



PROGRAMME

INTERNATIONAL WORKSHOP ON MINERAL SCALING IN GEOTHERMAL ENVIRONMENT

25-27 MAY 2011
HOTEL INTERCONTINENTAL MANILA
MAKATI, PHILIPPINES



PROGRAMME

Day 1 - 25 May 2011

730 H	Registration
	Opening Ceremonies
	National Anthem
	Welcome Remarks Antonio F. Yee
830 - 915 H	Introduction to the Keynote Speaker Manuel S. Ogena
	Keynote Address: Financial Issues of Scaling Richard B. Tantoco

Panel Discussion 1: Experiences and Control of Silica Scaling in Geothermal Environment

Facilitator:

Time	Presentation	Presenter
915 - 1000 H	Thermodynamics and Kinetics of Silica Deposition	Kevin Brown
1000 - 1015 H	S N A C K S	
1015 - 1100 H	Present Control of Silica Deposition	Paul Hirtz
1100 - 1200 H	D I S C U S S I O N	
1200 - 1300 H	L U N C H	

Technical Session 1: Experiences in Silica Deposition in Wells and Pipelines

Facilitator:

Time	Presentation	Presenter
1300 - 1330 H	Silica Deposition Experiments: Past Works and Future Research Directions	Ed Mroczek
1330 - 1400 H	Silica Scaling in Production Wells and Injection Lines	Larry Villaseñor
1400 - 1445 H	D I S C U S S I O N	
1445 - 1500 H	S N A C K S	

P R O G R A M M E

Technical Session 2: Controlling Silica Deposition

Facilitator:

Time	Presentation	Presenter
1500 – 1530 H	Experiences in Silica Deposition and Control Using Chemical Inhibitor	Almario Baltazar Jr.
1530 – 1600 H	pH Modification Scale Control Technology	Darrel Gallup
1600 – 1630 H	Silica Scale Prevention Effects of Brine pH Modification at Hachobaru Power Station	Yumi Kiyota
1630– 1730 H	D I S C U S S I O N	
1830 – 2100 H	COCKTAILS Bahia Room, Hotel Intercontinental	

Day 2 - 26 May 2011

Panel Discussion 2: Experiences and Control of Calcite and Anhydrite Scaling in Geothermal Environment

Facilitator:

Time	Presentation	Presenter
830 – 915 H	Accurate Evaluation of Thermodynamic Properties of Geothermal Gases from an Equation of State with Field Applications	Joselito Ruaya
915 – 1000 H	Calcite Scaling in Mindanao 1 Geothermal Production Field	Benson Sambrano
1000 – 1015 H	S N A C K S	
1015 – 1100 H	Precipitation Mechanism of Carbonate and Sulfate Scales in EGS System at Hijiori, Japan	Norio Yanagisawa
1100 – 1200 H	D I S C U S S I O N	
1200 – 1300 H	L U N C H	

P R O G R A M M E

Technical Session 3: Controlling Calcite and Anhydrite Deposition in Wells and Pipelines

Facilitator:

Time	Presentation	Presenter
1300 – 1330 H	Prevention and Dissolution of Anhydrite Deposit Using Chemical Agents for Production Wells at the Mori Geothermal Field, Hokkaido, Japan	Daisuke Fukuda
1330 – 1400 H	Calcite Inhibition System: Lihir Experience	Adrian Daimol
1400 – 1445 H	D I S C U S S I O N	
1445– 1500 H	S N A C K S	

Technical Session 4: Future Trends in Mineral Blockage Control

Facilitator:

Time	Presentation	Presenter
1500 – 1530 H	Recent Developments in Geothermal Scale Control	Mark Stapleton
1530 – 1600 H	Development of a "Green" Hydrothermally Stable Scale Inhibitor for Geothermal Wells and Pipelines	Leon Lee
1600 – 1630 H	Antimony and Arsenic Sulfide Scaling in Binary Plants	Kevin Brown
1630 – 1730 H	D I S C U S S I O N	
1730 – 1830 H	IGA-WPRB 6 th Annual General Meeting	Herman Ibrahim
1900 – 2300 H	COCKTAILS Ballroom 2/3, New World Hotel	

Day 3 – 27 May 2011

Field Trip

Facilitator: **Chevron**

Time	Activities
800 – 1000 H	Trip to Makiling - Banahaw
1000 – 1200 H	Tour
1200 – 1300 H	Lunch
1300 – 1500 H	Tour
1500 – 1700 H	Tagaytay Tour and Return to Manila

FIELD TRIP

A Field trip on 27 May 2011 to Makiling-Banahaw Geothermal Field of CGPHI would let the participants view one of Chevron's well-managed geothermal field. The trip will become more exciting as participants will take a glimpse of the world's famous Taal Volcano in Batangas Province. Cost of travel, inclusive of pack meals and AM/PM snacks, is P1,500.00/pax.

Tour Condition

Tour and itinerary are subject to change. Please contact the Organizing Committee for further details.

Inclusions:

- Tour will depart with a minimum of 5 persons
- Tour and transfer itinerary with air-conditioned vehicle
- English speaking guide
- Entrance fee
- Lunch and AM/PM snacks

Exclusions:

- Tips, gratuities and other personal expenses



The Mak-Ban (Makiling-Banahaw) or Bulalo geothermal field is located approximately 70km southeast of Makati, in the vicinity of Mt. Makiling. The field is located in a populated area, with communities located close to the surface facilities, and this presents various challenges in operating the field, particularly from a safety point of view.

The area was first explored in 1973 and Bulalo-1, the discovery well, was drilled in 1975; this well continues to be an active producer.

Commercial operation began in 1979, with the start-up of the first power plant (2 x 55MW) and the installed capacity today is 458.53MW, including 15.73MW of binary plants. The field is one the most prolific in the world as the productive area of only 7 km² still supports over 300MW of generating capacity after 32 years of commercial operation. A total of 113 wells have been drilled to date, with 68 presently being used for production and 16 for injection.



The production and injection facilities at Mak-Ban are operated by Chevron Geothermal Philippines Holdings, Inc. (CGPHI) while the power plants are owned and operated by Aboitiz Power Renewables Inc. (APRI).



Taal Volcano and Lake is located about 70-km south of Manila and is wholly located in the province of Batangas. The northern half of Volcano Island falls under the jurisdiction of the lake shore town of Talisay, and the southern half to San Nicolas.

Taal Volcano, in the Philippines, has been called the smallest active volcano in the world.



The volcano is located on an island inside a lake called Taal Lake. What makes Taal Volcano more unique is the fact that the volcano itself has a lake of its own inside its crater which is called the "Crater Lake."

REGISTRATION FEES

A single rate registration fee of **US\$300** will be charged to the participants. The low registration fee was made possible thru the kind assistance of IGA-WPRB and sponsors. Fill-out the registration form that is attached to this announcement and send to the in-charge below. Participants and sponsors are urged to register on-line and send your payment to:

METROBANK
Savings Account No. 492-3-49201033-3
Account Name: NGAP

Please send details of deposit to:

Sylvia G. Ramos
ramos.sg@energy.com.ph

On-site registration will begin at the venue in the morning of 25 May 2011, but it is hoped that most registration will be done beforehand using the website Registration Form. Payment may also be done during the first day of the Workshop.

FELLOWSHIPS

The Organizers will offer Fellowships to interested participants from developing countries. The number of Fellowships that can be granted will be largely dependent on the amount of money that can be raised for this purpose. Please note that people with partial support from other sources will have a higher preference for IWMSG2011.

The Fellowship will pay for:

- Registration at the Workshop
- Hotel Accommodation
- A daily allowance to cover meals during travel
- Field Tour

The Organizers reserve the right to change the above entitlements for individual applicants. The decisions of the Organizing Committee will be final and no correspondence will be entered into regarding their decisions.

Please use the on-line Application Form of the IGA for the Fellowship Grant.

ACCOMMODATION

Two Hotels in Makati, **Intercontinental Manila and New World Hotel**, have been selected as Official Hotels for the International Workshop on Mineral Scaling in Manila Philippines. The Organizing Committee has secured accommodations of participants for a special group rates. Both Hotels have 5 star ratings and offers room rate from **PHP6500 – PHP7400 Nett/day**. The New World Hotel is just 7-10 minute walk to the workshop venue.

EXHIBITION

A specific area near the Function room is allotted for the suppliers and sponsors to exhibit their products and accommodate prospective clients. Booths are free of charge for the Exhibitors and will be prepared by the Organizing Committee. The exhibits will be available from 25-26 May 2011.

For Hotel Accommodation, Exhibition and Field Trip inquiries and details, please contact:

The Organizing Committee c/o

Almario D. Baltazar Jr.
baltazar.ad@energy.com.ph

ORGANIZING COMMITTEE

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NGAP/EDC

Field Trips
Vilma Capuno
CGPHI

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