

BAGUS Project News 13TH SEPTEMBER 2017

(BENEFICIAL AND ADVANCED GEOTHERMAL USE SYSTEM)

ITB Awards Professor Koike



Project leader on the Japanese side, Professor Katsuaki Koike received Ganesha Wirya Jasa Adiutama, an award given to those who have shown a high achievement in supporting the development of Bandung Institute of Technology (ITB). The award was handed over by the Rector of ITB Professor Kadarsah Suryadi in an Open Session to commemorate the 97th Anniversary of Higher Education of Technology in Indonesia (1920-2017) on 24th August 2017 at Aula Barat Hall attended by all the academics of ITB and invited guests.

Kyoto University and ITB have been conducting collaborative researches for many years and particularly this SATREPS project's contribution to ITB in strengthening its research facility at the Faculty of Mining & Petroleum Engineering as well as the development of research education were highly appreciated. Professor Koike believes that this award recognizes not only his personal but also collective endeavor of the ITB and Kyoto University colleagues over the years and will become a spring board for continued collaborative researches under the ongoing partnership.

Kyoto University Team Visits Bandung

A team of researchers from Kyoto University visited ITB from 19th August to 2nd September 2017 for fieldwork, laboratory research, equipment installation, giving lectures to students as well as briefing to the trainees of the upcoming two-week geothermal course in Kyoto University.

Fieldworks were done in Wayang Windu (23rd to 29th August 2017) and Lembang-Maribaya (21st and 31st August 2017).

The aim of fieldwork on 21st August 2017 was to take six water samples; one sample was taken from hot spring, one from warm spring, and four from cold spring. The sampling points were determined based on high Radon concentration and gas chromatography analysis result. This water sample will be used to analyze Mercury, Strontium, Silica, alkalinity, Deuterium, 18-Oxygen, trace element, and Ion Chromatography analysis at Kyoto University laboratory.

On 31st August 2017, four Radon gas measurements were conducted.

Whereas the fieldwork in Wayang Windu area was to take water sample and conduct Radon measurement from water sample. Like in Maribaya-Lembang, water sample will be used to analyze Mercury, Strontium, Silica, alkalinity, Deuterium, 18-Oxygen, trace element, and Ion Chromatography analysis which will be carried out at Kyoto University laboratory. Slightly different from Maribaya-Lembang, Radon was measured from water sample.





With respect to the activity to identify the fractures that have acted as paths for hydrothermal fluids and gasses from reservoirs to the surface by mineralogical analysis of near surface rocks and satellite images, Prof. Yoneda advised the ITB researches on the analytical method of laboratory data and preparation of samples for X-Ray analy-

sis and setting parameters for the X-Ray diffraction apparatus at ITB in order to establish the identification method for variations of alteration minerals. Prof. Koike visited Star Energy Geothermal Ltd. on 22nd September 2017 to share the information regarding the ongoing research activities in Wayang Windu and to exchange opinions in order to facilitate the cooperation with the company so that the project's research results will be practiced in the company's thermal spot detection works in the near future.

Arrival of the Laboratory Equipment at ITB, Batch No.2

On 18th July 2017 the second batch of the research equipment arrived at Tanjung Priok port in Jakarta and were delivered to ITB on 10th August 2017. In this batch, the following equipment was imported from Japan:

- 1) Ion Chromatography System
- 2) Stable Isotope Ratio Mass Spectrometry System
- 3) Inductively Coupled Plasma Mass Spectrometry System
- 4) Water Isotope Analysis System
- 5) Gas Chromatograph–electron Capture Detector System

With this delivery, all the planned equipment provision by JICA has been completed and enable the project team to conduct planned research activities in developing a system to detect steam spots suitable for geothermal power generation and an environmental monitoring system. The installation works of the equipment start in September 2017.



The photos above show the scenes from customs inspection at the port and unloading at ITB.

People



Mr. Sato, second from the left, after the farewell dinner.

Project's coordinator Mr. Fumiharu Sato completed his assignment on 30th July 2017 and left for Japan. Mr. Sato had energetically spearheaded the start–up of project activities and the project owes much to his efforts for the current smooth running of its activities, particularly his contribution to the successful importation of advanced laboratory equipment from Japan is well noted. We wish him all the best for his future career.

Mr. Jiro Kamigatakuchi took over the task of the project's administration and coordination from Mr. Sato. Ms. Tanti joined the project team as Administrative Assistant from 9th August 2017.

A Joint ITB/JICA/JST SATREPS Project for Technology Development of Steam-spot Detection and Sustainable Resource Use for Large Enhancement of Geothermal Power Generation in Indonesia Beneficial and Advanced Geothermal Use System

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https://www.jica.go.jp/oda/project/1400739/index.html (JICA) http://bagus-satreps.fttm.itb.ac.id/ (ITB) http://www.jst.go.jp/global/kadai/h2601_indonesia.html (JST) http://www.geoenv.kumst.kyoto-u.ac.jp/bagus1.html (Kyoto University)