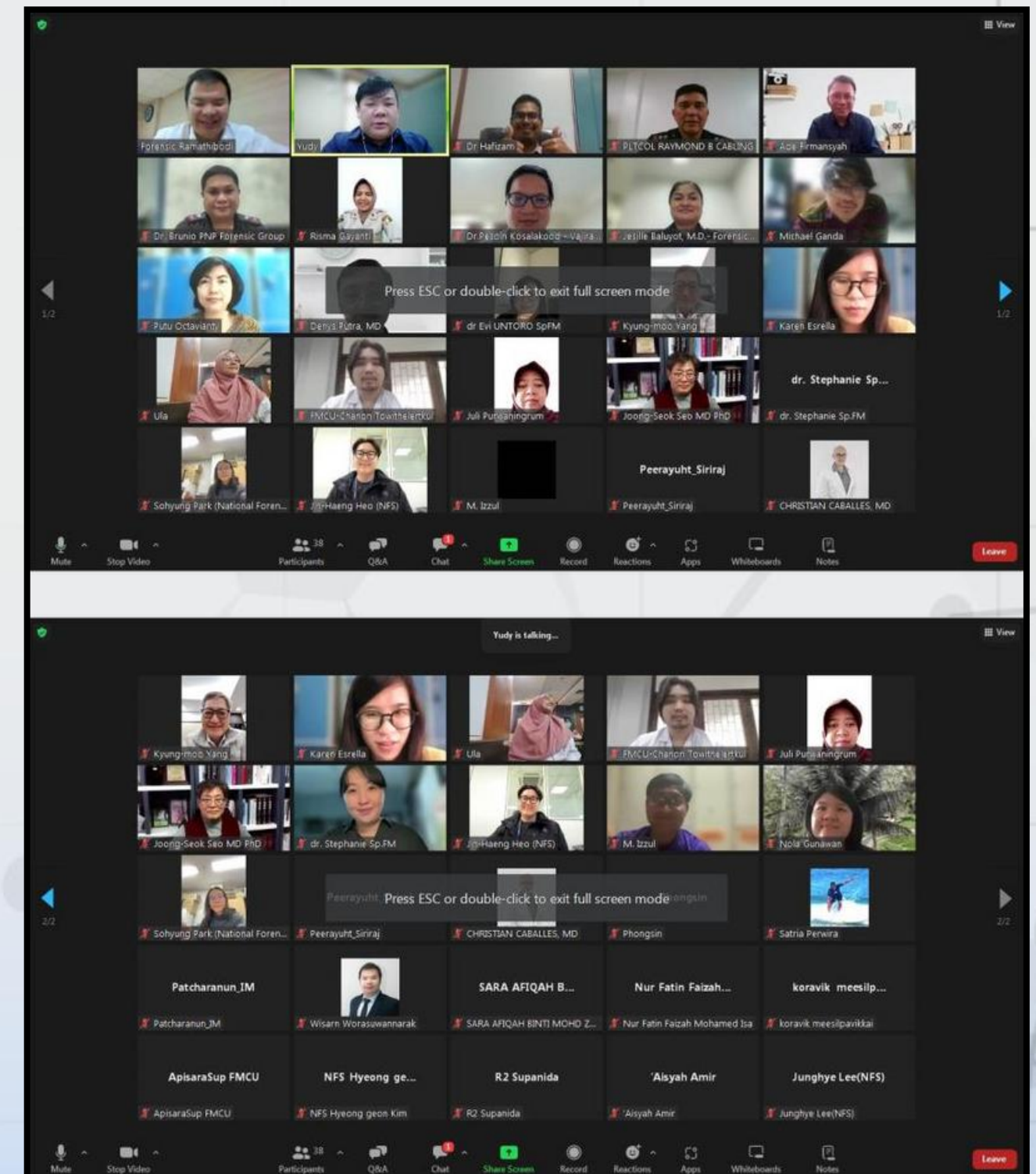
FORENSIC MEDICINE WORKGROUP

2024 ACTIVITIES

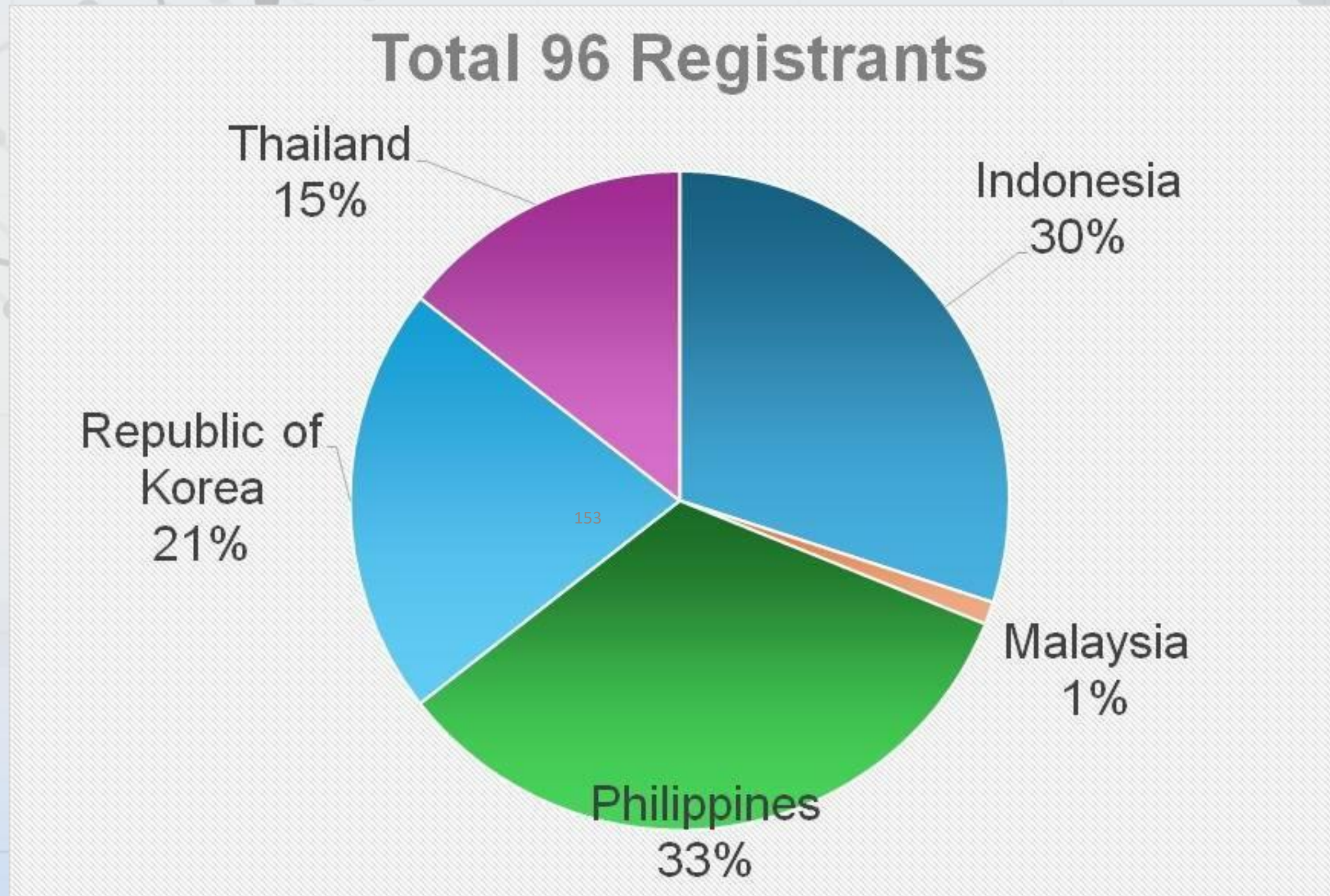
151

BRING YOUR OWN CASE FORUM

- Presenters 3 countries;
 - Thailand
 - Indonesia
 - Malaysia
- 20 March 2024
- 96 Registrants from different countries.



BRING YOUR OWN CASE FORUM



Chinese Forensic Medicine conference

- Chinese FMWG and DFWG joint conferences
- 12-13 June 2024
- 3 International FMWG members attended the conference from Thailand, Indonesia and Malaysia
- Some members from south Korea, Thailand, and Indonesia joined online.
- 15 keynote speakers

154







FINGERPRINT WORKGROUP 2024 ACTIVITIES

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Current Members

22 members(from 10 countries): Singapore, Malaysia, Thailand, China, Korea, Philippines, Indonesia, Kazakhstan, Timor-Leste, Myanmar, Mongolia

3 invited members (no voting right): Korea, Australia, China

member of steering committee

chair: Rongliang MA (China)

vice-Chair: absent

Secretaries: Dr Liu Shiquan (China)

Pol. Maj. Rafael B Roxas JR (Philippines)



New members for the year

- 5 New members from PNP and China (Gansu University of Political Science and Law, Nanjing Police College, Nantong Police, Chinese University of Political Science and Law)
- One Interested member from Hongkong Police (waiting for response)



Schedule for this meeting

- 3 oral presentation ☐
- A comparative study of Sudan black and superglue methods for the enhancement fingerprints on grease contaminated non-porous surfaces.
- Rhizomucor miehei LIPASE NANOCONJUGATE AS A CANDIDATE FOR FORENSIC VISUALIZATION OF LATENT FINGERMARKS ON WET NON-POROUS OBJECTS
- The Future Directions of Fingerprint Detection Techniques
- 1 poster
- Effects of Fingerprint Enhancement Techniques on Forensic DNA Recovery





Presentation 1

Comparative study of Sudan black and superglue methods for the enhancement fingerprints on grease contaminated non-porous surfaces.

Miss Peeraya Shaanle, CIFS, Thailand





Presentation 2

Rhizomucor miehei LIPASE NANOCONJUGATE AS A CANDIDATE FOR FORENSIC VISUALIZATION OF LATENT FINGERMARKS ON WET NON-POROUS OBJECTS

Nik Ihtisyam Majdah Nik Razi, Investigative and Forensic Sciences Research Group, Universiti Teknologi Malaysia





Presentation 3

The Future Directions of Fingerprint Detection
Techniques
Dr Rongliang MA
IFS, CHINA

The Future Directions of Fingerprint Detection Techniques

Rongliang MA

2024.8

Bangkok, Thailand

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No business meeting was held due to the absence of group members, but current problems and future plans have been discussed by the participants. Will have business meeting to change the steering committee by online meeting soon.

Current problems

1. less funding makes organizing meeting difficult.
2. the development of more modern forensic techniques such as electronic evidences and CCTV footage make fingerprint less important in crime investigation.



Plans for next year(from now to next Symposium)

1. will have regular meetings and other activities.
2. After discussion with the members of workgroup, will share practices between group members both online and offline including:
 - difficult fingerprint identification;
 - novel fingerprint detection techniques;
 - fingerprint collection at crime scenes;
 - AFIS techniques
 - future directions
3. To organize an academic meeting in China. (together with other workgroups?)
4. To revise the Term of FPWG.
5. To change some of the members of the Steering committee.



Guest speakers to be invited

- 1.To invite Prof. Chritophe CHAMPOD, Director of CFS Lausanne University, Switzerland to give an presentation on “The new expression of conclusion in pattern and impression evidence by probability and likelihood ratio” .
- 2.to invite Prof. Claude Roux, Director for CFS, UTS, Australia to give presentation on the advance of Fingerprint and Forensic Science.
- 3.Other intrested presenter may be Prof. Pierre Margot and Prof. James Robertson on crime scene investigation.





Thank you very much.
Happy the Mid-Autumn Festival!





ILLICIT DRUGS WORKGROUP 2024 ACTIVITIES

167

Webinar - LIMS for Forensic Investigation

14 March 2024

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Save the date

Date : 14 March 2024
Time : 3:00 - 4:30pm
(Singapore Time)

LIMS for Forensic Investigation

ORGANISED BY THE AFSN ILLICIT DRUGS AND TOXICOLOGY WORKGROUP

DR SANGGIL CHOE <i>National Forensic Service, South Korea</i>	MR SAMUEL LOH MR CHANG HIAN TWAN <i>Health Sciences Authority, Singapore</i>	MS KATHRIN ABELE <i>Forensic Science Institute of the Federal Criminal Police, Department Wiesbaden, Germany</i>
THE BRIEF INTRODUCTION OF NFS LIMS	GOING GREEN - PAPERLESS LABORATORY WITH LIMS	KISS goes KISSme - MODERN EDITION OF A PROVEN LIMS



Webinar Details : Zoom (Online)
Webinar ID: 988 1489 6818
Passcode: afsn140324

Let's work together to realize our common goals.

Let's harness the power of technology to propel our endeavors forward, creating a synergy that transforms challenges into opportunities.



Clandestine Laboratory Investigations and Sampling of Exhibits Course

- 10 – 13 June 2024
- Hosted by KIMIA Malaysia
- Topics on Clandestine Drug Lab Investigation – Hazard and Safety; Case study and report writing; manufacturing methods for methamphetamine, samples collection and analysis of samples, cooking classes (methamphetamine, amphetamine, methcathinone)





**20 Oral with 9 Country
Presentations, 4 Posters,**

**Mr Yang Ziliang (Legal
Director HSA) and Mr
Chotphan Jullaphet
(Narcotics Law
Enforcement Expert) as
Trainers for “Science
Meets Law: Enhancing
Work Through Legal
Collaboration Workshop”**

**2 Guest speakers each
from AFP and 3 from
UNODC**

Group Photo taken at 2024 AFSN Meeting in Bangkok, Thailand

AFSN co-host with UNODC,
US DEA and ENFSI
4th Forensic Science
Symposium on virtual
platform

Oct 8 – 10 2024

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4th FORENSIC SCIENCE SYMPOSIUM
FORENSIC SCIENCE SOLUTIONS FOR
EMERGING CHALLENGES IN
INTERNATIONAL DRUG CONTROL

October 8 – 10, 2024

AFSN, ENFSI, US DEA and UNODC are pleased to announce the fourth series of joint online symposia for forensic laboratories to explore scientific solutions to emerging challenges in international drug control.

SCHEDULE

October 8	<i>From licit to illicit opioids – a changing market place</i>
October 9	<i>Synthetic cathinones – illicit manufacturing and chemical characterization considering isomers</i>
October 10	<i>Beyond NPS: the next wave</i>

Registration details will be available in August

SAVE THE DATE!



UNODC and Colombo Plan Sponsorship (Total 6 participants)



UNODC

1. Cambodia – National Authority for Combatting Drugs
2. China – Drug Intelligence and Forensic Center, Ministry of Public Security
3. Myanmar – Myanmar Police Force, Ministry of Home Affairs
4. Vietnam – Institute of Forensic Science, Ministry of Public Security

Colombo Plan

1. Mongolia – National Forensic Agency
2. Sri Lanka – Government Analyst's Department

New Office Bearers : Year 2025 – 2026 (2 years)

No.	Position Held	Name	Country/Region	Institute
1	Chairman	Dr Vanitha Kunalan	Malaysia	Department of Chemistry
2	Vice-Chairman	Dr Ong Mei Ching	Singapore	Health Sciences Authority
3	Secretary	Dr. Jiyeong Jo	South Korea	National Forensic Service

Current IDWG Membership Details :
32 members from 22 institutes from 15 countries

Future Training Plans

- Clandestine Laboratory Training
- Drug Analysis – Drug Sampling, NPS, Instrumentation, Automation, “How to do more with less” yet fulfilling accreditation
- Data Integrity, Machine learning for new drug identification
- Quality Assurance – Method Validation, Best Practices
- For future meeting – Bring your own slides, Panel of experts for discussion, selection of a specific topic e.g. vapes analysis for group discussion.



QUALITY ASSURANCE & STANDARDS COMMITTEE 2024 ACTIVITIES



16th AFSN Annual Meeting

QASC Program

International Forensic Strategic Alliance Workshop
**Building a quality culture in regional
forensic science network**

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Organized by AFSN International Liaison Officer
Dr Angeline Yap



Survey of Quality Framework

- From February to May 2024, a set of survey questions was sent to the DNAWG & TXWG members of the AFSN.
- The survey aimed to gather information on the practice of the quality framework in the forensic biology and forensic toxicology disciplines.
- The information gathered will help us to better understand the state of quality assurance practices in the two disciplines among AFSN member institutes.
- This will allow us to identify good practices and any areas for improvement so as to align future activities to our needs.



Scope of Survey

- Competency of Personnel
- Equipment & Consumables
- Collection, Analysis, Interpretation, Reporting
- Procedures, Protocols, Variations
- Quality Management



Areas for improvement in DNA Labs

- Incorporate ethical practices and criminal law and testimony into the training program
- Implement suitable verification checks on reference materials used for routine DNA analysis
- Full assessment of the performance characteristics in method and equipment validation
- Explore digitalisation and computerised Laboratory Information Management System (LIMS)



Results of Survey in Toxicology

- TXWG & QASC will jointly organize an online Workshop in Forensic Toxicology & Quality Assurance in the first half of 2025.
- The results of this Survey will be presented during the Workshop.

180

**Look out for further
Announcement!**



Proposed Survey in QDWG

- QASC is proposing to carry out a survey of quality framework in the document examination discipline in 2025.
- QASC will be working with QDWG on the details of this survey, and we will need support from the members of QDWG to participate.
- The results of this Survey will be presented in the next AFSN Annual Meeting & Symposium.



QUESTIONED DOCUMENT WORKGROUP

2024 ACTIVITIES

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QDWG Steering Committee 2023-2025



Chair

**Ms Nellie
Cheng**
Health Sciences
Authority,
Singapore



Vice-Chair

**Mdm Wan
Rahimah**
Department of
Chemistry,
Malaysia



Vice-Chair

Dr Han Xingzhou
Institute of
Forensic Science,
People's Republic
of China



Secretary

Dr Qin Da
Institute of
Forensic Science,
People's Republic
of China



Secretary

**Ms Jovelyne
Maggay**
Philippine National
Police Forensic
Group, Philippines



Member

Dr Li Chi Keung
Hong Kong
Government
Laboratory,
HKSAR, People's
Republic of China

- 5 SC members attend this year's Annual meeting
- All of us present their work in Scientific Session

Thank You.





Members update

Past member(s)

New/replaced member(s)

1

Republican Center for
Forensic Examination
under the Ministry of
Justice, Republic of
Uzbekistan

Isomiddinov Fazliddin
Fahriddinovich

Rakhimov Orzu
Bakhodirovich

2

National Forensic
Service, South Korea

Tae Yi Kang

Ka Young Lee

Tae Yi Kang

20 institutes/labs from 12 countries

Updates on 16th afsn annual meeting and symposium

- 16 Oral Presentations (15 Oral Presentations last year)
- 2 Poster Presentations
- 1 Invited speaker



AFP

Mr Andrew Parkinson
Australian Federal Police, Australia

“Forensic intelligence in questioned document examination – towards a model of proactivity and disruption”



Our work 2023-2024

International Scene



- Applied Sciences Group – Analytical toxicology, Forensic biology, Forensic medicine, Illicit drugs, Forensic science
- Forensic Chemistry and Physics Laboratory – wide range of scientific examination
- Accredited under the ANSI National Accreditation Board (ANAB) Forensic Science Testing programme

- AFSN is a network of forensic institutes in Asia
- Comprises 70 member institutes from 18 countries (as of today)
- 9 Technical Workgroups and 1 Quality Assurance and Standards Committee
- “The Journey of the Asian Forensic Sciences Network through Fifteen Years”, Forensic Science International 359 (2024) 112042 (<https://doi.org/10.1016/j.forsciint.2024.112042>)

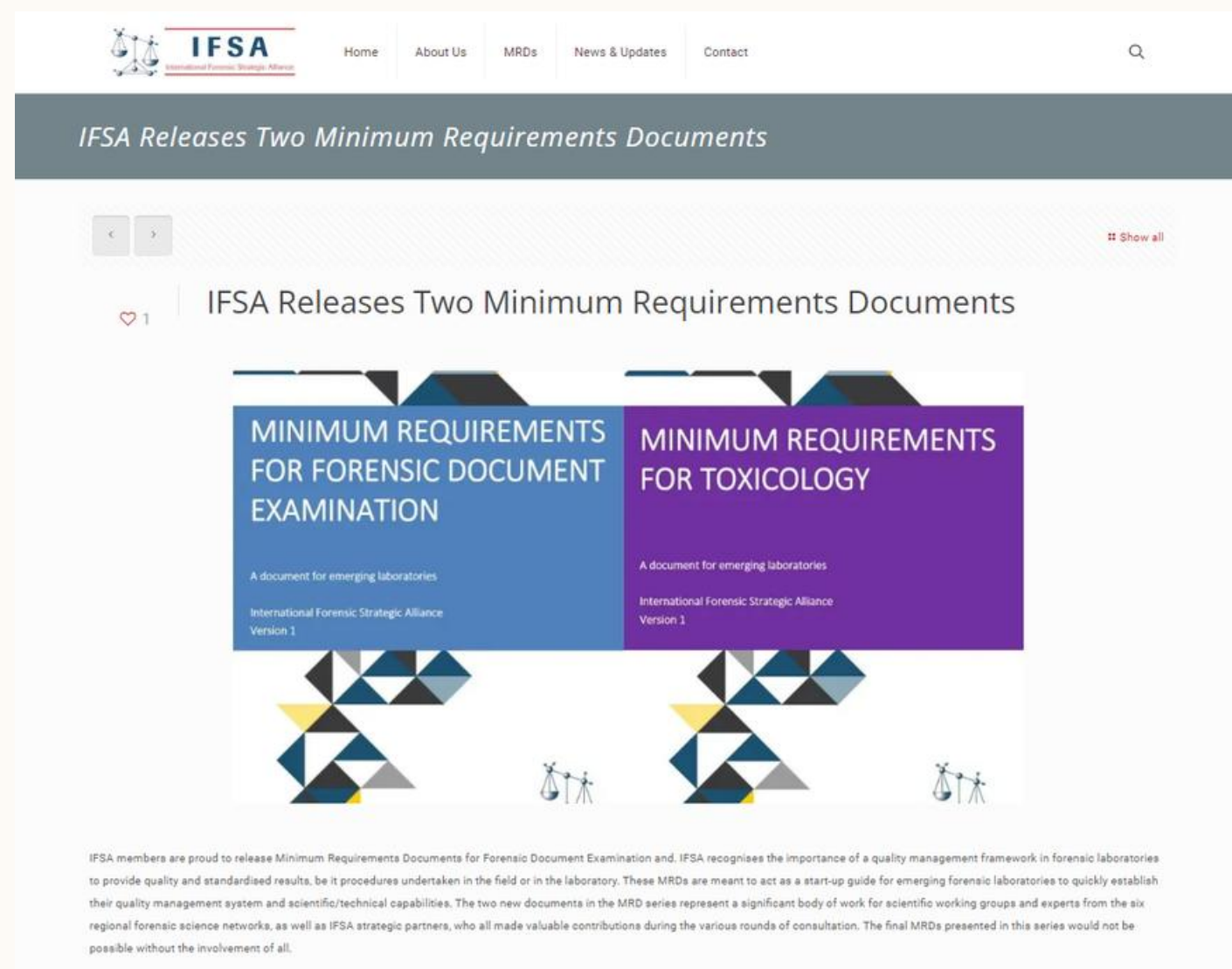
All Rights Reserved, Health Sciences Authority

- Nellie attended the 15th ENFSI/ENFHEX Conference in Stockholm, Sweden from June 17-20, 2024.
- In her presentation, she included one slide to introduce our WG to the ENFHEX community.



Our work 2023-2024

International Scene



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- International Forensic Strategic Alliance (IFSA) released Minimum Requirements for Forensic Document Examination in June 2023 with QDWG inputs
- Translation of the MRD into Bahasa Malay, Chinese and Thai by KIMIA, IFS, and CIFS respectively.



Our work 2023-2024

International Scene



“The Journey of the Asian Forensic Sciences Network through Fifteen Years”

Forensic Science International 359 (2024) 112042

(<https://doi.org/10.1016/j.forsciint.2024.112042>)

* Corresponding author.

E-mail address: yap_tiong_whei@hsa.gov.sg (A. Yap).

¹ AFSN President (2019–2022), AFSN International Liaison Officer (2013–current).

² AFSN Secretary (2010–2011 and 2019–2022), AFSN Questioned Document Workgroup Chair (2021–current).



Our work 2023-2024

Knowledge Sharing

销售发货单

北京盛江开源玻璃有限公司

制单日期: 2021 年 1 月 17 日

客户名称	赵林林	送货地址	廊坊市太平桥路 99 号			
工程名称	廊坊赵林林	联系人	电话：15888888888			
发货单号：		产品名称：5+12A+5				
序号	玻璃名称	长 mm	宽 mm	数量	面积	备注
1	双白	476	1281	216	131.707	
2	LOW-E-双白	205	1658	80	27.191	
	合 计：	296			158.898	
附 注	双白：131.707 平米*54 元/平米=7112.178 元 LOW-E-双白：27.191 平米*85 元/平米=2311.235 元 现金合计：9423.413 元					

客户签收: 刘会娟

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AFSN CE 2024		COMPARISON CHART QUESTIONED - "Q"	
<u>刘会娟</u>			
NORMAL SPECIMEN - "K1-1" to "K1-4"		REQUEST SPECIMEN - "K1-5"	
<u>刘会娟</u> K1-1	<u>刘会娟</u> K1-5(1,1)	<u>刘会娟</u> K1-5(1,4)	<u>刘会娟</u> K1-5(2,3)
<u>刘会娟</u> K1-2	<u>刘会娟</u> K1-5(1,2)	<u>刘会娟</u> K1-5(2,1)	<u>刘会娟</u> K1-5(2,4)
<u>刘会娟</u> K1-3	<u>刘会娟</u> K1-5(1,3)	<u>刘会娟</u> K1-5(2,2)	<u>刘会娟</u> K1-5(2,5)
<u>刘会娟</u> K1-4	<u>刘会娟</u> K1-5(1,5)	<u>刘会娟</u> K1-5(2,6)	<u>刘会娟</u> K1-5(2,7)

- IFS, China organized Collaborative Exercise 2024
- Examination of Chinese signatures



Our work 2023-2024

Collaboration and Cooperation



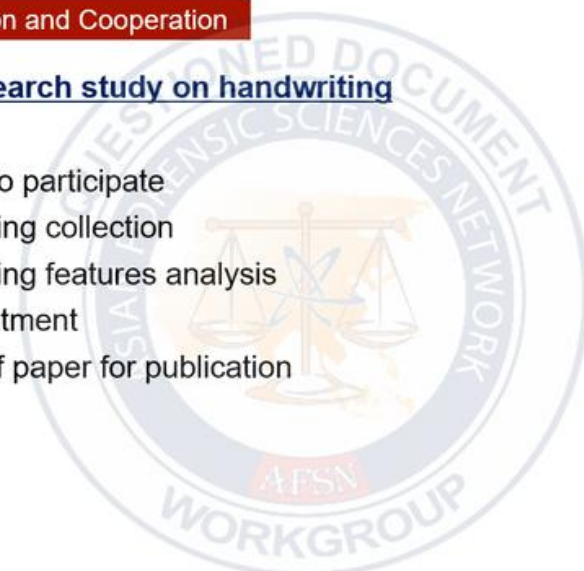
Our work 2022-2023

Collaboration and Cooperation

QDWG research study on handwriting

Invitations to participate

- Handwriting collection
- Handwriting features analysis
- Data treatment
- Writing of paper for publication



PARTICIPANTS

7 MEMBER INSTITUTES FROM 7 COUNTRIES/REGION





Our work 2023-2024

Collaboration and Cooperation

PARTICIPANTS

1 Handwriting Collection

DSS
Brunei

KIMIA
Malaysia

2 Handwriting Feature Analysis

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IFS
China

HKGL
HKSAR

NFA
Mongolia

CIFS
Thailand

3 Data Analysis

IFS
China

HSA
Singapore

4 Writing Of Paper For Publication

HKGL
HKSAR

HSA
Singapore



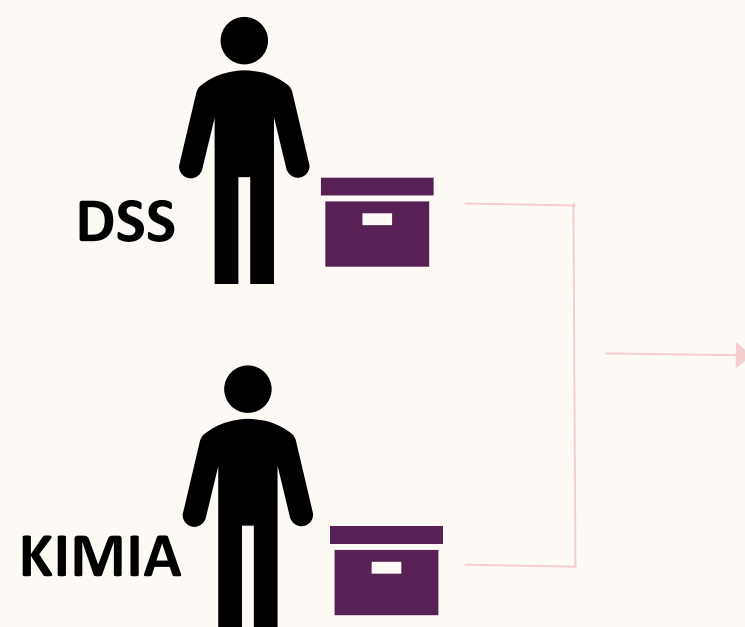
Our work 2023-2024

Collaboration and Cooperation

Collect

Scan

Upload



DSS

- 87 handwriting specimens

KIMIA

192

- 60 handwriting specimens

Resolution

- 600 dpi

Shared drive

- Google drives
- Access provided to participants

Flash drive

- Provided to IFS



Our work 2023-2024

Collaboration and Cooperation

PARTICIPANTS

1 Handwriting Collection

DSS
Brunei

KIMIA
Malaysia

2 Handwriting Feature Analysis

193

IFS
China

HKGL
HKSAR

NFA
Mongolia

CIFS
Thailand

3 Data Analysis

IFS
China

HSA
Singapore

4 Writing Of Paper For Publication

HKGL
HKSAR

HSA
Singapore



Work Plan 2024-2025

- 1 QDWG Handwriting Project
- 2 Collaborative Exercise 2025
- 3 Survey of Quality Framework



TRACE EVIDENCE WORKGROUP

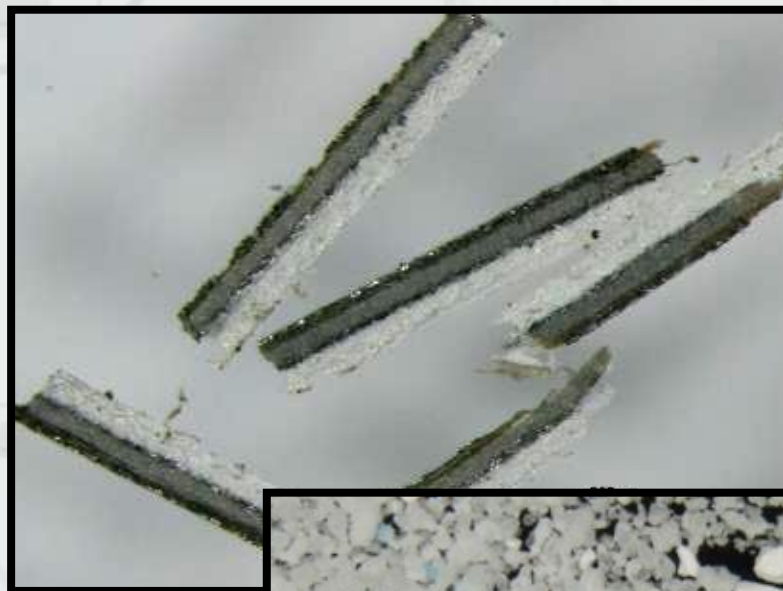
2024 ACTIVITIES

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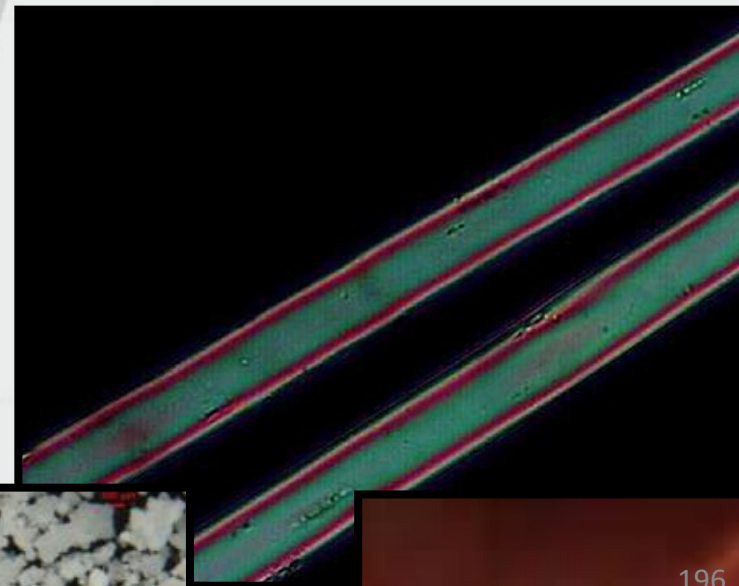
Asian Forensic Sciences Network (AFSN) Trace Evidence Workgroup (TEWG)



PAINT



FIBRE



GLASS



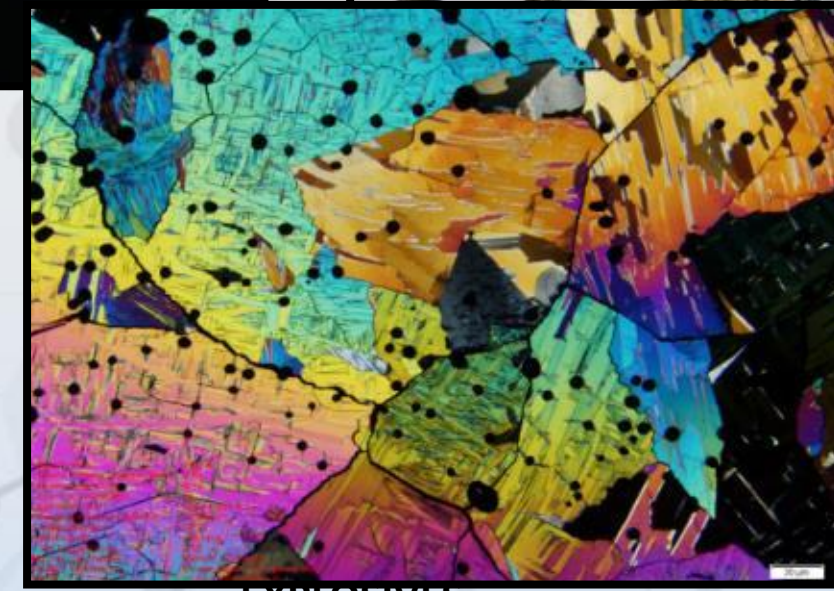
SOIL



CHEMICAL ANALYSIS OF UNKNOWNNS



FIRE DEBRIS ANALYSIS



EXPLOSIVES

Purpose of TEWG



1. Training and Education

- Conduct workshops on specific topics/disciplines in trace evidence
- Share technical knowledge through scientific sessions
- Facilitate laboratory attachment of scientists between member institutes.

2. Collaboration & networking

- Share workflow, methods and protocols¹⁹⁷
- Build trace evidence databases
- Discuss issues on trace evidence
- Organize and participate in collaborative exercises/tests



TEWG's Activities in 2024

AFSN TEWG GSR Analysis Sharing session

- The TEWG's webinar session “Automated GSR Analysis by SEM/EDS – Sharing of Best Practices & Tips on Validation and Interpretation” was held on 12 Jun 2024 and hosted by CIFS.
- Purpose: To enhance capability in GSR collection, validation of GSR analysis and interpretation.
- The session was attended by more than 55 participants from 8 countries, including Thailand, Singapore, Philippines, South Korea, China, Malaysia, Indonesia and Timor Leste.



Trace Evidence Workgroup (TEWG)
Asian Forensic Science Network (AFSN)

ONLINE SESSION

AUTOMATED GSR ANALYSIS BY SEM/EDS
“SHARING OF BEST PRACTICES AND TIPS ON VALIDATION AND INTERPRETATION”

Join us to learn best practices on validation process, quality assurance system involved, and the interpretation of the detected GSR particles, directly from trace evidence scientists

Dr. Mei Hongcheng
Senior researcher
Deputy Unit Chief of Trace Evidence Division
Institute of Forensic Science,
Ministry of Public Security, P. R. China.

Ms Farah Ad-Din Nordin
Science Officer
Criminalistics Division
Forensic Science Analysis Center
Department of Chemistry, Malaysia

Ms Leong Wai Ying
Senior Forensic Scientist
Forensic Chemistry and Physics Laboratory
Health Sciences Authority, Singapore

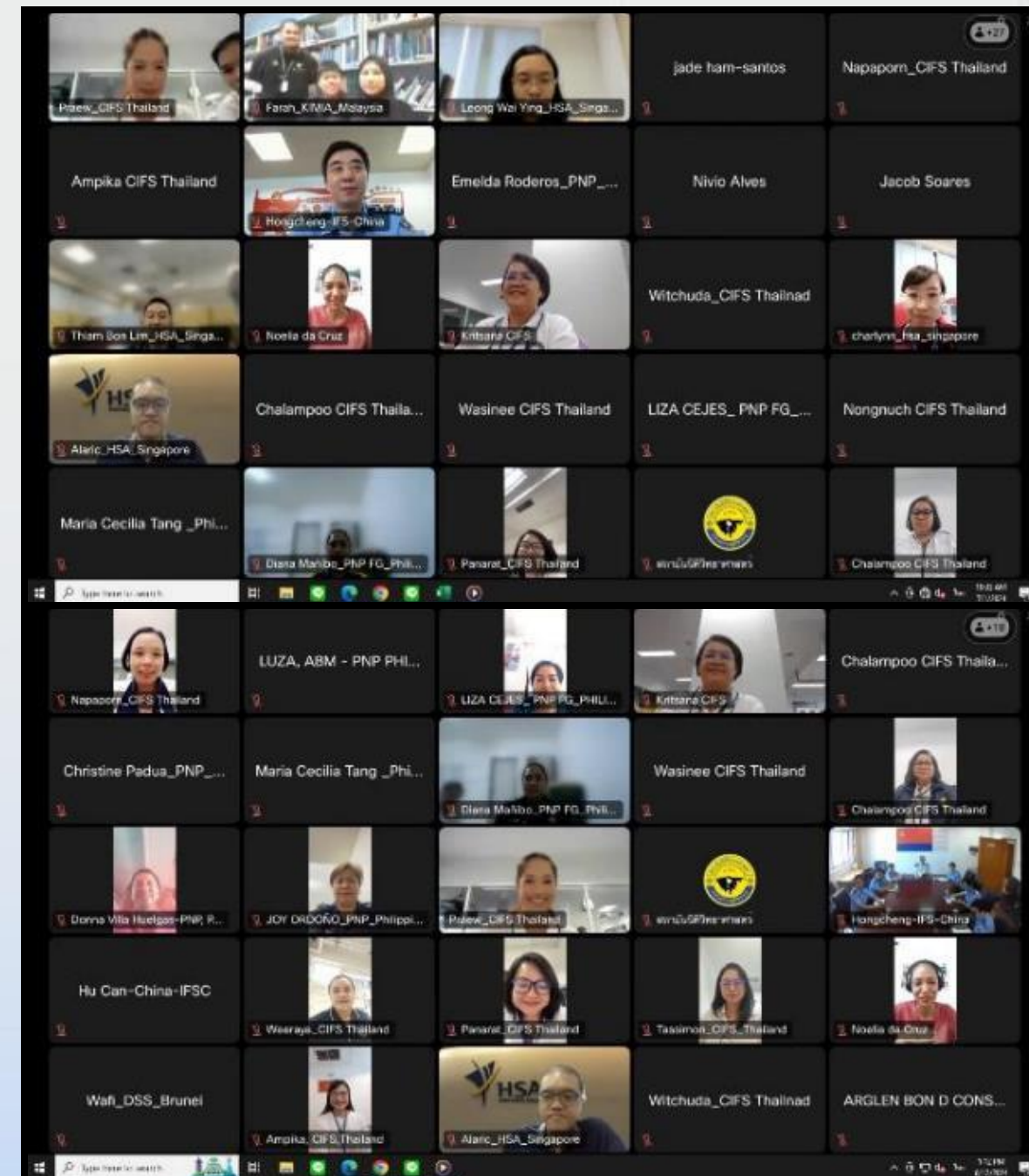
DATE
12 JUNE 2024

TIME
9.00 AM - 12.00 PM
(Bangkok Time)

SCAN HERE TO JOIN THE MEETING

HOSTED BY CENTRAL INSTITUTE OF FORENSIC SCIENCE, THAILAND

Meeting number: 2518 908 0235
Password: pMSMYADr846



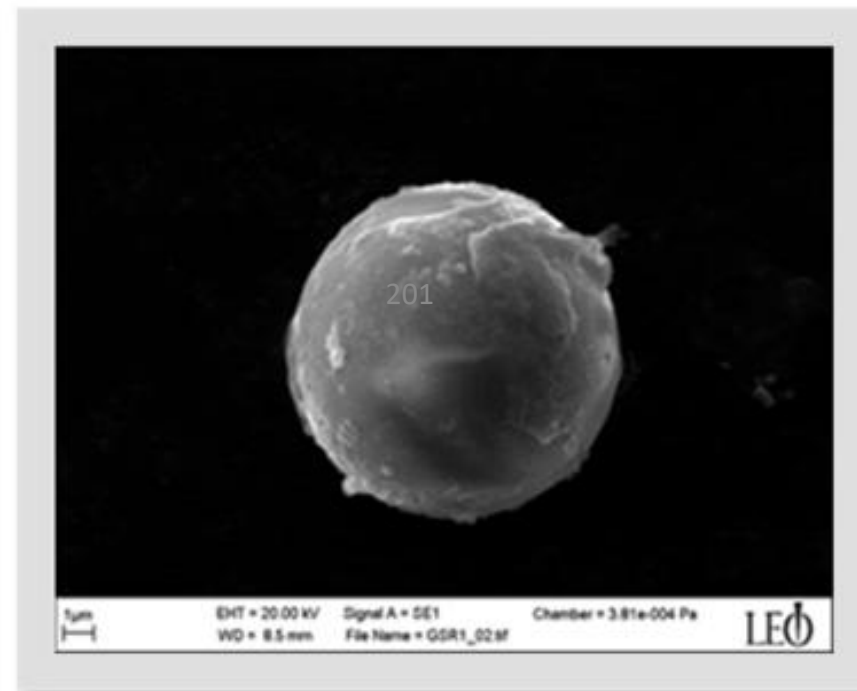
Collaborative Exercises (2017-2024)

CE	Year started	No of times	No of participating labs	The year of last CE administered
1. Fibre	2017	6	5	2022
2. Paint	2021	1	5	2022
3. Glass	2020	2	4	2022
4. GSR	2022	2	6	2024
5. Tape	2024	1	5	2024

- The active participants among the TEWG member institutes reckon the CEs administered so far have been **very useful for self-assessment of their own forensic capabilities, staff competency and laboratory processes as well as benchmarking with other labs** in various type of trace material analysis.
- Different laboratories which took up **the role of CE administrator** find it a good learning experience. For newer type of material analysis such as tape, **training through workshops** have also been organised through TEWG scientific sharing sessions before a CE is to be administered.

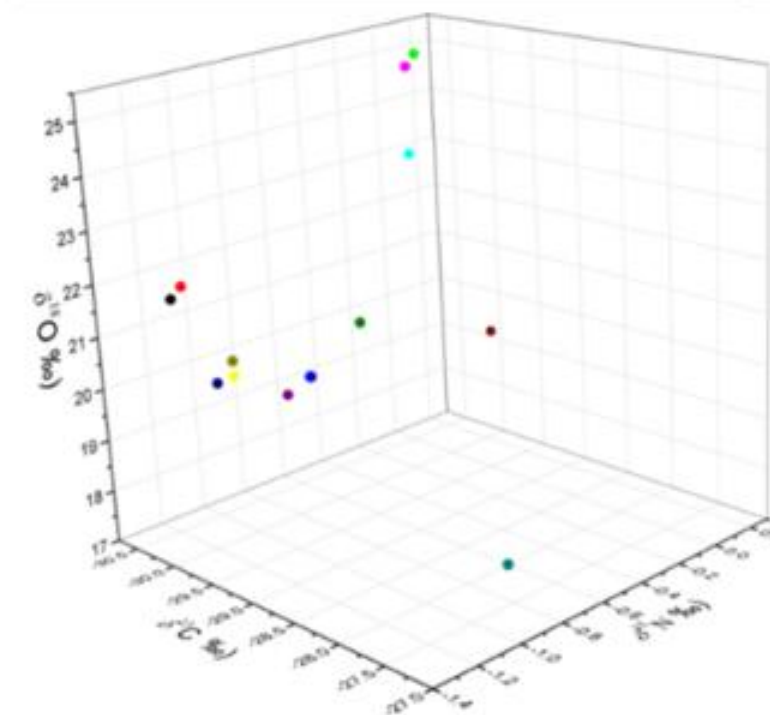
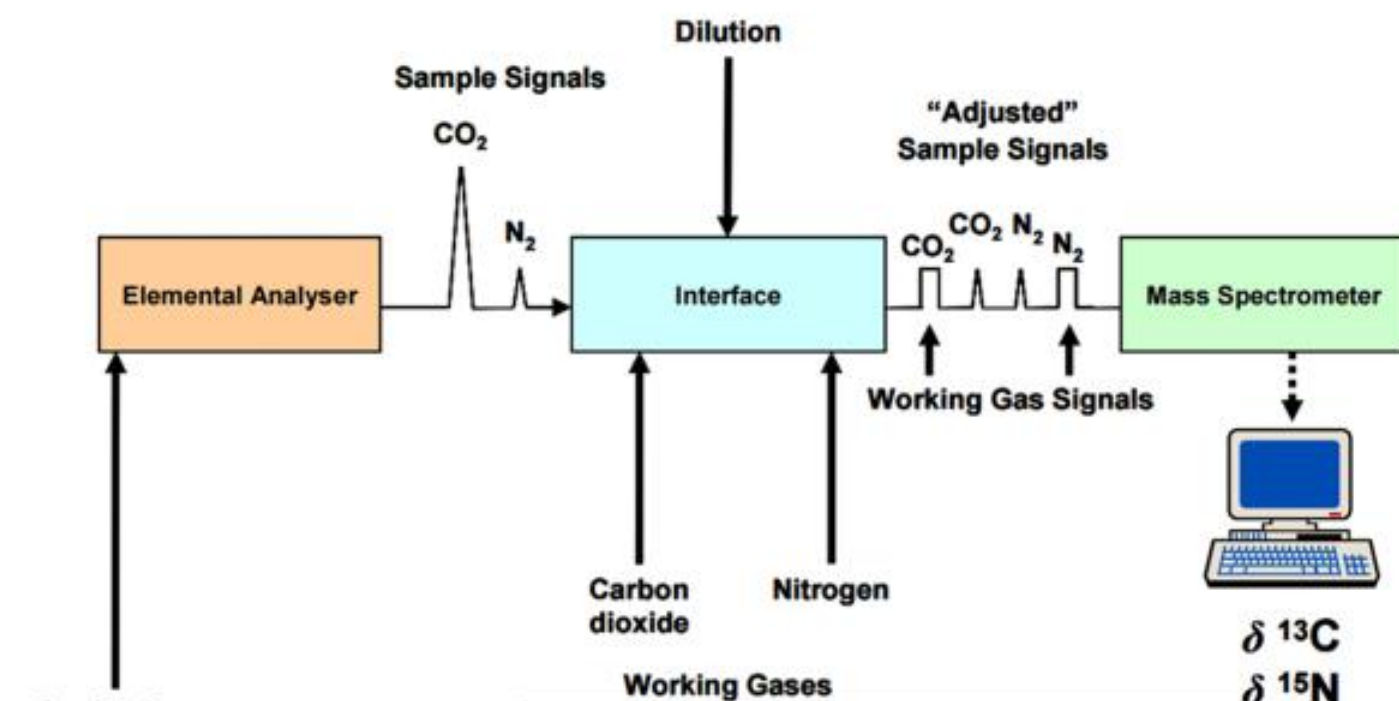
Collaborative Exercise: Tape & GSR Analysis

- The **First Tape analysis** collaborative exercise was administered by the Forensic Chemistry and Physics Laboratory, Singapore.
- The **Second GSR analysis** collaborative exercise was organised by KIMIA, Malaysia.
- Purpose: To assess the lab's capability and competency in GSR analysis and interpretation and as a form of benchmark among the member institutes.
- The results were shared in this AFSN TEWG's scientific session 2024.



AFSN TEWG Scientific Session 2024

- There were 2 special lectures, 9 oral presentations and 3 posters in the TEWG scientific session.
- Dr Kimberly Reubush** (FBI's TEDAC): "Terrorist Explosive Device Analytical Center (TEDAC) Overview".
- Dr Lee Dongkye** (NFS, Korea): "Tracing Clues: The Power of Stable Isotope Analysis in Forensic Chemistry"



AFSN TEWG Scientific Session 2024

- There were 2 special lectures, 9 oral presentations and 3 posters in the TEWG scientific session.
- **Dr Kimberly Reubush** (FBI's TEDAC): "Terrorist Explosive Device Analytical Center (TEDAC) Overview".
- **Dr Lee Dongkye** (NFS, Korea): "Tracing Clues: The Power of Stable Isotope Analysis in Forensic Chemistry"



Election of TEWG Committee Members 2025-2026

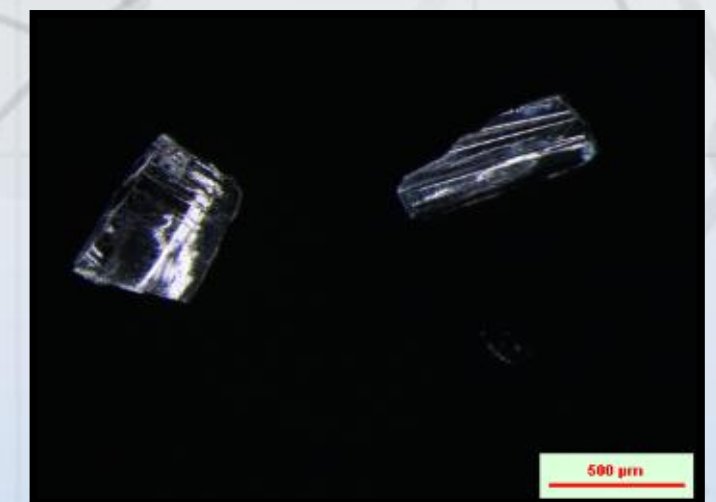
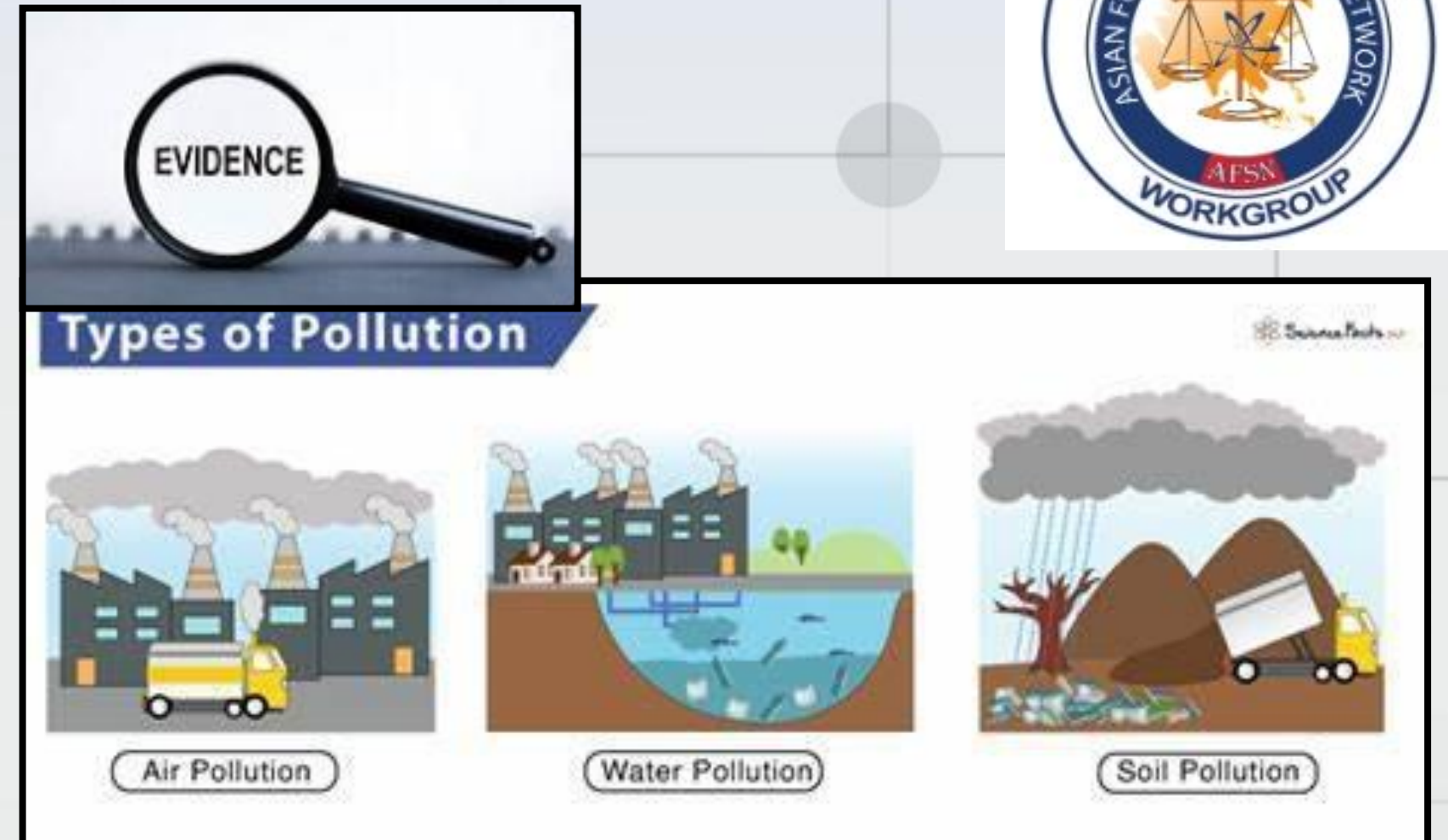
Positions	Name	Country	Institute
Chair :	Lim Thiam Bon	Singapore	HSA
Vice Chair 1 :	Guo Hong Ling	China	IFS
Vice Chair 2 :	Lee Dongkye	Korea	NFS
Secretary 1:	Farah Ad-din Nordin	Malaysia	KIMIA
Secretary 2:	Lee Kang Hua	Singapore	HSA



Plan for 2025

TEWG Plan 2025

- Proposed events in 2025
 - **Environmental Forensics Meeting**
 - Sharing of methods/protocols for analysis of pollutants in water/soil.
 - 2-day forum - organised by China, tentatively in June 2025.
 - **Explosives Database Meeting**
 - Organised by Malaysia, tentatively in Oct 2025.
 - **3rd Glass collaborative exercise** to be administered by China.



TEWG Plan 2025



- AFSN 2025 for TEWG's scientific session – suggested topics:
 - **Holistic approach in forensic traces analysis and interpretation**
 - **Fire debris analysis**
 - **Gas analysis**
 - **AI and forensic traces**



TOXICOLOGY WORKGROUP

2024 ACTIVITIES

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I. Webinar on LIMS For Forensic Investigation

Jointly organized by AFSN IDWG and TXWG

Date: 14 Mar 2024

Presenters:

1. Dr Sanggil Choe, National Forensic Services, South Korea
2. Mr Samuel Loh (IDL) & Mr Chang Hian Twan (DAT), HSA
3. Ms Kathrin Abele, Forensic Science Institute of the Federal Criminal Police Department, Germany

Objective:

To showcase how technology could be leveraged on to provide robust and reliable results as well as facilitate the seamless exchange of information.

Attendees:

More than 200 members from across the Globe including Brunei, Germany, India, Indonesia, Malaysia, Mongolia, Philippines, Thailand, Vietnam, Singapore and Korea

Save the date

Date : 14 March 2024
Time : 3:00 - 4:30pm
(Singapore Time)

LIMS for Forensic Investigation

ORGANISED BY THE AFSN ILLICIT DRUGS AND TOXICOLOGY WORKGROUP

DR SANGGIL CHOE National Forensic Service, South Korea	MR SAMUEL LOH MR CHANG HIAN TWAN Health Sciences Authority, Singapore	MS KATHRIN ABELE Forensic Science Institute of the Federal Criminal Police, Department Wiesbaden, Germany
THE BRIEF INTRODUCTION OF NFS LIMS	GOING GREEN - PAPERLESS LABORATORY WITH LIMS	KISS goes KISSme - MODERN EDITION OF A PROVEN LIMS



Webinar Details : Zoom (Online)
Webinar ID: 988 1489 6818
Passcode: afsn140324

Let's work together to realize our common goals.

Let's harness the power of technology to propel our endeavors forward, creating a synergy that transforms challenges into opportunities.





II. Lab Attachment

Attachment by Philippine National Police (PNP) Officer to Health Sciences Authority (HSA)

Date: 22 – 26 April 2024



Republic of the Philippines
NATIONAL POLICE COMMISSION
PHILIPPINE NATIONAL POLICE
FORENSIC GROUP
Camp BGen Rafael T Crame, Quezon City

January 9, 2024

Dr Yao Yi Ju
Division Director of Analytical Toxicology Division,
Health Sciences Authority, Singapore

Dear Dr Yao:

I hope this letter finds you in good health and high spirits. I am writing on behalf of the Philippine National Police (PNP) Forensic Group, a support unit in the PNP organization specializing in advanced forensic methodologies and research. We have been following the remarkable work presented by your team in the recent Asian Forensic Sciences Network annual symposium in the field of drug testing, particularly in hair sample analysis. After careful consideration, we are interested in exploring a potential partnership or collaboration with your agency to further enhance our capabilities in this important area.

At PNP Forensic Group, we firmly believe that collaborative efforts among organizations can significantly contribute to advancements in scientific research and improve the quality of services. Recognizing the expertise and reputation of the Health Sciences Authority, we believe that a partnership between our two organizations would be highly beneficial and could lead to groundbreaking discoveries in hair sample drug testing.

Several law enforcement agencies in the Asian region and across the globe employ drug testing in hair samples as a tool for investigation. Hair samples are collected during criminal investigations to evaluate for drug use or misuse in drug-facilitated crimes and child protection cases. Hair testing also assists in post-mortem evaluations of long-term drug use. The PNP Forensic Group resolves to do the same and much more. We also intend to utilize this analysis for periodic or random drug tests of PNP personnel to weed out erring officers and ensure that our ranks in the PNP organization are unblemished with dangerous drugs.

With this, we wish to adopt and familiarize ourselves with the experimental procedure introduced by your team during the recent AFSN annual meetings. We humbly seek your partnership in this endeavor by sharing with us the technical aspects and protocols of the experimental procedure, the experiences and lessons learned in analyzing hair samples for drug detection.

I would appreciate the opportunity to discuss this proposal further with you at your convenience. POLICE MAJOR ROANALAIN B BALIGOD, Forensic Chemist, with WhatsApp number +639175029847 and email addresses

Ms Loida B. Pacaro, Chemist from PNP Forensic Group Chemistry Division was attached to HSA Analytical Toxicology Laboratory (ATL) to learn about hair drug testing. The training covered hair collection, processing, analysis technique, result reporting and interpretation.



General Constancio T. Chinayog Jr., Director of the PNP Forensic Group (current AFSN President) has formally requested HSA ATL's collaboration to enhance their capabilities in hair drug testing.



III. Knowledge Sharing

Knowledge sharing with the Central Institute of Forensic Science (CIFS), Thailand on drug test in wastewater

Date: 1 July 2024

- CIFS invited HSA ATL to conduct an online session to share methodologies for drug testing in wastewater for their capability building.
- About 40 scientists from CIFS and Thai Forensic Toxicology Network attended the session.

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Scientific activities

KNOWLEDGE SHARING

TITLE :
WASTEWATER ANALYSIS
FOR DRUG OF ABUSE



Ms. Ng Xue Qin
Senior scientist
Health Sciences Authority (HSA)

Join us now for an interactive session and explore best practices and tips about the analysis of drug of abuse in wastewater including sampling techniques, advanced analytical methods from toxicology expert.

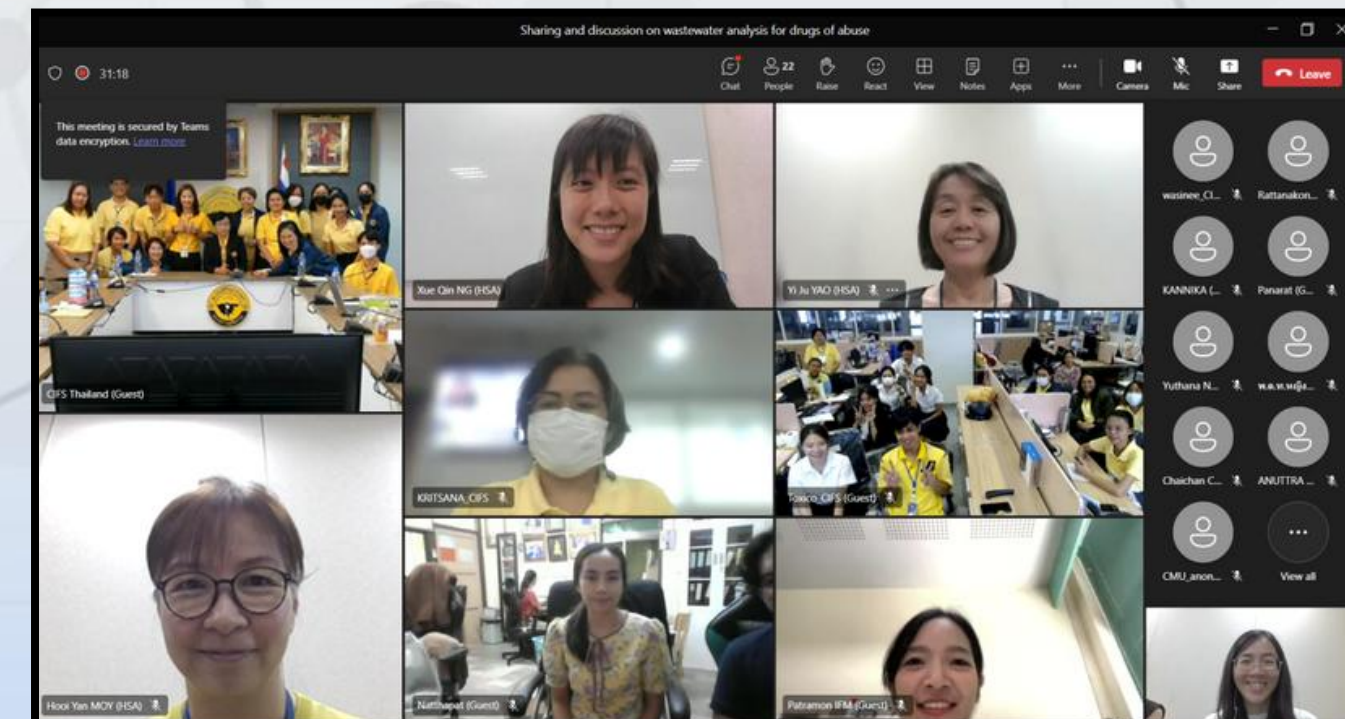
Microsoft Teams

DATE
1 July, 2024

TIME
3.00 PM - 5.00 PM
Singapore time

Meeting ID: 498 480 963 729
Password: ipkH4R

REGISTER NOW





IV. Update of 2024 AFSN Annual Meeting and Symposium

Date : 26 - 30 Aug 2024 in Bangkok, Thailand

- ❑ Hosted by CIFS, Thailand
- ❑ TXWG Invited Speaker: Assoc Prof Dimitri Gerostamoulos, Dr Simon Elliot, Pr Jean-Claude Alvarez and Dr Sara Wille
- ❑ TXWG Pre-conference Workshop on hair drug testing and drug & driving (Assoc Prof Dimitri Gerostamoulos, Pr Jean-Claude Alvarez and Dr Sara Wille)
- ❑ 2 Keynote lectures (Assoc Prof Dimitri Gerostamoulos, Dr Simon Elliot)
- ❑ 7 Oral presentations: Thailand, Indonesia, Singapore and China
- ❑ 7 Posters presentations: China, Singapore, Korea and Thailand
- ❑ 7 Case discussion with experts: Thailand, Malaysia and Singapore

Toxicology work group (TXWG)
Asian Forensic Science Network (AFSN)

TXWG PRE-CONFERENCE WORKSHOP

SECTION: 1
DRUG IN HAIR ANALYSIS, REPORTING AND INTERPRETATION

SECTION: 2
DRUGS & DRIVING PROCEDURES AND ISSUES FOR FORENSIC LABORATORIES

Join us now for an interactive session and explore best practices and tips about hair drug testing including drug & driving procedure directly from toxicology experts.

Assoc. Prof. Dimitri Gerostamoulos
Head of Forensic Science & Chief Toxicologist VIFM, TIAFT President

Prof. Jean-Claude Alvarez
Medical Director, DMU Medical Biology & Genetics of Paris-Saclay Hospital Group.

Dr. Sarah Wille
Expert in Forensic Toxicology National Institute of Criminalistics and Criminology (NICC)

DATE
26 August, 2024

TIME
09:00 AM - 5:00 PM

REGISTER NOW





IV. Update of 2024 AFSN Annual Meeting and Symposium

Date : 26 - 30 Aug 2024 in Bangkok, Thailand

More than 60 participants from: Brunei Darulssalam, China, India, Indonesia, Malaysia, Mongolia, Philippines, Korea, Singapore, Sri Lanka, Timor-Leste and Vietnam.





V. TXWG position holder for 2024/2025

S/N	Member Institute	Position
1	Health Sciences Authority (HSA), Singapore (Moy Hooi Yan)	Chair
2	Department of Chemistry (KIMIA), Malaysia (Mr Ayub Bin Ismail)	Vice-Chair
4	214 Department of Forensic Medicine, Faculty of Medicine, Chulalongkorn University, Thailand (Dr Parath Thirati)	Secretary



Future Training Plans

I. Collaboration with QASC for joint activity on Quality Assurance in Toxicology

- AFSN Quality Assurance & Standards Committee (QASC) Survey 2024 - Toxicology Discipline
- On-line webinar in Mar-Apr 2025

II. Online member's knowledge sharing

- Hair drug testing
- Oral fluid drug testing

III. Online case discussion with invited expert(s)

IV. TXWG programme for 17th AFSN Korea, 9-11 September 2025, 3-day event

- Continue collaborating with TIAFT Board



AFSN International Liaison Officer's Report for 2024

Angeline Yap
26 August 2024

The Journey of AFSN through 15 Years

Presentation

- IAFS Symposium, Sydney, Australia
- November 2023

Publication

- Forensic Science International
- April 2024



Making linkages with International Organisations

Colombo Plan

- Interested to be a sponsor for AFSN Annual Meeting & Symposium
- Sponsored three forensic drug scientists to attend the Bangkok meeting
- Linked up with IDWG for the selection of candidates
- Set up criteria for the sponsorship of candidates
 - From an AFSN member institute actively performing drug testing
 - To present a paper (oral or poster)
 - To share the lessons learnt at AFSN with the lab

Australian Federal Police

- Engaged Dr Simon Walsh, Chief Scientist, who is very keen to enhance collaboration with AFSN
- Linked AFP with WGs for opportunities to be involved in the annual meeting

²¹⁹Leverhulme Research Centre for Forensic Science

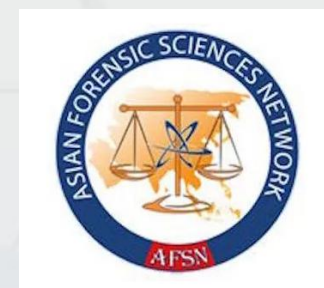
- Distributed the survey on “The future of forensic science education and training”

Association of Forensic Quality Assurance Managers (AFQAM)

- Invited Ms Rane Ho, President, to speak at the 2025 AFSN meeting in Korea

Working with IFSA

- Works with IFSA members and strategic partners on projects and build strategies for collaboration
- Quarterly online meetings
- Annual onsite meeting



IFSA @ AFSN meeting in Bangkok



Invited IFSA Board Members to have their annual onsite meeting @ AFSN Bangkok meeting



A rare opportunity for us to interact with the IFSA Board Members

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- Scott Ford, President of ASCLD
- Rebecca Kogios, Australia/New Zealand NIFS
- Linzi Wilson-Wilde, Australia/New Zealand NIFS
- Jose Lorente, ILO of AICEF
- Helen Tumedisso, SARFS



Organised an IFSA Quality Workshop for the QASC session on building a quality culture in regional forensic science network

Coordinating our contributions to IFSA MRDs

Minimum Requirements Documents (MRDs)



Published MRDs:

1. Seized Drugs Analysis (HSA and IDWG)
2. Forensic DNA Analysis
3. Crime Scene Investigation
4. Forensic Document Examination
5. Toxicology (KIMIA and TXWG)
6. Digital and Multimedia Evidence

Drafting in progress:

1. Latent Print
2. Anthropology
3. Firearms
4. Facial Recognition
5. Fire Investigation

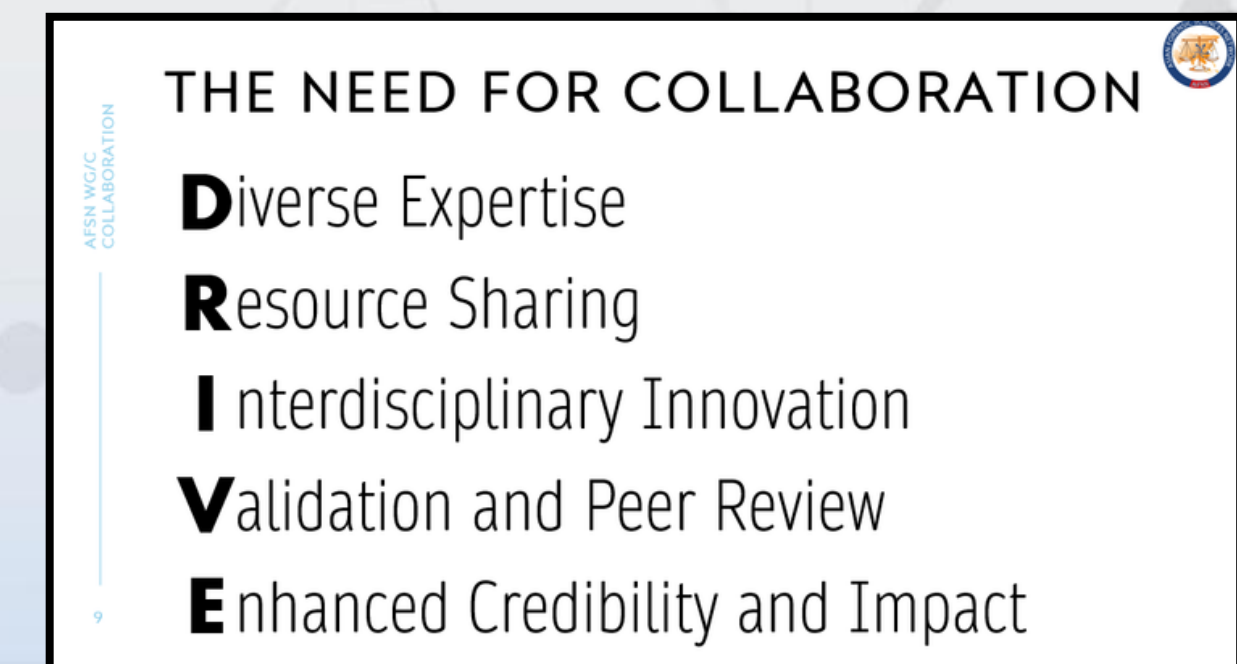
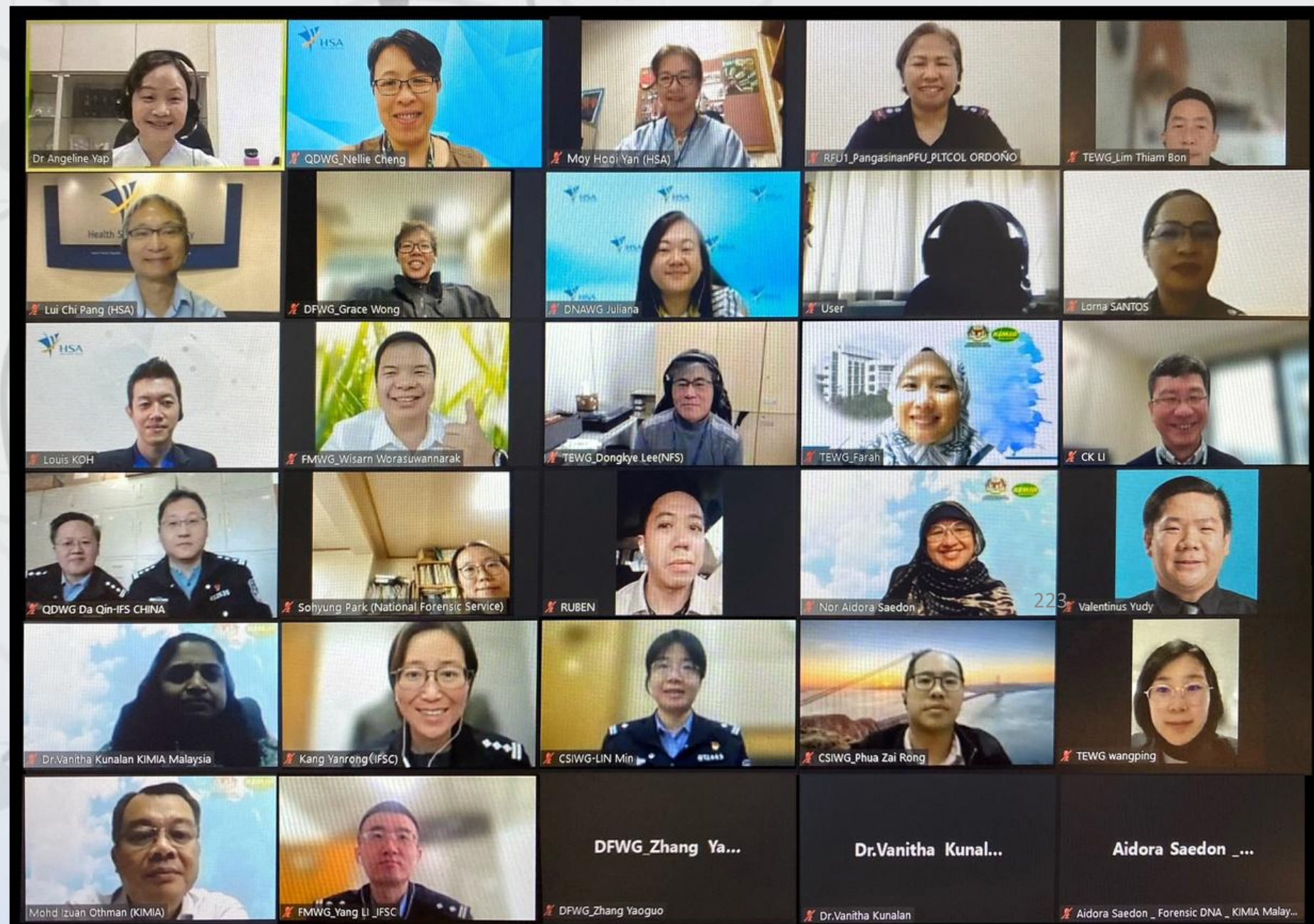
Available in the following languages:

- | | | |
|------------|------------|-------------|
| 1. English | 4. Chinese | 7. Malaysia |
| 2. Spanish | 5. Russian | 8. Thai |
| 3. French | 6. Arabic | |

Special thanks to IFS,
China, KIMIA Malaysia and
CIFS, Thailand

Advancing Strategies with WG/C

Online discussion with WG/C Steering Committee Members on WG/C plans and needs for collaboration.





Thank You!

I Look Forward To
Working Closely
With All Of You.



AFSN Board Members

2024 -2026

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BOARD MEMBERS 2024–2026



Ts. ChM. Nor Aidora Saedon
President
Department of Chemistry
(KIMIA), Malaysia



Dr. Weerakit Harnpariphan
Vice President
Central Institute of
Forensic Science (CIFS), Thailand



Dr. Bong Woo Lee
Vice President (Annual Meeting)
National Forensic Service (NFS),
Republic of Korea



PB Gen. Constancio Chinayog Jr
Past President
Philippine National Police Forensic
Group (PNP), Philippines



Dr. Angeline Yap
Board Member/International Liaison Officer
Health Sciences Authority (HSA),
Singapore



Dr. Hu Lan
Board Member
Institute of Forensic
Science (IFS),
Ministry of Public Security,
People's Republic of China



Pengiran Mohd Helmy
Board Member
Department of Scientific Services,
Brunei



Farah Ad-Din Nordin
Secretariat
Department of Chemistry
(KIMIA), Malaysia

“It does not matter how slowly you go as long as you do not stop.”

APPRECIATIONS

To all dedicated Steering Committee members of the Workgroups and Committees and the ForensicAsia Team,

Your unwavering commitment to AFSN, the generous sharing of your time and expertise, and your leadership within the workgroups have been instrumental in every success we've achieved. These milestones would not have been possible without you.

Thank you for your continued dedication and inspiring contributions.

AFSN BOARD MEMBERS



JABATAN KIMIA MALAYSIA
DEPARTMENT OF CHEMISTRY MALAYSIA

September 2025 ▪ Asian Forensic Sciences Network

www.afsn.asia