



CONFERENCE BOOKLET

8th Annual Scientific Meeting of the Indonesian Groundwater Experts Association (PAAI) x ICENIS 2026

July 2026

HIGHLIGHT

Groundwater sustainability is closely linked to energy security, industrial growth, urban resilience, and socio-economic stability. Across Indonesia, increasing groundwater extraction, land-use change, and climate variability have intensified challenges such as groundwater depletion, seawater intrusion, land subsidence, coastal flooding, and water quality degradation. These issues create growing environmental, operational, financial, and ESG (Environmental, Social, and Governance) risks for industry, infrastructure, and communities.

The 8th Annual Scientific Meeting of the Indonesian Groundwater Experts Association (PAAI) 2026 serves as a collaborative platform bringing together researchers, industry, government, and practitioners to promote science-based groundwater management, technological innovation, and sustainable resource governance.

Semarang is selected as the host city due to its strong relevance to groundwater and urban sustainability challenges. As one of Indonesia's major coastal and industrial cities, Semarang provides a strategic setting for discussions on climate resilience, sustainable development, and ESG implementation. With its strong academic, industrial, and governmental presence, Semarang further supports interdisciplinary exchange, scientific collaboration, and the development of practical solutions for sustainable and resilient development.

HIGHLIGHTS

Events

8th PAAI x ICENIS

Date

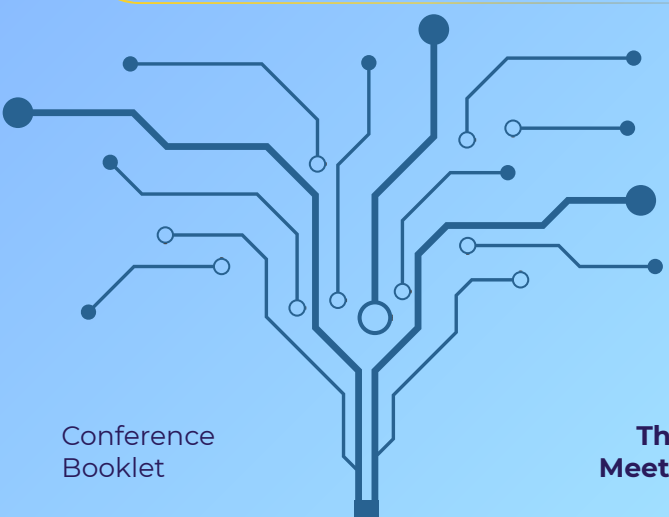
JULY 29th-30th
2026

Venue

SEMARANG
INDONESIA

Held in conjunction with the 11th International Conference on Environment, Energy, and Information Systems (ICENIS 2026), PAAI x ICENIS 2026 expands the dialogue toward broader environmental, energy, and digital transformation challenges. ICENIS 2026 provides an international platform for interdisciplinary collaboration, knowledge exchange, and integrated solutions across environment, energy, information systems, and ESG-driven development.

Together, PAAI x ICENIS 2026 aims to advance integrated, data-driven approaches for resilient infrastructure, responsible resource management, and long-term environmental and societal sustainability.



Venue

PAAI x ICENIS 2026 will be held at Gumaya Tower Hotel, Jl. Gajah Mada No. 59–61, Kembangsari, Semarang Tengah, Semarang City, Central Java, Indonesia on July 29–30, 2026.



Accessibility

Gumaya Tower Hotel is centrally located in Semarang and easily accessible from key transport hubs. It is approximately 7–8 km (15–25 minutes) from Jenderal Ahmad Yani International Airport, 6–8 km (15–25 minutes) from the main bus terminal, 2–3 km (5–10 minutes) from Semarang Tawang Train Station, and 3–4 km (10–15 minutes) from Semarang Poncol Train Station.

The venue is well connected via major city roads and can be conveniently reached using taxis, ride-hailing services, and private vehicles, ensuring smooth access for both domestic and international participants.

Fieldtrip

Date **JULY 28th 2026**

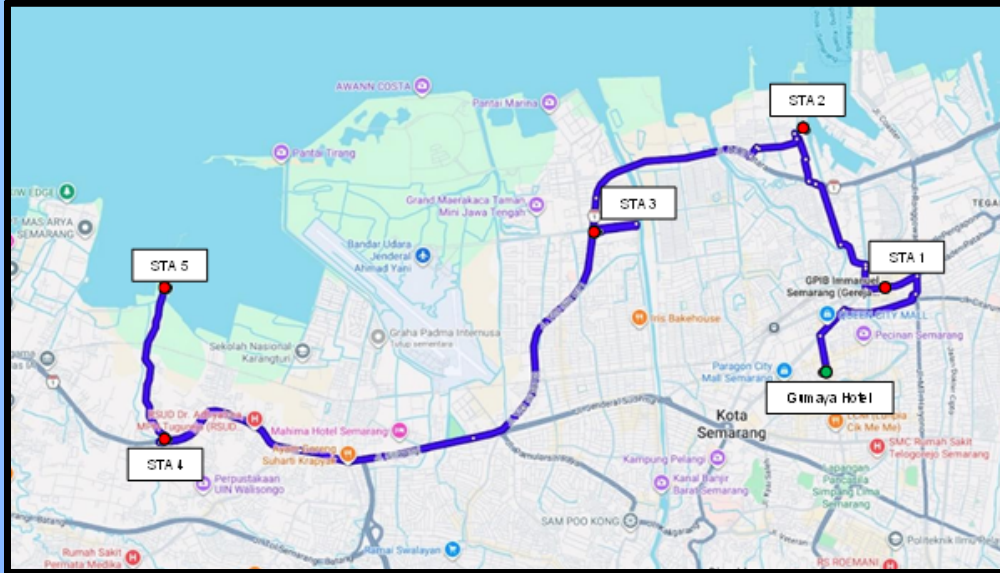
Participants are invited to register for an exclusive pre-conference field trip across Semarang, offering direct exposure to key hydrogeological and urban subsidence sites. The program includes visits to the oldest artesian well in Indonesia located in the historic Old Town area, land subsidence monitoring benchmarks managed by the Geological Agency (Badan Geologi, ESDM), and a representative outcrop of the highly productive Damar Aquifer.

The field trip will be guided by experts from PAAI, Universitas Diponegoro (UNDIP), and the Geological Agency, providing in-depth scientific explanations and practical insights. This curated experience offers a rare opportunity to observe groundwater systems, subsidence processes, and aquifer characteristics in a real urban setting—bridging science, policy, and practice in a single immersive program.

No.	Time	Activity
1	07.00 – 07.45	Registration and Preparation of All Participants
2	07.45 – 08.00	Participant Briefing and Field Trip Orientation
3	08.00 – 08.15	Departure to Station 1 – Srigunting Old Well, Kota Lama Semarang
4	08.15 – 09.30	Field Observation at Srigunting Old Well, Kota Lama Semarang: Historical Groundwater System and Urban Hydrogeology Exploration
5	09.30 – 10.00	Travel to Station 2 – Maritime Station of Semarang, BMKG
6	10.00 – 11.00	Observation of Land Subsidence Phenomena and Coastal Environmental Dynamics
7	11.00 – 11.30	Travel to Station 3 – Central Java Office of Energy and Mineral Resources (ESDM)
8	11.30 – 12.00	Institutional Discussion at Central Java ESDM Office and Benchmark Monitoring Observation for Land Subsidence Studies
9	12.00 – 13.00	Lunch Break, Prayer, and Rest
10	13.00 – 14.00	Travel to Station 5 – Mangrove Tapak Tugurejo Ecotourism Area
11	14.00 – 16.00	Mangrove Ecosystem Observation at Tapak Tugurejo: Coastal Conservation, Groundwater Interaction, and Environmental Resilience (Field Trip Closing Session)
12	16.00 – 17.00	Return Trip from Station 5 to Hotel

Fieldtrip Route

Date **JULY 28th 2026**



Groundwater and Environmental Observation Journey 8th PAAI x ICENIS 2026

STA 1 — Srigunting Old Well, Kota Lama Semarang

Exploring the historical groundwater heritage of Semarang through one of the city's iconic old wells located within the cultural landscape of Kota Lama. Participants will observe urban hydrogeological conditions and the historical relationship between groundwater and city development.

STA 2 — Maritime Meteorological Station, Badan Meteorologi, Klimatologi, dan Geofisika (BMKG) Semarang

Investigating coastal environmental dynamics and land subsidence phenomena in the northern coastal area of Semarang through field observations and scientific explanations from maritime and environmental monitoring perspectives.

STA 3 — ESDM Central Java Province & Benchmark Monitoring Site

Understanding institutional roles and groundwater governance through discussions with the Central Java ESDM Office, followed by direct observation of land subsidence benchmark monitoring infrastructure used for geodynamic and environmental assessments.

STA 4 — Taman Lele: Damar Formation Outcrop (Alternative Stop)

A geological observation stop featuring the Damar Formation outcrop, recognized as part of a tertiary aquifer system. Participants will gain insights into regional stratigraphy, aquifer characteristics, and geological controls on groundwater occurrence.

STA 5 — Tapak Mangrove, Tugurejo

Closing the field excursion with an exploration of the Tapak Mangrove coastal ecosystem, highlighting the interaction between mangrove conservation, groundwater systems, coastal resilience, and community-based environmental sustainability initiatives.

Fieldtrip

Date **JULY 28th 2026**

Oldest Freshwater Well in Semarang City



Benchmark for Landsubsidence



Damar Formation (Aquifer)



Conference Theme

“Sustainable Tomorrow: Redefining a Holistic Environmental, Social, and Governance (ESG) Approach to Energy, Groundwater, and Information Systems”

- Groundwater systems and environmental change across regions and geological conditions
- Climate change, drought, and groundwater resilience
- Urbanization, land-use change, and groundwater sustainability
- Groundwater–surface water interactions and ecosystem impacts
- Groundwater quality, contamination, and pollution management
- Sustainable groundwater and water resource management in coastal and inland regions
- Environmental, Social, and Governance (ESG) approaches to groundwater policy, finance, and resilience
- Groundwater energy infrastructure nexus, including geotechnical and development projects
- Groundwater management in urban areas and extractive industries, including mining, oil, gas, and other sectors
- Data-driven groundwater intelligence, including artificial intelligence, big data analytics, remote sensing, and advanced information systems

Important Dates

FEBRUARY 23th - May 25th
2026

Call For Abstract

May 29th
2026

Deadline For Abstract

June 26th
2026

Notification of Abstract
Acceptance

July 5th
2026

Poster Submission

29th - 30th July
2026

Conference days

August 9th

Full Paper Submission
Due Date

July 28th

Pre Event "Field Trip"

Speakers

Keynote Speakers:

- Prof. Sudharto P. Hadi, M.ES., Ph.D. – Universitas Diponegoro, Indonesia
- Prof. Dr. rer. nat. Thomas R. Rüde – RWTH Aachen University, Germany
- Lukasz Kruszewski, Ph.D. - Institute of Geological Sciences, Poland

Invited Speakers:

- Prof. Kuo-Wei Liao – National Taiwan University of Science and Technology, Republic of China
- Dr. Norsyafina Binti Roslan – Department of Earth and Environmental Sciences, Universiti Kebangsaan Malaysia, Malaysia
- Dr. Stefan Herwig Gödeke – Associate Professor, Universiti Brunei Darussalam, Brunei Darussalam
- Prof. Sr TS. Dr. Syahrul Nizam Bin Kamaruzzaman – Department of Building Surveying, Universiti Malaya, Malaysia
- Graham Robert Bell, Senior Manager of Geotechnical and Hydrogeology, PT. Merdeka Copper Gold

Additional speakers and moderators for discussion sessions, parallel sessions, and field trip will be drawn from academics and hydrogeology experts, industry representatives with ESG and groundwater management experience, regulators and policymakers, and sustainability practitioners and risk management consultants.

Speakers



KEYNOTE SPEAKER #1

Prof. Sudharto P. Hadi, M.ES., Ph.D
Universitas Diponegoro



KEYNOTE SPEAKER #2

Prof. Dr. rer. nat. Thomas R. Rude
RWTH Aachen University



KEYNOTE SPEAKER #3

Lukasz Kruszewski, Ph.D.
Institute of Geological Sciences, Poland

Invited speakers



Prof. Kuo-Wei Liao
National Taiwan University



Graham Robert Bell
PT. Merdeka Copper Gold



Dr. Norsyafina Binti Roslan
Universiti Kebangsaan Malaysia



Prof. Sr. Ts. Dr. Syahrul Nizam Bin Kamaruzzaman
Universiti Malaya



Dr. Stefan Herwig Gödeke
Universiti Brunei Darussalam

Scientific Committees

The 8th PAAI 2026 has a Steering Committee, the list are:

- Prof. Sudarto Notosiswoyo (ITB)
- Prof. Denny Djuanda (ITB)
- Prof. Lambok M. Hutasoit (ITB)
- Prof. Rudy Sayoga Gautama (ITB)
- Prof. Hendarmawan (Unpad)
- Prof. Dr.rer.nat. Ir. Heru Hendrayana, IPU (UGM)
- Prof. Riset. Robert Delinom (LIPI)
- Ir. Wahyudin, M.T. (Badan Geologi)
- Prof. Agus M. Ramdhan, Ph.D. (ITB)
- Irwan Iskandar, Ph.D (ITB)

Scientific Committees

The 11th ICENIS 2026 has a scientific committee which consist of Environmental , Energy , and Information System experts. The list of the Scientific Committee of the 11th ICENIS 2026 are:

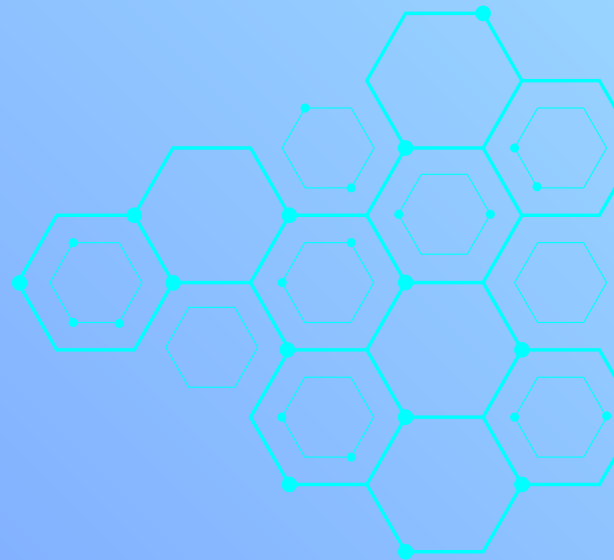
- Prof. Ir. Mochamad Agung Wibowo, M.M., M.Sc., Ph.D. – Universitas Diponegoro
- Prof. Dr. Ir. Purwanto, DEA – Universitas Diponegoro
- Prof. Dr. Ir. Hadiyanto, S.T., M.Sc., IPU – Universitas Diponegoro
- Prof. Dr. Rahmat Gernowo, M.Si – Universitas Diponegoro
- Prof. Dr. Tri Retnaningsih Soeprbowati, M.AppSc – Universitas Diponegoro
- Prof. Dr.-Ing. Ir. Silviana, S.T., M.T., IPM., ASEAN Eng. – Universitas Diponegoro
- Prof. Dr. Ir. R. Rizal Isnanto S.T., M.M., M.T., IPU, ASEAN Eng – Universitas Diponegoro
- Dr. Tri Laksmi Indreswari, S.H., M.H.– Universitas Diponegoro
- Dwi Cahyo Utomo, S.E., M.A, PhD - Universitas Diponegoro
- Dr. Budi Warsito, S.Si., M.Si – Universitas Diponegoro
- Drs. Bayu Surarso, M.Sc., Ph.D. – Universitas Diponegoro
- Dr. Eng. Maryono, S.T., M.T. – Universitas Diponegoro
- Dr. Fuad Muhammad, S.Si., M.Si. – Universitas Diponegoro
- Dr. Sri Widodo Agung Suedy, SSi, MSi – Universitas Diponegoro
- Ir. Marcelinus Christwardana, S.T., M.T., Ph.D., IPM., ASEAN Eng- Universitas Diponegoro
- Prof. Kuo-Wei Liao, National Taiwan University, Republic of China.
- Prof.Sr TS.DR.Sayhrul Nizam Bin Kamaruzzaman, Malay University

Organizing Committee



Member PAAI:

- Agus Sugiharto, ST, MT.
- Dr.rer.nat Ir. Doni Prakasa Eka Putra, ST, MT, IPM.
- Dr. Sci. Rahmat Fajar Lubis
- Ir. Narulita Santi, S.T.,M.Eng
- Riri Febrina, ST, MT.
- Sokhwatul Aghnia, ST, M.Eng
- Karin Nadira Dauwani, S.Si.,MT.
- Ir. Faridha Aprilia, ST, M.Eng.
- Andrian Mayka Ariawan, ST, M.En.
- Dr. Dwi Sarah
- Fahrudin ST, MT, Ph.D
- Idham Effendi, Ph.D
- Archibald Anugroho Nagel, ST, M.En.
- Nico Anatoly, ST, MT.
- Muhammad Syukri, ST, MT.
- Maria Christine, ST
- Desay Gitasari, ST
- Muhammad Rifky Wibisana, ST
- Kristanti Wulandari, ST
- Vydia Ridha Ariati, ST
- Yakub Rindaryanto, S.IP
- Yohanes Brahmo Emianto, ST
- Rizky Adi Nugraha, ST
- Indriyana
- Ken Nastiti



Organizing Committee

Chair woman:

- Dr. Tri Laksmi Indreswari, S.H., M.H (ICENIS)

Vice-Chairman:

- Qidir Maulana Binu Soesanto, S.Si., M.Sc., Ph.D

Member ICENIS:

- Prof. Dr. Ir. R. Rizal Isnanto S.T., M.M., M.T., IPU, ASEAN Eng
- Dr. Fuad Muhammad, S.Si., M.Si.
- Dr. Eng. Maryono, S.T., M.T.
- Dr. Budi Warsito, S.Si., M.Si
- Dinar Mutiara KN, ST, M.InfoTech.(Comp)., Ph.D.
- Drs. Bayu Surarso, M.Sc., Ph.D.
- Dr. Sri Widodo Agung Suedy, S.Si., M.Si.
- Sidiq Muhammad Asnan, S.T., M.M.
- Nurlilla Suryaningsih, S.E.
- Wenti Arum W, S.T
- Wahyu Setiyadi, S.Kom., M.Kom.
- Ekana Listianawati, S.Hum
- Doni Fajar Dwi Riyanto, S.E
- Alwi Achmad Muda, A.Md
- Wikasita Kusumawati, S.T
- Siti Andriyani, S.Sos
- Rochmad
- Almusriah
- Fitri Nurhandayni
- Marisa Anugraheni Lestyanti



Full Paper Submission

(Optional)



Full paper submission is optional, but we highly encourage you to submit to Riset Geologi dan Pertambangan (RGP). Riset Geologi dan Pertambangan – Geology and Mining Research is an open-access journal managed by dedicated Earth science enthusiasts and published by BRIN Publishing (Penerbit BRIN). We are committed to making Earth science research freely accessible to all. RGP offers both open access for readers and no article processing charges (APCs) for authors.

Publication Options

As part of the PAAI 8th Annual Scientific Conference x ICENIS 2026 Conference, participants are encouraged to share their research through one of several publication pathways. While full paper submission is optional, these outlets provide excellent opportunities to maximize visibility and academic impact.

1) PAAI Proceedings For rapid dissemination of research within the groundwater and applied geoscience community, focusing on technical and field-based studies.

Visit: <https://airtanah.org/proceeding>

2) Riset Geologi dan Pertambangan (RGP, Scopus-indexed Q3) An open-access, peer-reviewed journal published by BRIN Publishing. RGP provides a strong platform for advanced research in geology, mining, and interdisciplinary earth sciences. The journal is indexed in Scopus (Q3), Clarivate Analytics (WoS), and SINTA-2, and publishes twice a year (June and December). All articles undergo a double-blind peer review process, with no article processing charges (APCs) for authors.

Visit: <https://jrisetgeotam.brin.go.id/index.php/jrisgeotam>

3) Jurnal Geosains dan Teknologi (JGT, ISSN 2615-6520, e-ISSN 2620-634X) A periodic journal published by the Geological Engineering Department of Universitas Diponegoro, Indonesia. JGT accommodates scientific articles in geoscience and applied technology. It is accredited SINTA-4 by the Ministry of Research and Technology/National Research and Innovation Agency.

Visit: <https://ejournal2.undip.ac.id/index.php/jgt/index>

Riset Geologi dan Pertambangan (Geology and Mining Research)
ISSN 0125-9849, e-ISSN 2354 6638

Rundown

Main Schedule

Time	Session	Speaker
DAY - 1: Wednesday, July 29th 2026		
08.00 – 08.30	Registration	-
08.30 – 08.35	Opening remarks	MC
08.35 – 08.40	Singing national anthem: Indonesia Raya	PSMT and audience
08.40 – 08.45	Prayers	
08.45 – 08.50	Welcome speech by Chair of The 11th ICENIS	Dr.Tri Laksmi Indreswari,S.H.,M.H
08.50 – 08.55	Welcome speech by Chair of the 8th Annual Scientific Meeting (PAAI)	Ir.Narulita Santi,S.T.,M.Eng
08.55 – 09.05	Welcome speech by SPS Dean	Prof. Ir. Mochamad Agung Wibowo, M.M., M.Sc., Ph.D
09.05 – 09.15	Welcome speech by Head of The Indonesian Groundwater Experts Association (PAAI)	Irwan Iskandar,S.T.,M.T.,Ph.D
09.15 – 09.25	Welcome speech and opening by Rector of Universitas Diponegoro	Prof. Dr. Suharnomo, S.E., M.Si.
09.25 – 09.30	Performance: Traditional dancing	UKM Undip
09.30 – 10.30	Keynote Speech 1	Speakers: Prof.Dr.rer.nat.Thomas R Rude Prof. Sudharto P,MES.,Ph.D Lukasz Kruszewski Ph.D
10.30 – 10.40	Awarding certificate and group photo	MC
10.40 – 10.50	Performance: Medley Song	PSMT

Time	Session	Speaker
10.50 – 11.50	Keynote Speech 2	Speakers: Prof.Kuo Wei Liao Dr Norsyafina Binti Roslan Dr.Stefan Herwig Godeke
11.50 – 12.00	Awarding certificate and group photo	MC
12.00 – 13.00	Break	
13.00 – 14.15	Parallel Session 1	
14.15 – 14.30	Coffee Break	
14.30 -16.00	Parallel Session 2	
DAY - 2: Thursday , July 30th 2026		
08.00 – 08.30	Registration	
08.30 – 08.45	Opening remarks	MC
08.45 – 10.15	Keynote Speech 3	Speakers: Graham Robert Bell Prof.SR.TS.Dr Syahrul Nizam Bin Kamaruzzaman
10.15 – 10.25	Awarding certificate and group photo	MCJudging Session of the Competition
10.25 – 10.35	Coffee Break	
10.35 – 12.00	Parallel Session 1	
12.00 – 13.00	Break	
13.00 – 14.30	Parallel Session 2	
14.30 – 14.45	Coffee Break	
14.45 – 15.30	Final round of the 3 minutes talk competition (3 finalist : Presentation)	
15.30 – 16.00	Awarding for Best Paper, Presenter, Poster, 3 minutes talk	

Contact Information



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