



APFAN
in association with
Institute of Nutrition, Mahidol University (INMU)
and
National Institute of Metrology (Thailand) (NIMT) present:

Food Analysis Workshop:
Proficiency Testing and Reference Materials Development

TECHNICAL PROGRAM

Wednesday 19th to Friday 21st June 2019

Venue: Ambassador Hotel Bangkok,
171 Sukhumvit 11
Bangkok 10110,
THAILAND

WELCOME TO BANGKOK, THAILAND

On behalf of the APFAN Committee, I welcome you to Thailand's capital. Bangkok is a wonderful city known for ornate shrines and vibrant street life. The Workshop venue is ideally located adjacent to Bangkok's many attractions. The boat-filled Chao Phraya River feeds its network of canals, flowing past the Rattanakosin royal district, with its Grand Palace and sacred Wat Phra Kaew Temple. Nearby is Wat Pho Temple with a reclining Buddha and, on the opposite shore, Wat Arun Temple with its Khmer-style spire. Food is another Bangkok highlight, from local dishes served at humble street stalls to haute cuisine at romantic rooftop restaurants. Luxury malls compete with a sea of boutiques and markets, where you can treat yourself without overspending.

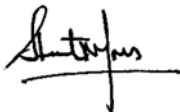
APFAN is a special project of the Federation of Asian Chemical Societies (FACS) and was formed at the Third Asian Chemical Congress in Brisbane in 1989 and in 2019 we celebrate our 30th birthday. The aim of APFAN is to serve the needs of food analysts and thereby promote food quality and safety and good nutrition. This is achieved by promoting and supporting (reliable) food analysis laboratories in the region, indirectly contributing to the improvement of regional food security.

The goal of the current APFAN project is to provide laboratories in the Asia Pacific region access to PT trials in order to assess their performance compared to their peers. By focusing on the practical aspects of the ISO/IEC 17025 Standard, Proficiency Testing, Reference Materials, and Workshops, this project will assist participants to identify, assess and implement actions that address any technical shortfalls of their organizations.

Many thanks go to the organizations and individuals who have contributed to the success of the APFAN project so far, in particular, Charoen Pokphand Group (CP), PT. Indofood CAP Sukses Makmur Tbk, Institute of Nutrition, Mahidol University (INMU), SGS (Thailand) Ltd., and the Food and Nutrition Research Institute (FNRI) of The Philippines for preparation of the PT test materials to date. I am also very happy to advise that Agilent Technologies (Thailand) Ltd., Saengvith Science Co. Ltd., Mettler-Toledo (Thailand) Ltd., PerkinElmer (Thailand) Ltd., Sithiporn Associates Co.,Ltd., and S.M.Chemical Supplies Co.,Ltd. are Sponsors for this PT2 Workshop and other APFAN activities in 2019.

I look forward to further cooperation with you in the remaining activities of the current APFAN project and beyond as we realize our goal, which is to improve the proficiency and capabilities of food testing laboratories in the Asia Pacific region, enabling the participants to improve their methodologies and adopt a more uniform approach to regional food analysis.

Yours sincerely



Mr Stewart Jones
COORDINATOR

APFAN (ASIA PACIFIC FOOD ANALYSIS NETWORK)

Email: apfan.apfan@yahoo.com



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Technical collaborators:

**Institute of Nutrition, Mahidol University
(INMU), Thailand**

APFAN PT-2 Provider

SGS (Thailand) Limited, Thailand

APFAN PT-2:
Homogeneity Testing -
defatted soybean flour

**National Institute of Metrology, Thailand
(NIMT)**

APFAN PT-2:
Reference values: minerals
in defatted soybean flour

**Food and Nutrition Research Institute
(FNRI), The Philippines**

APFAN PT-3 Provider

TECHNICAL PROGRAM

DAY 1 WEDNESDAY 19 TH JUNE 2019	
8:30 am - 9:00 am	Registration
9:00 am - 9:15 am	Welcome and Opening Welcome: Kunchit Judprasong , Workshop Organiser Opening Remark: Ratchanee Kongkhachai , Director, Institute of Nutrition, Mahidol University
9:15 am - 9:30 am	Workshop Introduction Stewart Jones , Coordinator APFAN
9:30 am - 10:00 am	Plenary Speaker: "Asia Pacific Food Analysis Network (APFAN): Thirty Years' Achievements and Future Challenges for Food Analysts", Pieter Scheelings , Coordinator APFAN (2001-2014)
10:00 am - 10:30 am	MORNING BREAK AND GROUP PHOTO
<u>Session 1: Implementing Proficiency Testing (PT) Programmes and Uses of Reference Materials (RM) in Laboratory Quality Systems</u> Chair: Prapasri Puwastien	
10:30 am - 11:00 am	Workshop Address: "The Role of the Measurement, Standards and Conformance Infrastructure in Sectoral Challenges", Stewart Jones , Coordinator APFAN
11:30 am - 12:00 pm	Keynote Address: "Implementing ISO/IEC 17025:2017 in Proficiency Testing (PT) Schemes and Reference Material (RM) Production", Suda Nantavithya , Former Director, BLA-Department of Science Service (DSS), Thailand
12:00 pm - 13:00 pm	LUNCH BREAK
13:00 pm - 13:05 pm	Presentation of Door Prize: Stewart Jones , Coordinator APFAN
<u>Session 2: Introduction to Proficiency Testing Programmes</u> Chair: Stewart Jones	
13:05 pm - 13:35 pm	Plenary Speaker: "Highlights of ISO 17043:2010 and ISO 13528:2015 in PT Programmes", Paul Armishaw , National Measurement Institute (NMI), Australia
13:35 pm - 14:00 pm	Keynote Speaker: "Statistical Evaluation Throughout a PT programme: ISO 13528:2015", Kunchit Judprasong , INMU, Thailand
<u>Session 3: APFAN-PT Programme: PT2 Report</u> Chair: Stewart Jones	
14:00 pm - 15:00 pm	Keynote Speakers: "Analytical Performance of Laboratories in Asia Pacific Food Analysis Network - APFAN PT2 (2018-2019), Report and Discussion: <ul style="list-style-type: none"> • Analytical performance • Critical analytical steps of selected target components • Factors involved in the discrepancies of particular nutrients • Common problems in PT reporting • How to improve the performance of laboratories in PT", Kunchit Judprasong, Prapasri Puwastien , Institute of Nutrition, Mahidol University (INMU), Thailand
15:00 pm - 15:30 pm	AFTERNOON BREAK
15:30 pm - 15:40 pm	Announcement and Distribution of PT3 Materials: Leah C. Dajay Food and Nutrition Research Institute - Department of Science and Technology, The Philippines
15:40 pm - 15:55 pm	Delegate Paper: "Asian Regional Proficiency Testing for Soil Laboratory Network (SEALNET) 2018", Nopmanee Suvannang* , Christian Hartmann. *Land Development Department (LDD), Thailand

DAY 1 WEDNESDAY 19TH JUNE 2019 (continued)	
15:55 pm - 16:10 pm	Delegate Paper: "Proficiency test for nutrient level of chemical fertilizer in Thailand", Charirat Kusonwiriawong , et.al., Department of Agriculture, Thailand
16:10 pm - 16:30 pm	Delegate Paper: "Collusion and falsification of results in proficiency testing", Philip Briggs , Proficiency Testing Australia
16:30 pm - 16:40 pm	Summary of Day 1 Workshop, Stewart Jones , Coordinator APFAN

DAY 2 THURSDAY 20TH JUNE 2019	
Session 4: PT Provision in the Asia Pacific Region	
Chair: Pieter Scheelings	
9:00 am - 9:15 am	Delegate Paper: "PT Provision in Australia", Paul Armishaw , NMI, Australia
9:15 am - 9:30 am	Delegate Paper: "PT Provision in the Philippines", Leah C. Dajay , PT Laboratory, Food Quality and Safety Section FNRI, DOST, Manila
9:30 am - 9:45 am	Delegate Paper: "PT Provision in Malaysia", Li Hui Ling , Chemical Metrology Division, Department of Chemistry, Malaysia
9:45 am - 10:00 am	Delegate Paper: "PT Provision at DSS, Thailand", Ratchada Hempatavee , Wannee Aupaiboon Department of Science Service (DSS), Ministry of Higher Education, Science Research and Innovation, Thailand
10:00 am - 10:30 am	MORNING BREAK
10:30 am - 10:45 am	Delegate Paper: "Achievement of Accreditation Body, Thailand", Chantarat Vorasapavit , Bureau of Laboratory Accreditation (BLS), DSS, Ministry of Higher Education, Science Research and Innovation, Thailand
10:45 am - 11:00 am	Delegate Paper: "PT programmes at Department of Medical Sciences (DMSC), Thailand", Kanokporn Atisook , DMSC, Ministry of Public Health, Thailand
11:00 am - 11:20 am	Cancel
11:20 am - 11:40 am	Delegate Paper: "Role of Proficiency Testing in Food Microbiology Analysis", Uma Priya Kupusamy , Biotechnology Division, Department of Chemistry, Malaysia
11:40 am - 12:00 pm	Delegate Paper: "Critical Steps of PT Programmes in Food Microbiology", Boonmee Kanjanopat , Thailand
12:00 pm - 13:00 pm	LUNCH BREAK
13:00 pm - 13:10 pm	Exercise: "Heads and Tails", Stewart Jones , Coordinator APFAN
Session 5: Panel Discussion (1): Issues in PT Programmes - Experience From Accreditation Body, PT Provider and PT Participant	
Chair: Stewart Jones	
13:10 pm - 14:00 pm	Panel Discussion 1: "PT Programme on Analysis of Nutrients in Foods" Moderator: Kunchit Judprasong <ul style="list-style-type: none"> • Accreditation Body: Chantarat Vorasapavit, Department of Science Service (DSS), Bureau of Laboratory Accreditation, Ministry of Higher Education, Science Research and Innovation, Thailand • PT Provider : Prapasri Puwastien, INMU, Thailand • Participating Laboratory: Tasanee Ratanakulwadeewong, ALS Laboratory Group (Thailand) Co., Ltd)

DAY 2 THURSDAY 20TH JUNE 2019 <i>(continued)</i>	
14:00 pm - 14:30 pm	AFTERNOON BREAK
Session 5: Panel Discussion (2): Issues in PT Programmes <i>(continued)</i>	
Chair: Stewart Jones	
14:30 pm - 15:20 pm	Panel Discussion 2: "PT Programme on Analysis of Pesticides in Food/Agricultural Products", Moderator: Paul Armishaw <ul style="list-style-type: none"> • Accreditation Body: Suda Nantavithya, Lead Assessor, Former Director of BLA-DSS Dept. of Science Service (DSS), Thailand • PT Provider: Kanokporn Atisook, Department of Medical Sciences (DMSC), Ministry of Public Health, Thailand • Participating Laboratory: Chin Chaothaworn, SGS, Thailand
15:20 pm - 15:30 pm	Questions, Comments and Suggestions
Session 6: Special Techniques in Food Analysis	
Chair: Stewart Jones	
15:30 pm - 15:45 pm	Delegate Paper: "Identification and quantification of GMO papaya using ddPCR", Phattaraporn Morris , National Institute of Metrology (Thailand)
15:45 pm - 16:00 pm	Delegate Paper: "Flow Injection Analysis (FIA) for continuous monitoring of food product quality", Adam Wiryawan , Department of Chemistry, Brawijaya University
16:00 pm - 16:15 pm	Delegate Paper: "Method Development and Validation for Analysis of Antibiotics in Food Producing Animals", Mohammad Shoeb , Department of Chemistry, University of Dhaka, Bangladesh
16:15 pm - 16:30 pm	Summary of Day 2 Workshop, Stewart Jones , Coordinator APFAN
16:30 pm - 17:30 pm	APFAN Meeting (attendance optional)

DAY 3 FRIDAY 21ST JUNE 2019	
Session 7: Reference Material (RM) Production	
Chair: Kittaya Shearman	
9:00 am - 9:30 am	Keynote Address: 'The Role of Reference Materials in optimising Food Analysis'. Pieter Scheelings , Former APFAN Coordinator (2001-2015)
9:30 am - 9:50 am	Delegate Paper: "Past, Present and Future Activities on Developing Thailand Reference Materials", Nongluck Tangpaisarnkul , National Institute of Metrology, Thailand (NIMT)
9:50 am - 10:10 am	Delegate Paper: "Development of Reference Materials to Improve Halal Food Testing Capability", Kanjana Hongthong , National Institute of Metrology, Thailand (NIMT)
10:10 am - 10:30 am	Delegate Paper: "Thailand Reference Material (TRM-F-2002) for Analysis of Trace and Essential Elements in Prawn", Nattikarn Ornthai , National Institute of Metrology, Thailand (NIMT)
10:30 am - 11:00 am	MORNING BREAK
Session 7: Reference Material (RM) Production <i>(continued)</i>	
Chair: Ujang Tinggi (Queensland Health, Australia)	
11:00 am - 11:20 am	Delegate Paper: "Development of CRMs for Melamine Determination in Milk Powder and Food", Cheerapa Boonyakong , National Institute of Metrology, Thailand (NIMT)
11:20 am - 11:40 am	Delegate Paper: "Production of Certified Reference Material of Beta-Agonists in Feed", Kittaya Shearman , National Institute of Metrology, Thailand (NIMT)

DAY 3 FRIDAY 21ST JUNE 2019 <i>(continued)</i>	
11:40 am - 12:00 pm	Delegate Paper: "Preparation and Characterization of Zearalenone Standard Solution for Mycotoxin Analysis", Sornkrit Marbumrung , National Institute of Metrology, Thailand (NIMT)
12:00 pm - 13:00 pm	LUNCH BREAK
13:00 pm - 13:05 pm	Sponsor's Message: Agilent
13:05 pm - 13:10 pm	Sponsor's Message: Saengvith Science
13:10 pm - 13:15 pm	Sponsor's Message: Mettler Toledo
13:15 pm - 13:20 pm	Sponsor's Message: PerkinElmer
13:20 pm - 13:25 pm	Sponsor's Message: Sithiporn Associates
13:25 pm - 13:30 pm	Sponsor's Message: S.M.Chemical Supplies Co.,LTD
13:30 pm - 14:00 pm	Keynote Address: "Food Reference Material Derived from PT Programme", Kunchit Judprasong , Prapasri Puwastien, INMU Thailand
14:00 pm - 14:20 pm	Delegate Paper: "Development of Chemical Reference Substances", Anny Sulistowati , PT Qualis Indonesia
14:20 pm - 14:40 pm	Delegate Paper: "Development of Reference Standard in the Context of Drug and Food Control in Indonesia", Fajar Kurniyati , National Agency of Drug and Food Control (NADFC), Republic of Indonesia
14:40 pm - 15:10 pm	AFTERNOON BREAK
<u>Session 8: Use of Reference Materials (RM) in Research</u> Chair: Stewart Jones	
15:10 pm - 15:30 pm	Delegate Paper: "Use of the Reference Material derived from APFAN PT-1 for Quality Control System in the Study of Nutritive Values of Ethnic Foods (Rakhine and Shan)", Moh Moh Hlaing , Theingi Thwin. Department of Medical Research, Republic of the Union of Myanmar
15:30 pm - 15:45 pm	Summary of the Three Day Workshop, Stewart Jones , Coordinator APFAN
15:45 pm - 16:20 pm	Discussion and Recommendations: APFAN WS-2 Participants
16:20 pm - 16:30 pm	Closing Remarks: Stewart Jones , Coordinator APFAN
16:30 pm	Closing