IAVCEI Commission on Volcanic Lakes

Second Circular

CVL 12th Workshop

Pampanga and Laguna, Philippines

March 9-18, 2026

INVITATION

On behalf of the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) – Commission on Volcanic Lakes (CVL) and the Department of Science and Technology – Philippine Institute of Volcanology and Seismology (DOST-PHIVOLCS), we are excited to invite you to the 12th CVL Workshop (CVL 12), to be held in the Philippines on March 9-18, 2026, specifically in Clark, Pampanga, with field workshops at the Pinatubo Crater Lake and San Pablo Maars.

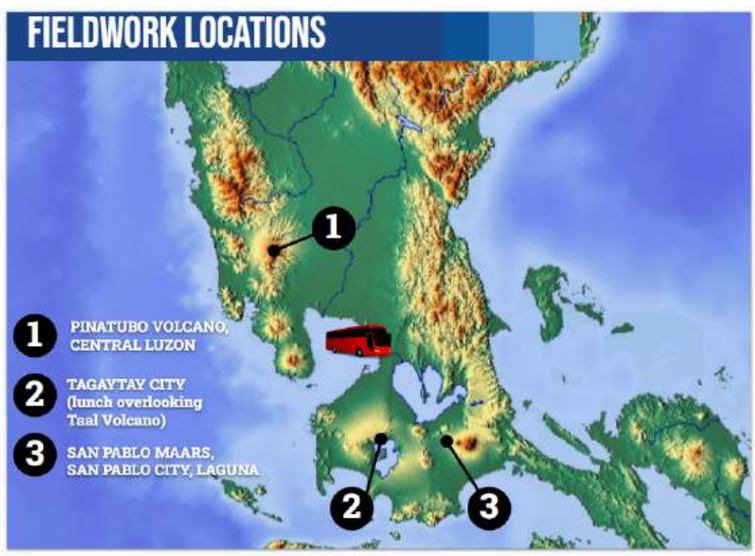
The goal of the workshop is to bring together researchers from a wide range of disciplines such as physical volcanology, hydrology, limnology, biogeochemistry, geochemistry, and geophysics to exchange ideas and open a dialogue on a broad range of topics regarding volcanic lakes applied research such as: latest developments in field measurements; biogeochemical and geophysical monitoring of volcanic lakes; modelling of volcanic lake systems processes; hazards recognition, forecasting, and mitigation.

CVL 12 is designed to offer both oral and poster scientific sessions and field visits to volcanic areas where crater lakes and maars exist.

GENERAL INFORMATION

Luzon is the largest and most populous island in the Philippines, located in the northern part of the archipelago. It serves as the country's political, economic, and cultural centre, home to the capital city, Manila, as well as key regions such as Central Luzon and Northern Luzon. The island features a diverse geography that includes mountain ranges like the Sierra Madre and Cordillera, active and dormant volcanoes, vast plains, lakes, and coastal areas.

March marks the beginning of the dry season in most parts of Luzon, particularly in Central Luzon, where the workshop venues are located. The weather is typically warm and dry, with average daytime temperatures ranging from 25°C to 34°C (77°F to 93°F). Humidity levels are moderate, and rainfall is minimal—ideal conditions for outdoor activities and fieldwork.



The main venue for the workshop is **Clark** in **Pampanga province**, located in Central Luzon. Once a former U.S. military base, Clark has transformed into a modern, well-planned economic zone with excellent infrastructure, accommodations, and conference facilities. It is known for its accessibility, safety, and growing reputation as a hub for both business and tourism.

Clark is approximately **80 kilometers (about 50 miles)** north of Manila, the national capital. By car or bus, the travel time from **Metro Manila to Clark** typically ranges from **1.5 to 2.5 hours**, depending on traffic conditions.

Mount Pinatubo
Located near the tripoint of Zambales, Tarlac, and Pampanga provinces, Mount Pinatubo is famous for its cataclysmic eruption in 1991, one of the largest volcanic events of the 20th century. Today, it features a stunning crater lake and remains an important site for geological studies and environmental recovery.

San Pablo Maars
The city of **San Pablo** in **Laguna province** is known for its seven crater lakes, formed by ancient maar volcanoes. These maars are low-relief volcanic craters filled with water, offering insights into phreatomagmatic eruptions and geomorphological evolution. The city is surrounded by lush greenery and sits on the foothills of Mount Banahaw and Mount Cristobal.

Clark to Mount Pinatubo: Approximately **50–60 kilometers** (1.5 to 2 hours by 4WD or tour vehicles, depending on access points).

Clark to San Pablo, Laguna: Roughly **120 kilometers** (2.5 to 3.5 hours by car, depending on traffic).

Mount Pinatubo to San Pablo: About **130 kilometers** (approximately 3 to 4 hours by land), making it feasible to structure multi-day field trips between both locations.

Airport Access: Clark International Airport vs. NAIA

Flying into **Clark International Airport (CRK)** is generally more convenient for events based in Central Luzon, like this workshop. CRK is **just 15–20 minutes** from the Clark Freeport Zone, avoiding the heavy congestion of Metro Manila. It also caters to both domestic and international flights, with increasing connectivity to regional hubs in Asia and the Middle East.

In contrast, **Ninoy Aquino International Airport (NAIA)** in Manila, while offering more international routes, often faces significant traffic delays. Travelers using NAIA must account for 2 to 3 hours (or more) of travel time to reach Clark, depending on Manila's traffic conditions.

PINATUBO VOLCANO ERUPTION

The cataclysmic eruption of Pinatubo Volcano on 15 June 1991 is the second-largest volcanic eruption of this century and by far the largest eruption to affect a densely populated area. The eruption produced high-speed avalanches of hot ash and gas, lahars, and a cloud of volcanic ash hundreds of kilometres across. The impacts of the eruption continue to this day.

From June 7 to 12, the first magma reached the surface of Pinatubo Volcano. Because it had lost most of the gas contained in it on the way to the surface (like a bottle of soda pop gone flat), the magma oozed out to form a lava dome but did not cause an explosive eruption. However, on June 12 (Philippine Independence Day), millions of cubic meters of gas-charged magma reached the surface and exploded in the reawakening volcano's first spectacular eruption.

When even more highly gas-charged magma reached Pinatubo's surface on June 15, the volcano exploded in a cataclysmic eruption that ejected more than 5 cubic kilometres (1 cubic mile) of material. The ash cloud from this climactic eruption rose 35 kilometres (22 miles) into the air. At lower altitudes, the ash was blown in all directions by the intense cyclonic winds coincident with the passage of a tropical cyclone (International Name: Yunya; Local name: Diding) in the Philippine Area of Responsibility (PAR), and winds at higher altitudes blew the ash south-westward. A blanket of volcanic ash (sand- and silt-size grains of volcanic minerals and glass) and larger pumice lapilli (frothy pebbles) blanketed the countryside. Fine ash fell as far away as the Indian Ocean, and satellites tracked the ash cloud several times around the globe.

Huge avalanches of searing hot ash, gas, and pumice fragments (pyroclastic density currents) roared down the flanks of Pinatubo Volcano, filling once-deep valleys with fresh volcanic deposits as much as 200 meters (660 feet) thick. The eruption removed so much magma and rock from below the volcano that the summit collapsed to form a large volcanic depression (caldera) 2.5 kilometres (1.6 miles) across.

Much weaker but still spectacular ash eruptions occurred occasionally through early September 1991. From July to October 1992, a lava dome was formed in the new caldera as fresh magma rose from deep beneath Pinatubo.

- C*hris Newhall, James W. Hendley II, and Peter H. Stauffer*

PINATUBO CRATER LAKE

The June 1991 eruption of Mount Pinatubo, Philippines breached a significant, pre-eruptive magmatic-hydrothermal system consisting of a hot (>300°C) core at two-phase conditions and surrounding, cooler (<260°C) liquid outflows to the N and S. The eruption created a large, closed crater that accumulated hydrothermal upwellings, near-surface aquifer and meteoric inflows. A shallow lake formed by early September 1991 and showed a long-term increase in level of ~1m/month until an artificial drainage was created in September 2001. Comparison of the temporal trends in lake chemistry to pre- and post-eruptive springs distinguishes important processes in lake evolution. The lake was initially near-neutral pH and dominated by meteoric influx and Cl–SO_4 and Cl–HCO_3 hydrothermal waters, with peaks in SO_4 and Ca concentrations resulting from leaching of anhydrite and aerosol-laden tephra. Magmatic discharge, acidity (pH~2) and rock dissolution peaked in late 1992, during and immediately after the eruption of a lava dome on the crater floor. Since cessation of dome growth, trends in lake pH (increase from 3 to 5.5), temperature (decline from 40 to 26°C), and chemical and isotopic composition indicate that magmatic degassing and rock dissolution have declined significantly relative to the input of meteoric water and immature hydrothermal brine. Higher concentrations of Cl, Na, K, Li and B, and lower concentrations of Mg, Ca, Fe, SO_4 and F up to 1999 highlight the importance of a dilute hydrothermal contribution, as do stable-isotope and tritium compositions of the various fluids. However, samples collected since that time indicate further dilution and steeper trends of increasing pH and declining temperature. Present gas and brine compositions from crater fumaroles and hot springs indicate boiling of an immature Cl–SO_4 geothermal fluid of near-neutral pH at approximately 200°C, rather than direct discharge from magma. It appears that remnants of the pre-eruptive hydrothermal system invaded the magma conduit shortly after the end of dome emplacement, blocking the direct degassing path. This, along with the large catchment area (~5 km^2) and the high precipitation rate of the area, led to a rapid transition from a small and hot acid lake to a large lake with near-ambient temperature and pH. This behaviour contrasts with that of peak-activity lakes that have more sustained volcanic gas influx (e.g., Kawah Ijen, Indonesia; Poas and Rincon de la Vieja, Costa Rica).

- Stimac et al., 2004

ACCESS TO PINATUBO CRATER LAKE

Access to Pinatubo Volcano Crater Lake via the Sta. Juliana trail in Capas, Tarlac involves a combination of a 4x4 off-road drive and a trek across lahar canyons and dry riverbeds. The hike is moderately challenging, with long stretches of uneven terrain, loose rocks, and limited shade. In March, the dry season, the trail is generally passable but can be hot and dusty, making sun protection and hydration essential. The hike from the drop-off point to the Crater is around 1.5 – 2 hours. There will be porters that can carry the instruments, and this will be part of the logistical support of the LOC.

From the crater view deck, access to the shore of the Crater Lake requires descending a well-established but steep stairway and footpath built along the inner crater wall. The descent takes about 10–15 minutes, but the slope and steps can be tiring, especially on the return climb back to the rim. The path is exposed, with little shade, so sun protection is necessary.

SAN PABLO MAARS

San Pablo City is located in the Province of Laguna and is situated approximately 70 kilometres away from Metro Manila. It is famous for its seven (7) lake-filled maars, namely: Bunot, Calibato, Mohicap, Palakpakin, Pandin, Sampaloc, and Yambo. The seven lakes were formed through the interaction of shallow magma with groundwater, causing an explosion that created crater-like depressions that eventually have been filled with meteoric water.

The 7 lakes of San Pablo are part of the monogenetic volcanic centres, of the pull-apart ‘Macolod Corridor’ rift zone, with reported ages of 1.05 ± 0.05 Ma (De Boer et al., 1980) and 0.84 ± 0.13 Ma (Oles, 1991) from basaltic to andesitic rocks in the eastern side of the monogenetic volcanic field (Sudo et al., 2000). Additionally, ages 0.20 ± 0.04 Ma (Wolfe and Self, 1983), 0.14 ± 0.04 Ma (Oles, 1991) and 0.10 ± 0.02 Ma (Wolfe and Self, 1983) were obtained from dacitic to rhyolitic rocks in the western side of the monogenetic volcanic field (Sudo et al., 2000). Moreover, these basaltic scoria cones and maars are observed to align according to NE-SW and NW-SE trending fault systems present within the Macolod Corridor (Forster et al., 1990).

Available research themes conducted on the San Pablo maars as of this writing are predominantly focused on limnology, biodiversity, and socio-economic development.

2024 satellite image of the San Pablo Maars via Google Earth Pro

SAMPALOC LAKE

Sampaloc Lake is the largest among the seven lake-filled maars with surface area of approximately 104 hectares and maximum depth of approximately 27 meters. It is one of San Pablo City's popular tourist attractions and a source of income for surrounding communities as it is abundant in different species of freshwater fish.

CALIBATO LAKE

Calibato Lake is the deepest among the seven lakes with an average depth of 156 meters and surface area of approximately 43 hectares. It is also a source of abundant fish for nearby communities.

PANDIN AND YAMBO LAKE

Known as "The Twin Lakes," Pandin and Yambo Lakes are only separated by a narrow strip of land. Unlike the other lakes, both Pandin and Yambo are classified as oligotrophic due to low nutrient supplies, high dissolved oxygen level and little organic matter.

Pandin Lake has a surface area of 24 hectares and a water depth of approximately 62 meters.

Yambo Lake has a surface area of 30.5 hectares and water depth of approximately 38 meters.

MOHICAP LAKE

Mohicap Lake is the smallest among the seven lakes with surface area of approximately 23 hectares and water depth of approximately 30 meters. The lake is also a major source of tilapia (*Oreochromis niloticus*) for Metro Manila and suburbs.

Photos: Ralph Daryl Photography via San Pablo City Tourism Page

PALAKPAKIN LAKE

The shallowest among the seven lakes is Palakpakin Lake, with a water depth of approximately 8 meters and surface area of approximately 48 hectares.

BUNOT LAKE

Bunot Lake, which is a neighbouring lake to Sampaloc Lake, has a surface area of approximately 30.5 hectares and maximum depth of approximately 23 meters.

Photos: Ralph Daryl Photography via San Pablo City Tourism Page

SIGNIFICANCE OF THE MEASUREMENT AT LAKE PANDIN AND LAKE MOHICAP

Research on Lake Pandin and Lake Mohicap, two of the Seven Crater Lakes of San Pablo City, has focused on understanding their ecological condition, human impacts, and management potential. Limnological studies have described the lakes' physical and chemical characteristics, including seasonal variations in temperature, dissolved oxygen, and nutrient levels, which are influenced by monsoon-driven mixing and catchment inputs. Phytoplankton surveys and primary productivity assessments have highlighted the lakes' varying trophic states and the role of nutrient enrichment in shaping algal dynamics.

Lake Pandin has been cited in several studies discussing its volcanic genesis and crater morphology and is occasionally included in broader regional analyses of Quaternary volcanism within the Macolod Corridor. In contrast, Lake Mohicap is noted in volcanological and geomorphological surveys as a maar lake, but it has received less detailed study compared to Sampaloc, Pandin, and Yambo.

For this workshop, we aim to develop a clearer understanding of the two lakes by examining their dissolved gases concentrations, microbiological profiles, and physico-chemical characteristics.

ACCESS TO LAKE PANDIN AND LAKE MOHICAP

Access to Lake Pandin is via a short hike of about 10–15 minutes from the main parking area in the barangay. The trail is relatively well maintained but includes steps and uneven terrain; all access is regulated to preserve the lake's

environment. Boats are used on the lake itself for short ecotourism rides, and swimming is generally discouraged to protect water quality.

Lake Mohicap is slightly larger and less developed for tourism, with access via a 10–20 minute forest trail from the barangay entry point. The path is gently sloping but can be muddy during the wet season. Mohicap has fewer facilities, making it quieter and less crowded than Pandin.

Logistics: Both lakes are accessible by private vehicle or tricycle from downtown San Pablo. Entry fees and guide services are managed by local cooperatives, and it is recommended to coordinate in advance for visits or fieldwork, especially for research sampling. This will be part of the logistical support of the LOC.

SCIENTIFIC TOPICS AND SESSIONS

The program will feature dedicated sessions on the characterization of lake environments, aimed at elucidating the physicochemical processes, interactions and dynamics influencing these aquatic systems within volcanic settings and their implications for volcanic activity, monitoring, and modelling. The main topics will include:

- Geochemical and microbiological characterization of lake waters - compositional variations and their controlling factors.
- Gaseous emissions from lakes, with a special focus on CO_2(CH_4) degassing - identifying volcanic contributions to lake chemistry.
- Volcanic lake monitoring - seasonal to long-term changes affecting the lake environment.
- Hydrogeological and geophysical modelling of lake environments – towards a conceptual model of volcanic lakes.
- Hazard assessment - deciphering potential lake-related risks and their impact on the society.
- Active volcanism and phreatic events - evaluating the implications for volcanic unrest and eruption.

FIELD ACTIVITIES

Two field sampling sites are designated for this workshop. The first site is Pinatubo Crater Lake, where the following activities may be performed:

- Collection of lake water samples along vertical profiles
- Gas flux measurements
- Direct gas measurements and fumaroles sampling
- Geophysical measurements

The planned field activities at Pinatubo Volcano Crater Lake may include CTD profiling at the lake centre (approximate depth, 90 meters) and near suspected vent sites to document temperature, conductivity, dissolved oxygen, turbidity, and pH, providing a detailed picture of the lake's vertical

structure. Alongside this, discrete water samples may be collected at different depths for biogeochemical and isotopic analyses, including $\delta^{13}C\text{-}CO_2$, $\delta^{13}C\text{-}CH_4$, $\delta^{18}O\text{-}H_2O$, and $\delta^{2}H\text{-}H_2O$, to trace hydrothermal/magmatic inputs and biogeochemical processes.

To assess degassing, surface CO_2 fluxes will be possibly measured using floating chambers, while hydroacoustic surveys may be performed to map bubble plumes and guide targeted dissolved-gas sampling directly above active sub-lacustrine vents. Complementary sediment cores may be sampled near the shore to study tephra stratigraphy, biogeochemistry, and records of past hydrothermal activity. Rubber boats will be provided by the LOC to conduct these activities in Pinatubo Crater Lake.

Onshore and near-vent sites may also be investigated through direct fumarole gas sampling using Giggenbach bottles and portable gas analyzers, with strict safety protocols in place due to the potential hazards of toxic emissions.

The second site is constituted by Lake Pandin and Lake Mohicap. The following activities can be done:

- Collection of lake water samples along vertical profiles, as already described for Lake Pinatubo
- Collection of lake sediments via core sampling
- Gas flux measurements, as already described for Lake Pinatubo
- Field testing of water drones
- Other field activities according to participants' interest and request

PROGRAM

DAY 1 - March 9, 2026

- Arrival of the participants via Clark International Airport (CRK) or transfer of participants from Manila International Airport (MNL) to Hotel in Clark, Pampanga.
- Check-in of the participants to their respective hotels. Grant recipients will be billeted at the Conference hotel in a double room arrangement.
- Icebreaker / Cocktail

DAY 2 - March 10, 2026

- Registration, Official Opening Ceremony
- Start of the Scientific Sessions (Oral and Poster)
- Welcome Dinner

DAY 3 - March 11, 2026

- Continuation of the Scientific Sessions
- Planning meeting for the fieldwork

DAY 4 - March 12, 2026

- Check out from Clark hotel and transfer to the Airbnb at the foot of Pinatubo Volcano

- Field trip along O'Donnell River, introduction to the eruptive deposits of Pinatubo Volcano
- Option to hike for an overnight camping at Crater Lake (We will issue a further communication with details on this matter when they become available)

DAY 5 - March 13, 2026
- Field activities at Pinatubo Crater Lake
- Option to camp overnight in the Crater Lake

DAY 6 - March 14, 2026
- Continuation of the field sampling in Pinatubo Crater Lake

DAY 7 - March 15, 2026
- Check out from Santa Juliana Airbnb and travel to San Pablo, Laguna
- Stop at the PHIVOLCS Main Office and Tagaytay overlooking Taal Volcano
- Visit to the Taal Volcano Observatory.

DAY 8 - March 16, 2026
- Field activities in Lake Pandin

DAY 9 - March 17, 2026
- AM - Continuation of field sampling in Lake Mohicap
- PM - Business Meeting
- Evening - Closing Ceremonies and Farewell dinner

DAY 10 - March 18, 2026
- Check-out and departure of participants to Manila
- Fly out from Ninoy Aquino International Airport (MNL)

POST-WORKSHOP FIELD INVESTIGATION (Optional)

CAGUA VOLCANO, GONZAGA CAGAYAN, March 19-22, 2026
Limited to 8 participants only. The participation fee is **180 Euros**, which covers airfare, meals, and local transportation. Accommodation will be provided **free of charge** through the support of the Local Government of Gonzaga.

Cagua Volcano is home to a unique hydrothermal system. Its natural features include springs, mud pools, fumaroles, and outcrops. Some springs retain a cool temperature, while others, like those in Sitio Manaring, have temperatures over 50°C. The volcano craters contain boiling mud pools with temperatures between 80°C and 90°C and fumaroles that emit strong sulfuric steam. The Philippine Institute of Volcanology and Seismology (PHIVOLCS) is currently studying the volcano's hydrothermal system by conducting geochemical field surveys, sampling springs, mud pools, and fumaroles, and collecting rock and charcoal samples to determine the age of past eruptions.

The fieldwork at Cagua Volcano will begin early, with the ascent starting at approximately 6:00 AM. The activity will focus on the summit crater, where active fumaroles and vigorous steam emissions are observed. The climb to the crater

takes about 2–3 hours, allowing participants 3–4 hours of fieldwork before beginning the descent at 3:00 PM. During this period, gas and hydrothermal fluid samples will be collected from fumaroles. As parts of the crater floor are unstable, participants are advised to observe proper care and strictly follow safety protocols throughout the activity.

Participants traveling by air may take a flight from Manila to Tuguegarao Airport (to be arranged by the LOC), the nearest airport to Cagua Volcano. From Tuguegarao City, the journey continues by land to the municipality of Gonzaga, Cagayan, which typically takes about 3–4 hours via a private van.

Upon arrival in Gonzaga town proper, local transportation will be arranged to bring participants to the trailhead of Cagua Volcano. From there, the ascent to the crater requires a 2–3-hour hike along established trails before reaching the summit area where field activities will be conducted.

REGISTER HERE FOR THE POST WORKSHOP FIELD INVESTIGATION: https://forms.gle/2PiiwfR3eujbrQ3V8

VENUE AND ACCOMMODATIONS

The conference will be held at one of the hotels in Clark, Pampanga. We will release a special communication when the exact venue for the scientific session has been decided.

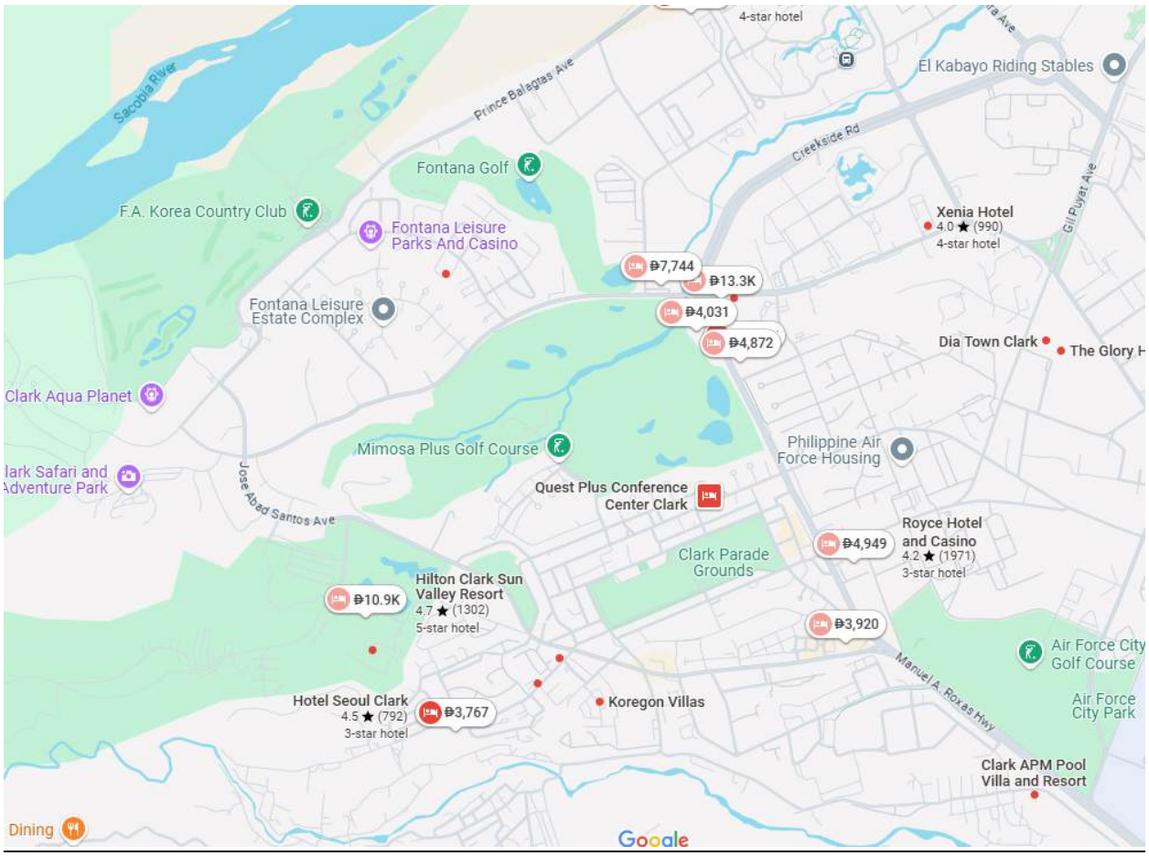
All participants are expected to arrive on March 9 in Clark, Pampanga. Participants are encouraged to book in the sessions' venue. A discounted rate will be available to those who will book there. Details to follow shortly.

On booking websites, you will also find most hotels, including those listed below, from budget-friendly options to luxury accommodations. You can make reservations directly through the websites of most of the hotels. A shuttle will be arranged for those participants who will stay off-site.

List of hotels:

1. QUESTPlus Hotel (https://www.questhotelsandresorts.com/clark)

2. Park Inn by Radisson (www.raddissonhotels.com)
3. Swissotel Clark Philippines (swissotelclark.com)
4. Hotel Seoul Clark (www.hotelseoul-clark.com)
5. Best Western Plus Metro Clark (bestwesternplusmetroclark.com)
6. Clark Marriott Hotel (www.marriott.com)
7. Midori Clark Hotel and Casino (www.midorihotel.com)
8. Punta Clark Hotel (puntaclark.com-hotel.info/en/)
9. Widus Hotel Clark (www.widus.com)
10. Royce Hotel and Casino (www.roycehotelandcasino.com)



For the remaining days of the workshop, participants will be housed in an Airbnb. Due to the limited accommodation options in the field area, the organizers will secure the most convenient and appropriate arrangements available. (This will be arranged by the LOC and is included in the participants' registration fee).

Pinatubo Crater Lake Field Workshop Accommodation:

Alvin Bognot Mt. Pinatubo Guesthouse






San Pablo Maars Workshop Accommodation:

The LOC is in the process of securing accommodations for participants of the San Pablo Maar Field Workshop. Details will be provided once finalized.

COST

Conference fees are **600 Euro** per person. The fee includes the following:

- Registration.
- Rental fee of the conference venue and its amenities (welcome dinner, coffee breaks, and socials) for 3 days in the venue hotel.
- 3 nights' accommodation at the Airbnb in Santa Juliana, Tarlac (O'donnell) based on double room occupancy from March 12 - 15, 2026.
- 3 nights' accommodation at a hotel/resort in San Pablo, Laguna, based on double room occupancy (limited single rooms will be available) from March 15 - 18, 2026.
- Dinner at the Airbnb in Santa Juliana.
- Government fees for climbing Pinatubo Volcano.
- Rental of off-road vehicles (4WD) for transport to the drop-off and pick-up point.
- Lunch and dinner will be provided by the LOC.
- Packed lunch boxes and snacks on all field days.
- Coffee breaks and snacks.
- Conference kit.
- Transfer from San Pablo to hotels close to Ninoy Aquino International Airport (MNL). We recommend booking hotels close to the airport if staying for an extra day in Manila.

Not included in the conference fee are:

- Airfare to the Philippines.
- Transfer from CRK (or MNL) Airport to the venue hotel.
- Accommodation in Clark – March 9-12, 2026 (3 nights).
- Cost of any touristic activities.

REGISTRATION AND ABSTRACT SUBMISSION

The registration must be done online before **November 10, 2025,** using the link provided below. The registration link is also found on the website of the workshop.

https://forms.gle/SzVzQsaxABYt3fQM7

Abstracts should be submitted at the time of registration through the same link. All abstracts must be written in English and include the following: title, author name(s), affiliation(s), country/countries, keywords, and the main text (maximum 350 characters). A sample of the abstract can be downloaded via this link: Sample Abstract

SCHOLARSHIP AND TRAVEL GRANTS

A limited number of grants from IAVCEI are available to cover the workshop registration fee in double-room accommodation (valued at 600 Euros each). Should further grant opportunities arise, they will be communicated promptly.

The grants are open to all applicants; however, high priority will be given to graduate students and early-career scientists working on volcanic lakes, particularly those from Low- and Middle-Income Countries, ensuring a diverse representation and a well-balanced distribution of the attendees across different countries and genders. Eligibility requires submission of an abstract for presentation at the workshop and a firm commitment to attend.

Applicants must submit the following by **November 3, 2025,** via the registration form:

- An abstract (in English)
- A one-page CV (in English, PDF format)
- A motivation letter (in English, PDF format)

Only complete applications submitted on time will be considered. Proposals will be evaluated by a panel from the Scientific Committee, and results will be announced by **November 7, 2025**.

By **November 30, 2025,** the grant winners must send confirmation of their flight purchase, otherwise the merit ranking list will be scaled down.

PAYMENT METHOD

Registered participants will receive a separate email with detailed instructions on how to pay the registration fee. Additionally, a secure payment link will be provided on the conference website. Payment can be made via bank transfer. The fees can be paid up to **November 30, 2025**.

INTERNATIONAL TRAVEL INSURANCE AND CUSTOMS

Participants are strongly advised to obtain comprehensive international travel and medical insurance to cover the duration of the workshop, including travel to and from the host country. The organizers do not assume responsibility for any personal injury, illness, loss, or damage to property during travel or participation in the event.

Participants may need an invitation letter to join the CVL workshop. Please inform the organization when you will perform the registration. Similarly, send a list of all the material you are planning to bring to the workshop, so the organization will write a letter to each participant to be shown to the customs. Nevertheless, the organization cannot be responsible for the customs procedures when participants arrive to the Philippines.

IMPORTANT DATES

- **September 22, 2025** - Registration / Abstract submission opens
- **November 3, 2025** - Deadline for grants application
- **November 7, 2025** - Announcement of grants results
- **November 10, 2025** - Deadline for registration and abstract submission
- **November 30, 2025** - Deadline for the registration fee payment and notice for oral and poster presentation
- **March 9 - 18, 2026** - CVL 12 Workshop

LOCAL ORGANIZING COMMITTEE (LOC)

- Teresito C. Bacolcol
- Ma. Mylene M. Villegas
- Raymond Patrick R. Maximo
- Danikko John V. Rivera
- Timothy John E. Daita
- Winchelle Ian G. Sevilla
- Jeffrey S. Perez
- Joan C. Salcedo
- Charmaine V. Villamil
- Lucille Rose D. Sanico
- Rygin Joy R. Matias
- Karl Vincent C. Soriano
- Marilou Del Rosario
- Kevin L. Garas
- Janice C. Wayan

SCIENTIFIC COMMITTEE

- Jacopo Cabassi - CNR-IGG, Italy
- Agnes Mazot - ESNZ, New Zealand
- Jennifer Lewicki, USGS, USA
- Franco Tassi, University of Firenze, Italy
- Zachary Smith, UC Berkeley, USA
- Felipe Aguilera Barazza - Ckelar Volcanoes/UNAB, Chile
- Alain Bernard - ULBruxelles, Belgium
- Bruce Christenson - ESNZ, New Zealand
- Dmitri Rouwet - INGV Bologna, Italy
- Cesar Andrade – IVAR/CIVISA, Portugal
- Ma. Mylene Villegas, DOST-PHIVOLCS, Philippines
- Raymond Patrick R. Maximo, DOST-PHIVOLCS, Philippines

CVL STEERING COMMITTEE

- Jacopo Cabassi - Leader
- Agnes Mazot - Leader
- Felipe Aguilera Barazza - Secretary General
- Dmitri Rouwet - Past Leader/Webmaster
- Jeniffer Lewicki - Past Leader

- Corentin Caudron - Past Leader
- Bruce Christenson - Past Secretary
- Franco Tassi
- Giovannella Pecoraino
- Stefano Fazi
- Zachary Smith
- Cynthia Werner
- Cesar Andrade

SPONSORS

- IAVCEI
- PHIVOLCS
- Geological Society of the Philippines

CONTACT INFORMATION:

Dr. Ma. Mylene M. Villegas

Email address: mylene.villegas@phivolcs.dost.gov.ph

Dr. Raymond Patrick R. Maximo

Email address: raymond.maximo@phivolcs.dost.gov.ph

CVL 12 Workshop

Email address: iavcei.cvl12.workshop@gmail.com

REFERENCES

De Boer, J., Odom, L. A., Ragland, P. C., Snider, F. G., & Tilford, N. R. (1980). The Bataan orogene: Eastward subduction, tectonic rotations, and volcanism in the western Pacific (Philippines). *Tectonophysics*, *67*(3–4), 251–282. https://doi.org/10.1016/0040-1951(80)90270-x

Förster, H., D. Oles, U. Knittel, M. C. Defant, & R. C. Torres (1990), The Macolod Corridor: A rift crossing the Philippine island arc, *Tectonophysics,* 183(1–4), 265–271, doi:10.1016/0040-1951(90)90420-D.

Newhall, C., Hendley, J., II, & Stauffer, P. (1997). The Cataclysmic 1991 Eruption of Mount Pinatubo, Philippines. Geological Survey (U.S.). https://doi.org/10.3133/fs11397

Oles, D. (1991), Geology of the Macolod Corridor intersecting the Bataan-Mindoro island arc, the Philippines, Proj. Fo 53/16–1 to 2, Philipp. Inst. of Volcanol. and Seismol., Dep. of Sci. and Technol., Quezon City, Philippines.

Stimac, J. A., Goff, F., Counce, D., Larocque, A. C. L., Hilton, D. R., & Morgenstern, U. (2004). The crater lake and hydrothermal system of Mount Pinatubo, Philippines: evolution in the decade after eruption. *Bulletin of Volcanology*, *66*(2), 149–167. https://doi.org/10.1007/s00445-003-0300-3

Sudo, M., E. D. Listanco, N. Ishikawa, T. Tagami, H. Kamata, & Y. Tatsumi (2000), K-Ar dating of the volcanic rocks from Macolod corridor in southwestern Luzon, Philippines: Toward understanding of the Quaternary volcanism and tectonic, *J. Geol. Soc. Philipp.,* 55(1–2), 89–104.

Wolfe, J. A., & S. Self (1983), Structural lineaments and Neogene volcanism in southwestern Luzon, in The Tectonic and Geologic Evolution of Southeast Asian Seas and Islands: Part 2, *Geophys. Monogr. Ser.,* vol. 27, edited by D. E. Hayes, pp. 151–172, AGU, Washington, D. C.

Zapanta, I., Salandanan, M., Directo, M., Mamadra, U. D., Jr., Nicolas, J., & De La Cruz, A. (2008). *WATER QUALITY REPORT OF THE SEVEN CRATER LAKES*. Laguna Lake Development Authority.