



BAGUS Project News

BAGUS Project's 6th JCC

Coordinating Committee



On 2nd to 4th July 2019 BAGUS Project held its 6th Joint Coordinating Committee (JCC) meeting. During this occasion the team members presented their research progress and updated the research activity plans for the remaining 8 months of the project's life span. Also joining the team members were representatives from Star Energy, Ltd., PT. Geo Dipa Energi (Persero), and Center for Mineral, Coal and Geothermal Resources (CMCGR), Ministry of Energy and Mineral Resources to discuss upcoming research activity plans.

During the meeting, the team members agreed that the evaluation of the Project will be held on the fourth week of October.

The team also visited Patuha geothermal field of PT Geo Dipa Energi (Persero) for some observation around the radon monitoring sites.

The 6th JCC meeting was closed with the signing of the minutes of meeting by Prof. Koike and Prof. Sudarto. The meeting agreed that, in the remaining project term, it is likely that the project purpose will be attained.

Research Result Presentations

Institute of Technology Bandung:

1. Prof. Dr. Sudarto Notosiswojo (Faculty of Mining and Petroleum Engineering, ITB):
Progress on BAGUS Project for Indonesian Side.
2. Mohamad Nur Heriawan, Ph.D (Faculty of Mining and Petroleum Engineering, ITB):
"Spatial correlation between permeability from TLC and resistivity from MT to identify the reservoir zone at Patuha geothermal field, Bandung"
3. Irwan Iskandar, Ph.D, Dr.mont. Andy Yahya Al Hakim (Faculty of Mining and Petroleum Engineering, ITB):
"Connecting soil gas and surface geochemical data for interpreting the sub-surface condition of Patuha geothermal field"
4. Dr. Eng. Asep Saepuloh (Faculty of Earth Sciences and Technology, ITB):
"PS-InSAR displacement vector analyses at Wayang Windu geothermal field"
5. Arie Naftali Hawu Hede, Ph.D (Faculty of Mining and Petroleum Engineering, ITB):
"Research progress of geobotanical remote sensing for geothermal exploration"
6. Nenny Miryani Saptadji, Ph.D, Dr.Eng. Sutopo, Zuher Syihab, Ph.D (Geothermal Graduate Program, ITB):
"The use of TOUGH2 for sustainability studies of several geothermal fields in Indonesia"
7. Center for Mineral, Coal and Geothermal Resources, Geological Agency of MEMR:
"Update activity of geothermal resources survey and challenges"
8. Star Energy Geothermal:
"Wayang Windu BAGUS Project Optimization (1-year Remaining)"
9. Geo Dipa Energi:
"Updated conceptual model of Patuha geothermal field"

Kyoto University:

1. Prof. Katsuki Koike (Graduate School of Engineering, Kyoto Univ.):
"Research progress overview of the BAGUS (Beneficial and Advanced Geothermal Use System) project by Kyoto University team"
2. Mr. Taiki Kubo (Graduate School of Engineering, Kyoto Univ.):
"Progress report and annual research plan of soil gas geochemistry and remote sensing analysis"
3. Dr. Yohei Tada (Graduate School of Engineering, Kyoto Univ.):
"Progress report and annual research plan of geochemistry: gas components, major contents, trace elements, and stable and radio isotopes"



2019 Two-week Intensive Geothermal Course at Kyoto University

Course Schedule

No.	Day	9:30-11:30	13:30-15:30	15:45-17:45
1	1 (Sun)	Arrival at Kyoto and Orientation		
2	2 (Mon)	[1] Prof. Koike Geo-thermics & mathematics	[2] Prof. Goto <i>Electromagnetic Geophysics</i>	[3] Emeritus Prof. Ishida <i>Geomechanics</i>
3	3 (Tue)	[4] Prof. Koike Remote Sensing	[5] Prof. Mikada <i>Seismic Geophysics</i>	
4	4 (Wed)	[6] Prof. Yoneda <i>Mineralogy</i>	[7] Assistant Prof. Koki Kashiwaya <i>Geochemistry</i>	[8] Dr. Yohei Tada <i>Analytical Methods</i>
5	5 (Thu)		[9] Mitsubishi Materials & Mitsubishi Materials Tecno <i>Geothermal Practice</i>	Collaboration Seminar with Koike Lab.
6	6 (Fri)	[10] Dr. Mitsuo Matsumoto <i>Well Testing</i>	[11] Dr. Norio Tenma <i>Reservoir Engineering</i>	[12] Dr. Yasuhiro Yamada <i>Geothermal Drilling</i>
7	7 (Sat)	Self study		
8	8 (Sun)	Trip to a Geothermal Site		[Orientation of field training]
9	9 (Mon)	Field training at a geothermal site (Hatchobaru, Kyushu)		
10	10 (Thu)	Return Trip to Kyoto (including geothermal site-visits in Beppu City)		
11	11 (Wed)	Laboratory experiments		
12	12 (Thu)	Laboratory experiments	Data Analysis	
13	13 (Fri)	[13] Prof. Tosha <i>Social Science</i>	Presentation of Learning Result	
14	14 (Sat)	Feedback of overall training		
15	15 (Sun)	Return to Indonesia		

BAGUS Project held its two-week intensive geothermal course at Kyoto University on 2nd to 14th September 2019. This year's course would be the last geothermal course to be held by the Project according to the activity plan.

Ten pre-selected junior researchers and one researcher from ITB along with representatives from Star Energy Ltd., PT. Geo Dipa Energi, and Center for Mineral, Coal and Geothermal Resources (CMCGR), Ministry of Energy and Mineral Resources, totaling to fourteen participants, joined this course.

During their training course in Japan, not only the participants received lectures but they also participated in field observation and laboratory work. They diligently went through the courses and came back to Indonesia with valuable knowledge and experience.



Left to right: Prof. Koike - Prof. Goto - Prof. Ishida - Prof. Mikada - Prof. Tosha - Prof. Yoneda - Asst. Prof. Dr. Kashiwaya - Dr. Tada Mitsubishi Materials - Dr. Matsumoto - Dr. Tenma - Dr. Yamada - Mr. Kubo - Participants with some lecturers and staffs




Rudy Fernando Sihite | Dept. of Mining Engineering, ITB

Thank You JICA, Kyoto University, and ITB. Such a great experience being able to take a part as a trainee in this training. All of the "Sensei" explained every topic in detail, and some students very welcome to guide us to enjoy a beautiful City of Kyoto. This training made me got more knowledge and experience. I hope BAGUS 2019 is not the last training as Sensei said, and the projects will continue with other topics. Arigatogozaimashita. Terima Kasih!


Andrew Julio Momongan | Dept. of Geothermal, ITB

The learning presented is very structured. I get a lot of input from overall training. The most memorable thing was when I learned how to use the XRD tool directly from sample acquisition, preparation, analysis and interpretation. This learning can help me in completing the research that I'm working on about identifying a blind geothermal system. Regarding Kyoto, an amazing place, two weeks is not enough to explain the wonderful inside.


Prayolandini Gantifa Andwiti | Geology Engineering ITB

Thank you very much for the given opportunity, Sensei, BAGUS Project, and JICA team. I cherish this experience where I was extensively learning about upstream and downstream of geothermal industry. I also got the opportunity to experience Japanese culture (food, people, etc) that I have adored since I was a child and I can say that Japan is awesome! Last but not least, I gain new amazing friends that are helpful and kind. Thank you, dear friends. I hope our paths cross again in the future.


Murdoko Broto Kusumo | Production Department of PT. Geo Dipa Energi (Persero)

This is a very rare and extraordinary course. I feel very fortunate to have the opportunity to attend in on a prestigious campus and lecturers (Koike - Sensei, Goto - Sensei, Kashiwaya - Sensei, Tada - Sensei, Kubo - San, etc) who have the best reputation for providing knowledge for 2 weeks patiently. I will share the science I got at the office.

Thank you also to Ms. Riozz, Ms. Nurita, Ms. Tanti, Mr Yudi for all your help. Bravo everyone


Muhamad Hasbi Assiddiqy | Dept. of Geothermal, ITB

I would like to thank to JICA and Kyoto University. From this training i gained a lot of knowledge both theoretical and practical, and also the culture of the society that i've never seen in my country. This training also teach me how to do many practical things with high standard, and how to integrate informations that we collect from the field.


Mirza Dian Rifaldi | Dept. of Mining Engineering, ITB

Thank you very much for all the experiences and knowledge which have been shared during the Two-Week Intensive Training Course on Geothermal Science and Technology. Thank you for JICA and Kyoto University for letting me join this program. I learn and studied so much about Geothermal science directly with Kyoto University's professor and it makes me interested in Geothermal research topics. I hope the collaboration between Kyoto University, Bandung Institute of Technology and JICA-SATREP program can continue and provide an opportunity for us to sharing knowledge in the future.


Albertus Ivan | Dept. of Geothermal Engineering, ITB

First of all, I want to say thank you for JICA and BAGUS-SATREPS to give me such opportunity to be a part of this training. I am very grateful that I can join this two-weeks intensive training. I learn so much thing about geothermal and also have a new experience for studying in other country. I get a new view about geothermal, especially for the enhanced geothermal system which is uncommon in my country. Thank you for all amazing sensei's (Koike Sensei, Kashiwaya Sensei, Goto Sensei, Tada san, Kubo san, Ota san, and other Sensei) that give me a lot of knowledge about geothermal. Also, I want to thank to Yudi San, Gea San, Rios San, and Nurita San that accompany us while we are in Kyoto. I really enjoy living in Kyoto, such a great and amazing city. I hope that I have another opportunity to visit Kyoto again.


Andy Yahya | Researcher, Dept. of Mining Engineering, ITB

The training was very informative, clear and detailed. Training materials were well organized, easy to follow and understand, and lecturer are commonly completer with case studies that is relevant to Indonesia. Lecturer was extremely professional. I enjoy learning about this material to help me do my research. Special thanks are due to the JICA, Kyoto University and ITB for the opportunity to join the BAGUS SATREPS training.

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Erawan Melisano | CMCGR, Geological Agency, Ministry of Energy and Mineral Resources
Many thanks to Kyoto University and lecturers, I gained new knowledge that I had never gotten before, I also got new friends who inspired me to continue my studies, Japan is always a good and strategic partner for Indonesia, and I hope this collaboration and friendship will continue to improve in the future.



Arifin | Dept. of Groundwater Engineering, ITB
Thank you very much to JICA, Kyoto University, all sensei and staff for the wonderful experience in Japan. I really appreciate every course and the field trip. Every knowledge and experience I have received are very precious. Hopefully, such training and collaboration will still be held in the next years. I can't wait to visit Japan again in the future.



Indra Yudhistira | PT Star Energy Geothermal
First of all, I would like to say thanks to Star Energy, JICA and Kyoto University for the opportunities that has been giving to me for attending a two weeks course training. It was a good experience for me especially to enhance my knowledge, because it was my first time to learn about geothermal system intensively, because basically I was a mechanical engineer. Gratitude to all Sensei and Team in BAGUS project for kindness and intention to accompany us. Warm Regards.



Abdullah Husna | Dept. of Groundwater Engineering, ITB
Japan is one of the most leading country in geothermal, no wonder geothermal technology in Japan is very advanced and efficient. In this course, best geothermal experts in Japan taught me strong fundamental geothermal science, in-depth analysis to understand geothermal systems, and also various geothermal technologies that have been applied in Japan, I am very grateful to be able to participate in this course, because besides getting valuable geothermal knowledge I can also enjoy the beauty of Kyoto, as well as the wonderful culture and amazing work ethic of Japanese people. I love Japan for all its beautiful scenery, human, and technology. Arigatou Gozaimasu All sensei and JICA.



Putri Aprillia | Department of Hydrogeology, ITB
First of all, I would like to thanks to JICA and Kyoto University for allowing me to join this training. I got many knowledge and experiences not only in academic but also in other aspects such as Japan culture, transportation, and infrastructure. I like all the materials, lecturers, laboratories study and field activity both in Kyoto and Kyushu. The lecture gives me a deeper understanding of Geothermal since I just got the introduction about geothermal in bachelor student. All the people and the environment is very warm and kind, and I hope I can come back to Japan especially in Kyoto University again.

Continuation of Field Research & Other Activities

Dr. Tada and Mr. Kubo prolonged their stay after the 6th JCC for some laboratory and field work. Mr. Kubo along with Associate Prof. Dr. M. Nur Heriawan and some master students of Mining ITB conducted TEM Survey at Patuha and Wayang Windu. Assistant Prof. Dr. Kashiwaya visited Tampomas, Tangkuban Perahu, Wayang Windu and Patuha in mid to late August 2019. Dr. Kashiwaya also took the occasion of his visit to Indonesia to give some lectures. Together with Assistant Prof. Dr. Irwan Iskandar, both participated in the GEOSEMINAR held by the Center for Geological Survey, Ministry of Energy and Mineral Resources of Indonesia on 23rd August 2019.



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GEOSEMINAR

Tema : Hydrogeochemistry & Environmental Tracer

Pembicara 1 :
Irwan Iskandar, Ph.D
(Fakultas Teknik Pertambangan dan Perminyakan, ITB)
Judul presentasi :
"Advanced Hydrogeochemistry for Geothermal and Geosciences Studies"

Pembicara 2 :
Koki Kashiwaya, Ph.D
(Graduate School of Engineering, Kyoto University)
Judul presentasi :
"Application of Environmental Tracers in Hydrogeology, Case Study : Hokkaido & Fukushima Nuclear Power Plant"