



Regional seminar on “Microplastic Pollution and Analytical Techniques”

22 July 2025, Mandarin Hotel Bangkok, Thailand (GMT+7)

TENTATIVE AGENDA

Main target: representatives from the national authorities of the region in charge of the control of food safety, food contact materials, environmental monitoring and assessment, and laboratories and the private sectors from packaging and food industry, academic and research institutions and laboratories. 100 participants Max		
08:20 – 09:00	Welcome of participants - Registration	
09:00 – 09:15	Inauguration of the seminar by representatives of: - Dr.Pochaman Tagheen Deputy Director of Department of Science and Service (DSS), Thailand - Dr.Nirawat Thammajak Director of Program Management Unit for Human Resources & Institutional Development, Research and Innovation (PMU-B), Thailand - Dr.Kanit Tapasa . Director of National Institute of Reference Laboratories, DSS, Thailand - Dr.Orasa Onjun Director of Institute of Standard Development and Conformity Assessment, DSS, Thailand	
09:15 – 09:30	Overview of the project of the technology development of micropollutant analysis for establishing new standard test methods to enhance the organization's service capability being equivalent to international level by Dr.Amorpon Changsuphan DSS	
09:30 – 09:50	Overview of microplastic analysis and laboratory development by Dr.Aopeau Imvittaya . DSS	
09:50 – 10:40	TBA (Pyrolysis GC-MS) by Professor Kevin Thomas Queensland Alliance for Environmental Health Sciences (QAEHS), University of Queensland, Australia	
10:40 – 10:50	Coffee break	
10:50 – 11:40	Occurrence, Detection and Removal of Microplastics in Water by Assoc. Prof. Jenyuk Lohwacharin Department of Environmental and Sustainable Engineering, Faculty of Engineering, Chulalongkorn University, Thailand	
11:40 – 12:30	Microplastics contamination in drinking water: Detection and polymer identification using FTIR Spectroscopy by Professor Sandhya Babel Sirindhorn International Institute of Technology, Thammasat University, Thailand	
12:30 – 13:30	Lunch break	
13:30 – 14:20	TBA (Pyrolysis GC-MS) by Dr.Cassandra Rauert . QAEHS, University of Queensland, Australia	
14:20 – 15:00	TBA (ISO Microplastic Analysis) by Dr.Nizar Benismail Nestlé Quality Assurance Center (NQAC) Vittel, France	
15:00 – 15:10	Coffee break	
15:10 – 16:00	Automated microplastic analyzers using multi-wavelength polarization microscopy for marine samples by Dr.Visarute Pinrod Nanotechnology Center (NANOTEC) National Science and Technology Development Agency (NSTDA), Thailand	
16:00 – 16:50	TBA (Raman Spectroscopy) by Assoc. Prof. Supakij Suttiruengwong Department of Materials Science and Engineering Faculty of Engineering and Industrial Technology, Silpakorn University, Thailand	



Workshop on “Microplastic Pollution and Analytical Techniques”

23-24 July 2025, Department of Science Service, Bangkok, Thailand

TENTATIVE AGENDA

Time	Activity	Instructor
23 July 2025		
08.30 – 09.00	Welcome of participants - Registration	
09.00 – 12.00	1.) Introduction to pyrolysis GC-MS for microplastic analysis 2.) Introduction to FTIR Spectroscopy for microplastic analysis	Dr.Cassandra Rauert Bruker's staff. Dr.Aopeau Invittaya
12.00 – 13.00	Lunch break	
13.00 – 17.00	1.) Sample preparation techniques for microplastic analysis: sieving, filtration, digestion, density separation, etc. 2..) FTIR microscope demonstration 3.) Pyrolysis GC-MS demonstration	Dr.Cassandra Rauert Dr.Aopeau Invittaya Bruker's staff. Ms.Vichanee Sornsa Ms.Ratimarth Bonlorm
24 July 2025		
08.30 – 09.00	Welcome of participants - Registration	
09.00 – 12.00	Sample preparation experiment for various samples: - Tap water - Wastewater	Dr.Cassandra Rauert Dr.Aopeau Invittaya Mr.Surawut Puangmalee
12.00 – 13.00	Lunch break	
13.00 – 17.00	Instrumental analysis for microplastics - Pyrolysis GC-MS - FTIR microscope	Dr.Cassandra Rauert Dr.Aopeau Invittaya Ms.Vichanee Sornsa Ms.Ratimarth Bonlorm Mr.Surawut Puangmalee

PS: There are mid-morning and afternoon breaks.



The Expert Mission on “Development of Microplastic Testing Laboratories and Network”

TENTATIVE SCHEDULE

DATE	TIME	SCHEDULE
Sat 19 July 2025		Travel from Brisbane, Australia to Bangkok, Thailand
Sun 20 July 2025		Bangkok, Thailand
Mon 21 July 2025	8.30 9.00 – 10.00 10.00 – 12.00 13.00 – 16.30	Arrive at Department of Science Service (DSS) Administrative meeting DSS laboratory visit Visit other organizations (research institutes and laboratories)
Tue 22 July 2025	8.30 – 16.30	Regional seminar on “Microplastic Pollution and Analytical Techniques”
Wed 23 July 2025	8.30 – 16.30	Pyrolysis GC-MS for microplastic analysis workshop – day 1 (Lecture)
Thu 24 July 2025	8.30 – 16.30	Pyrolysis GC-MS for microplastic analysis workshop – day 2 (Experiment)
Fri 25 July 2025	7.00 – 8.30 9.00 – 12.00 13.00 – 15.00 15.00 – 17.00	Travel from Bangkok to Songkla (Flight) Visit Office of Scientific Instrument and Testing, Prince of Songkla University Travel from Songkla to Satun (Car) Visit the study site in Satun
Sat 26 July 2025	9.00 – 15.00 15.00 – 17.00	Visit the study sites in UNESCO global geopark in Satun Travel from Satun to Songkla (Car)
Sun 27 July 2025	9.00 – 10.30	Travel from Songkla to Bangkok (Flight)
Mon 28 July 2025		Travel from Bangkok, Thailand to Brisbane, Australia