THE 12TH ASIA-PACIFIC LANDFILL SYMPOSIUM (APLAS KUALA LUMPUR 2024) REPORT

EXECUTIVE SUMMARY

APLS Kuala Lumpur2024 was held in Kuala Lumpur, Malaysia from November 12~14, 2024. A total of 151 people from 11 countries participated, and the event was a success. In addition, it was decided that the next APLAS2026 will be held in Bali, Indonesia. This time, under the theme “Waste 2 X,” the symposium highlights our commitment to pioneering waste solutions that go beyond traditional disposal. The discussions focus on the transformative potential of waste in advancing the circular economy, emphasizing its role as a resource for creating new materials, energy, and economic opportunities.
For more details of the symposium, please refer to the main report below and the photo collection APLAS KL2024 Appendix 3.

1. Purpose of the Event

The Asia-Pacific Landfill Symposium (APLAS) is an international forum dedicated to addressing critical waste management challenges in the Asia-Pacific region. Its primary objective is to promote sustainable development and enhance the regional environment by facilitating the exchange of technologies, knowledge, and best practices among experts in the fields of waste landfill and recycling.

2. Overview of Past APLAS Conference

No.	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
Year	APLAS 2000	APLAS 2002	APLAS 2004	APLAS 2006	APLAS 2008	APLAS 2010	APLAS 2012	APLAS 2014	APLAS 2016	APLAS 2018	APLAS 2022	APLAS 2024
Hosting-city	Fukuoka Japan	Seoul Korea	Kitakyushu Japan	Shanghai China	Sapporo Japan	Seoul Korea	Bali Indonesia	Ho Chi Minh Vietnam	Hong Kong China	Tokyo Japan	Bangkok Thailand	Kuala Lumpur Malaysia
Date	Oct.11-13 2000	Sep.25-28 2002	Oct.27-29 2004	Oct.18-20 2006	Oct.22-24 2008	Oct.27-29 2010	Oct.8-11 2012	Oct.23 2014	Nov.7-9 2016	Nov.24-26 2018	Nov.8-10 2022	Nov.12-14 2024
Venue	FuKkuoka Health Promotion Center	JW Mariot Hotel & NIER	Kitakyushu International Conference Center	Shanghai Exhibition Center	Keio Plaza Hotel Sapporo	Seoul Palace Hotel	Sanur Beach Hotel	Widsor Plaza Hotel	The University of Hong Kong	MEISEI Univ.	Grand Center Point Hotel Terminal21, Bangkok	Concorde Hotel, Kuala Lumpur
Turnout	250 participants	300 participants	350 participants	400 participants	500 participants	350 participants	400 participants	141 participants	356 participants	208 participants	171 participants	151 participants
Participated countries	14 countries	26 countries	19 countries	24 countries	21 countries	11 countries	23 countries	7 countries	15 countries	15 countries	11 countries	11 countries
Presentation	Oral: 32 Poster: 27	Oral: 60 Poster: 60	Oral: 67 Poster: 52	Oral: 85 Poster: 43	Keynote: 4 Oral: 62 Poster: 33 Hybrid: 40	Keynote: 5 Oral: 33 Poster: 57	Keynote: 5 Oral: 83 Poster: 36	Keynote: 2 Oral: 17 Poster: 12 Business Ses.: 11 Ex.: 15	Keynote: 3 Oral: 106 Poster: 17 Business Ses.: 6 Ex.: 10	Keynote: 3 Oral: 50 Poster: 30 Business Ses.: 8 Ex.: 15 Co.: 9	Keynote: 10 Oral: 35 Poster: 10 Business Ses.: 6 Ex.: 14 Co.:17	Keynote: 6 Oral: 35 Business Ses.: 6 Ex.: 1 Co.: 8
Organizer	JSMCWM	KSWM SLC	City of Kitakyushu JSMCWM NPO・LSA	Shanghai Environment Groups NPO・LSA	City of Sapporo JSMCWM NPO・LSA	KSWM SLC KDWASTE NPO・LSA	Ministry ob Public Works ITB IATPI NPO・LSA MOEJ	NPO・LSA HCMUT	NPO・LSA The University of Hong Kong	NPO・LSA MEISEI Univ. JSMCWM	EEAT NPO・LSA	UMT-MJIIT AUN-SEED NET NPO・LSA

NPO・LSA: The Landfill Systems & Technologies Research Association of Japan, NPO
JSMCWM: Japan Society of Material Cycles and Waste Management
KSWM: Korea Society of Waste Management
SLC: Sudokwon Landfill site Management Corporation
IATPI: Indonesian Society for Sanitary and Environmental Engineers
ITB: Institute Technologies Bandung
HCMUT: Ho Chi Minh City University of Technology
JSWME: Japan Society of Waste Management Exparts
KDWASTE: Korea Waste Association
MOEJ: Ministry of Environment, Japan
EEAT: The Environmental Engineering Association of Thailand
UTM-MJIIT: Malaysia-Japan International Institute of Technology, Univesiti Teknologi Malaysia

Business session
Ses.: Oral presentation and Exhibition
Ex.: Exhibition
Co.: Corporation

Figure 1: Overview of Past APLAS Conference

3. Date and Venue of the Symposium

- **Date**: November 12 (Tuesday) – November 14 (Thursday), 2024
  Note: A technical tour of related facilities was conducted on November 14.
- **Venue**: Concorde Hotel Kuala Lumpur, Malaysia
  (Each session was held in its respective conference room: Grand Hall, Gallery 1, Gallery 2)

4. Organizational Structure

1) Organizers and Co-organizers

Organizer:

- Malaysia-Japan Advanced Research Centre (MJARC)
- Malaysia-Japan International Institute of Technology (MJIIT)
- Institut Sultan Iskandar (ISI)
- ISI Ventures
- Universiti Teknologi Malaysia (UTM)
- NPO Landfill System and Technology Research Association (LSA)

Supporters:

- Embassy of Japan in Malaysia
- Japan International Cooperation Agency (JICA)
- Association of Southeast Asian Nations (ASEAN)
- ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net)
- Japan Science and Technology Agency (JST)
- Japan-ASEAN Science, Technology and Innovation Platform (JASTIP)
- Waste Management Association of Malaysia (WMAM)
- Post Graduate Student Society MJIIT (PGSS MJIIT)

Collaborators:

- Ministry of the Environment, Japan

2) Key Members of the Steering Committee

Founder of APLAS:

- Prof. Masataka Hanashima

Chairperson:

- Ts. Dr. Pramila Tamunaidu

Deputy Chairperson:

- Ts. Dr. Abd Halim Md Ali

3) Executive Committee Members

Secretaries:

- Dr. Hafizah Farhah Saipan @ Saipol
- Mr. Muhammad Bukhari Rosly
- Ms. Nurhamieza Md Huzir

Treasurers:

- Dr. Nurshafinaz Mohd Maruai
- Ms. Mazliza Aini Abdul Majid
- Ms. Che Fatiqah Jama'yah Mohammad Adnan

Technical Staff:

- Dr. Uswah Khairuddin
- Dr. Siti Rahmah Aid

Publication:

- Assoc. Prof. Ir. Ts. Dr. Liew Peng Yen

Logistics:

- Dr. Ahmad Faiz Mohammad
- Mr. Azlan Nur Rasyid Amin

Secretariat:

- Ts. Dr. Vekes Balasundram
- Dr. Liew Wai Loan
- Dr. Ruwaida Jamian
- Ms. Puteri Zakirah Shaffiei

Permanent Secretariat (LSA/International Liaison)

- Director: Prof. Kazuei Ishii
- Chair of International Committee: Mr. Fumiyoshi Ohno
- Secretary General: Mr.Shungo Soeda
- Deputy Secretary General: Mr. Koki Takano
- Support: Ms.Kaori Kobayashi

Source: Photo taken by UTM

Figure 2: Group photo

5. Program Overview

1) Program

A summary of the APLAS KL2024 program is provided below. For detailed daily schedules, please refer to Attachment 1: Program E-book.

Table 1: APLAS KL2024 Program (Overview)

Date	Program	Venue/Location
Day 1 Nov. 12 (Tue)	- Welcome Remarks - Keynote Speeches - Business Expert Session - Corporate Exhibitions (Day 1) - Welcome Dinner	Grand Hall, Gallery 1, Gallery 2 Concorde Hotel Kuala Lumpur **Exhibitions were held in a partitioned section of the Grand Hall.* **Parallel sessions were held in Gallery 1 and Gallery 2.*
Day 2 Nov. 13 (Wed)	- Parallel Sessions (held simultaneously in 3 rooms) - Corporate Exhibitions (Day 2) - Awards and Closing Ceremony	
Day 3 Nov. 14 (Thu)	- Technical Tours (2 locations in Kuala Lumpur)	PJ Eco Recycling Plaza Fasiliti Inovasi Kitar Semula (FIKS), Putrajaya **Participants were divided into two groups for the technical tour.*

APLAS KL2024 Program E-books

FOREWORD BY THE CHAIR OF THE ORGANISING COMMITTEE

On behalf of the organizing committee, it is a privilege to welcome you to the 12th Asia Pacific Landfill Symposium in Association with the AUN/SEED-Net Regional Conference (APLAS) 2024. This symposium, themed "Waste 2 X", highlights our commitment to pioneering waste solutions that extend beyond disposal. This year's discussions will examine the transformative potential of waste in advancing the circular economy, emphasizing a transition where waste serves as a resource for creating new materials, energy, and economic opportunities.

APLAS has established itself as a cornerstone event for exchanging cutting-edge knowledge on sustainable waste management practices across the Asia-Pacific region. This year's program is tailored to address critical topics, from landfill technology innovations, waste management strategies to policies supporting circular waste solutions. We are proud to provide this platform where insights and expertise from global thought leaders, including distinguished speakers from Malaysia, Japan and beyond.

I would like to thank NPO LSA for the trust in handing the baton to MJIIT-UTM to host the APLAS 2024 and all our collaborators, sponsors, and participants, whose dedication to sustainable development makes this event possible.

Let us collectively embrace the challenge of reimagining waste and working towards building a sustainable future. We look forward to productive discussions, meaningful collaborations and networking during APLAS 2024.

Warm regards,

Ts. Dr. Pramila Tamunaidu
Chair, APLAS 2024

APLAS
KUALA LUMPUR 2024
THE 12TH ASIA-PACIFIC LANDFILL SYMPOSIUM

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Ts. Dr. Pramila, Chair, APLAS KL2024

Figure 3: APLAS KL2024 Program book

2) Opening Remarks and Declaration

Master of Ceremonies (arranged by UTM)

1. **Prof. Ts. Dr. Ali Selamat**
   Deputy Vice Chancellor, Universiti Teknologi Malaysia
2. **Prof. Kazuei Ishii**
   President, NPO Landfill System and Technology Research Association; Professor, Hokkaido University
3. **Mr. Takayuki Shikata**
   Ambassador Extraordinary and Plenipotentiary, Embassy of Japan in Malaysia
   Note: Delivered remarks as the incoming ambassador at the time of APLAS KL2024.

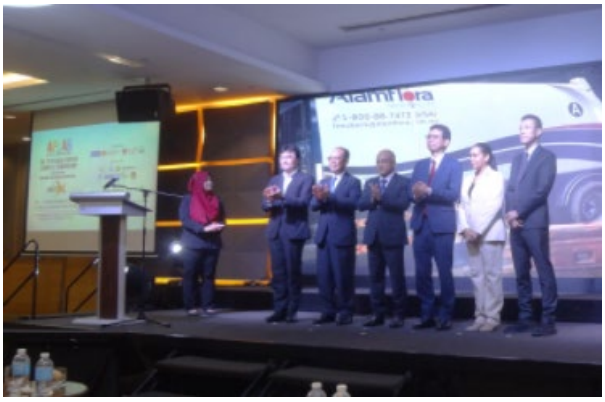
3) Opening Declaration

- **Yang Berhormat Datuk Wira M. Noor Azman Taib**
  Secretary General, Ministry of Housing and Local Government, Malaysia

4) Keynote Speeches

1. **Wataru Matsuura (Japan)**
   Waste Management and Circular Economy Policy in Japan
2. **Mr. Zamri Abdul Rahman (Malaysia)**
   Solid Waste Management in Malaysia: What's Up?
3. **Prof. Kazuei Ishii (Japan)**
   Perspective on the Role of Landfill Sites in the Circular Economy
4. **Kazuyuki Numata (Sendai City, Japan)**
   Municipal Staff Shortage for Disaster Waste Disposal (Online)
5. **Takaya Yamamoto (Japan)**
   JICA Global Waste Management Projects
6. **Thares Srisatit (Thailand)**
   Five-Year Review (FYR) of Klity Creek Rehabilitation and Secure Landfill of Tailing Waste

Participants



Organizers

Source: Photo taken by LSA

Figure 4: Scene from Day 1

Prof Ts Dr Ali Selamat, Deputy Vice Chancellor, UTM

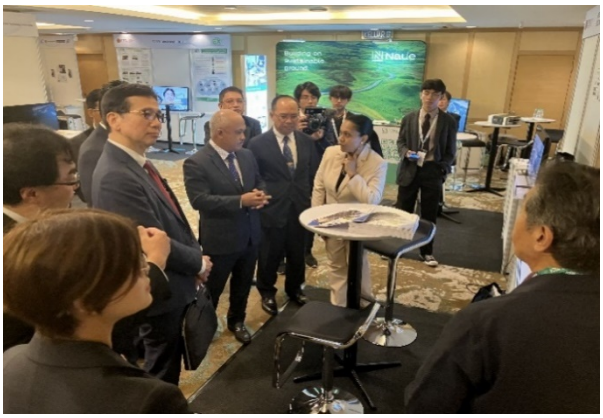
Kazuei Ishii, President of NPO・LSA

Source: Photo taken by LSA

Figure 5: Scene from the Key talk

Presenters of Business Expert Session

Business Expert Session（MC）



VIP Tour of the Corporate Exhibition

Source: Photo taken by LSA& UTM

Figure 6: Scenes from the Business Expert Session and Corporate Exhibition

Corporate Exhibition

Corporate Exhibition

Corporate Exhibition

Corporate Exhibition

Source: Photo taken by LSA& UTM

Figure 7: Scenes from the Corporate Exhibition

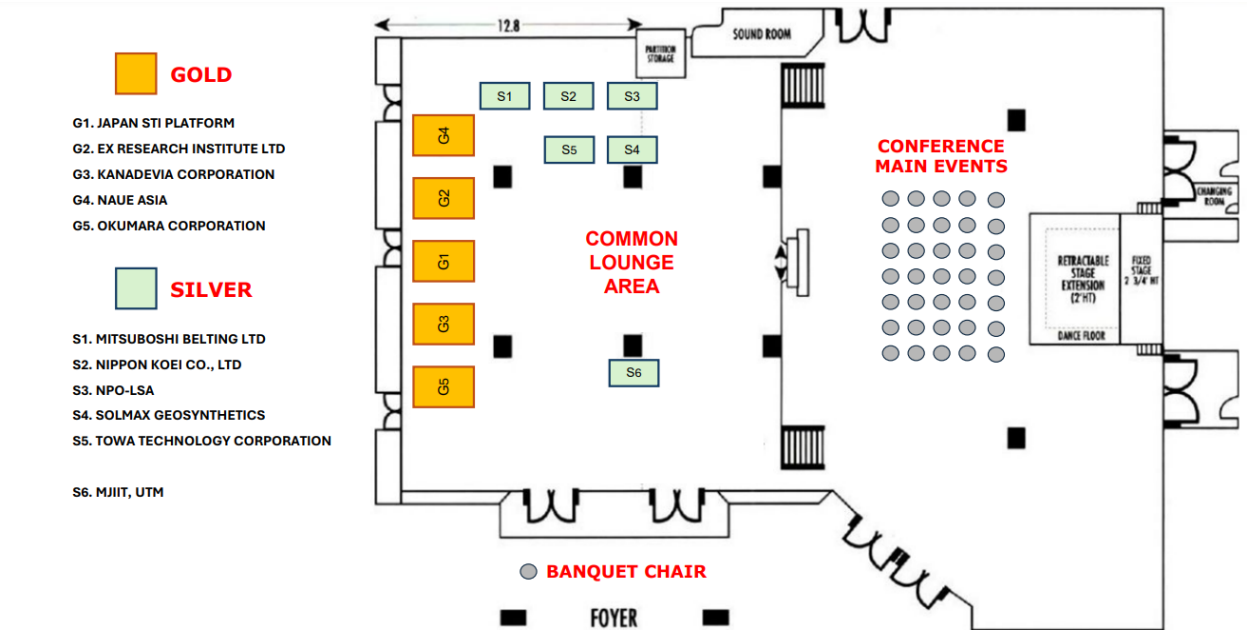


Figure 8: Booth Layout for the corporate exhibition

5) Corporate Exhibitors (Gold, Silver, and Special LSA Sponsors)

Gold Sponsors:

- G-1: JAPAN STI PLATFORM
- G-2: EX Research Institute Ltd.
- G-3: Kanadevia Corporation
- G-4: Naue Group (Headquartered in Germany)
- G-5: OKUMURA CORPORATION

Silver Sponsors:

- S-1: Mitsuboshi Belting Ltd.
- S-2: NIPPON KOEI Co., Ltd.
- S-3: NPO・LSA
- S-4: TOWA Technology Co., Ltd.
- S-5: SOLMAX (Headquartered in Canada)

Special Exhibits:

- S-6: MJIIT, UTM

6) Special LSA Sponsor Booths

- L-1: Eight-Japan Engineering Consultants Inc.
- L-2: PENTA-OCEAN CONSTRUCTION CO., LTD.
- L-3: Docon Co., Ltd.
- L-4: JDC Corporation
- L-5: Japan Lining Systems and Technologies Association (JLSTA)
- L-6: CTI Engineering Co., Ltd.
- L-7: Volclay Japan Co., Ltd.
- L-8: MAEDAKOSEN CO., LTD.

A post-event survey was conducted via email with 15 Japanese companies that participated under the Gold, Silver, and LSA Special Sponsorship categories.

LSA members

LSA member company brochure

Source: Photo taken by LSA

Figure 9*: LSA Special Sponsorship Booths*

7) Oral Presentation Schedule in Parallel Sessions

a. Number of abstracts submitted and oral presentations: **43**

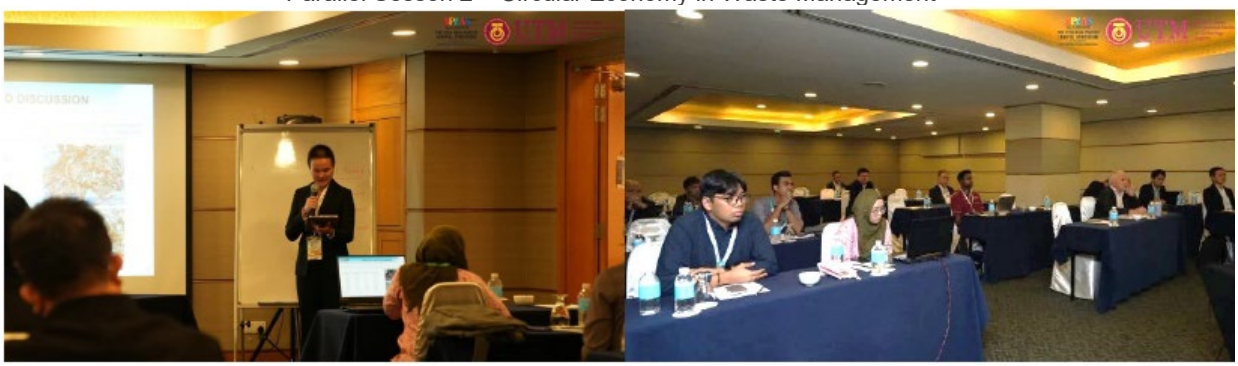
b. Paper Submission Schedule

- Abstract submission deadline: **July 25, 2024**
- Notification of acceptance: **August 15, 2024**
- Full paper submission deadline: **September 15, 2024**

Over two days, 43 papers were presented in 8 themed parallel sessions by local and international participants from academia, industry, and students.

Parallel Sesson 1 – Sustainable Waste Management Strategies

Parallel Sesson 2 – Circular Economy in Waste Management



Parallel Sesson 3 – Innovative Approach to Sustainable Landfilling

Parallel Sesson 4 – Waste Transformation and Valorization Technologies

Parallel Sesson 6 – Island Waste Management

Parallel Sesson 7 – Environmental Assesment in Waste Management

Parallel Sesson 8 – Community-Based Waste Management

Source: UTM

Figure 10: Scenes from Parallel Sessions

8) Networking Dinner

Networking Dinner

Silat performance by Pentas MJIIT students

Networking Dinner

Networking Dinner

Networking Dinner

Source: UTM & Photo taken by LSA

Figure 11: Scene from the Welcome Dinner

9) Site Visits (Technical Tour)

Site visits were conducted at two locations in Kuala Lumpur, with participants divided into two groups:

A: PJ Eco Recycling Plaza

B: Fasiliti Inovasi Kitar Semula (FIKS), Putrajaya

Visit to PJ Eco Recycling Plaza

Visit to Fasiliti Inovasi Kitar Semula (FIKS)

Source: Photo taken by LSA

Figure 12: Scenes from the Technical Tour

6. Participant Statistics

A total of 151 participants from 11 countries attended the symposium. The breakdown is as follows:

Table 2: Breakdown of Registered Participants

Country	Number of Participants
Japan	33
Malaysia	83
Indonesia	12
Thailand	9
Maldives	4
Philippines	3
Kiribati	2
Samoa	2
South Korea	1
Singapore	1
Germany	1
Total	**151**

7. Distributed Materials and Signage

1) Distributed Items

- Program Book (available for download on the APLAS KL2024 website)
- Neck strap-style name tags
- Commemorative gifts for participants (sponsored by Coca-Cola Malaysia, etc.)

2) Signage

- The event title was displayed on two banner rolls and on the electronic bulletin board at the entrance of the main venue.

3) Commemorative Trophy

- APLAS commemorative trophy (brought by LSA)

8. About APLAS 2026 (Tentative)

Regarding APLAS 2026, it has been officially decided that the conference will be held in Bali, Indonesia. This announcement was made by the President of the LSA during the closing session of APLAS KL2024 Although LSA had initially planned to host APLAS 2026 in Sapporo, the decision was revised in consideration of a proposal from Institut Teknologi Bandung (ITB), which will serve as the host for the next event. Below is the tentative outline of APLAS Bali2026:

Table 3: Overview of APLAS 2026(Tentative)

Tentative Conference Name	APLAS Bali 2026
Host Country & Location	Indonesia, Bali
Timing	Second half of 2026
Organizer	Institut Teknologi Bandung (ITB)
Chairperson	Prof. Dr. Emenda Sembiring
Co-organizer	NPO・LSA

9. Appendices

Appendix 1: APLAS KL2024 E-program Book
Appendix 2: Jeram Sanitary Landfill Site Visit Record (APLAS Day 4)
Appendix 3: APLAS KL2024 Photo Collection
Appendix 4: Corporate Participant Survey Results
Appendix 5: Financial Report
Please note that this document has not been attached here.