

MOA/MOU Signing Ceremony with KACST (Saudi Arabia)

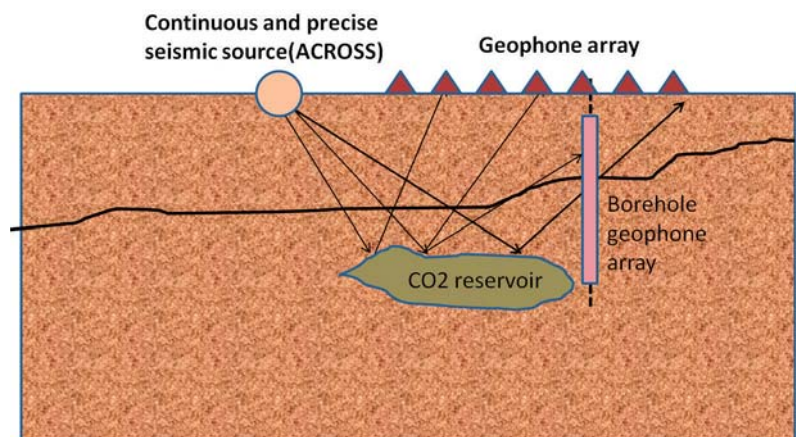
On November 27, 2013, King Abdulaziz City for Science and Technology (KACST) and JCCP took part in a signing ceremony held at KACST in Saudi Arabia. Concluded were a Memorandum of Agreement (MOA) on the “Joint Project on CCS Monitoring Technology for the Underground Storage of CO₂ Produced in Oil Refineries (Saudi Arabia)” and a Memorandum of Understanding (MOU) for hosting an international workshop related to that technology. The memoranda were signed by H.H. Dr. Turki bin Saud bin Mohammed Al-Saud, Vice President of KACST, and Mr. Morihiro Yoshida, Managing Director of JCCP, and witnessed by Mr. Ryoji Kubota, Director–Executive Officer of Kawasaki Geological Engineering Co., Ltd., the company participating in the project from Japan.

The project takes its roots in the Study on the Application of Ground Deformation Monitoring Technologies that has been implemented jointly by KACST and JCCP since fiscal 2008 employing the ACROSS technology (Accurately Controlled and Routinely Operated Signal System). The ACROSS technology was originally developed in Japan to monitor and predict seismic motion, and is a novel technology



Exchanging the signed MOA

that allows continuous monitoring and measurement of underground conditions by generating and emitting accurately controlled and routinely operated signals underground and measuring seismic waves at surface level. The KACST-JCCP Joint Study on CCS Monitoring Technology aims to apply this technology to monitoring the behavior of CO₂ that has been captured and injected into the ground. In addition to CCS, the technology is also expected to be applicable to assessing the behavior of oil, gas and water in the reservoirs.



Schematic diagram of the ACROSS technology and CCS monitoring (provided by Dr. Kasahara, Technical Advisor, Kawasaki Geological Engineering Co., Ltd.)

While the Saudi Arabian national oil company Saudi Aramco is also engaging in the development of CCS technology, the KACST-JCCP study aims to apply Japan's ACROSS technology in Saudi Arabia and ultimately transfer the technology to relevant institutions in Saudi Arabia once it has been developed for monitoring CO₂ injected into the limestone strata, which is the most typical strata in Saudi Arabia.

During the ceremony, H.H. Dr. Turki first gave a congratulatory speech, expressing his appreciation of the project and expectations of promising achievements. He then articulated his strong interest in the workshop scheduled to be held in Jeddah, and expressed his passionate hopes for the project.

Mr. Yoshida thanked all parties concerned for their cooperation toward launching the project and wished its smooth implementation. He explained that the primary goal of the technology is to enable monitoring of the geological disposal of CO₂ produced in refineries, but also noted that the technology has a wide-ranging application potential, as represented by its capacity to be applied to EOR technologies, which could lead to increased oil and gas production in oil-producing countries.

After the speeches, Mr. Kubota from Kawasaki Geological Engineering introduced his company and its role in the project, and the two leaders then signed the MOA and exchanged commemorative gifts. Dr. Junzo Kasahara, Technical Advisor from Kawasaki Geological Engineering, gave a presentation on the project, and the ceremony came to a close amid a friendly atmosphere.

In relation to this project, the KACST-JCCP 1st Joint International Workshop for the Earth's Surface and Subsurface 4D Monitoring was held in January 2012 at KACST in Riyadh with the participation of a large number of academics and researchers. While it was the first attempt of its kind, it was extremely well-received by many interested parties inside and outside the country.

Seizing this occasion of the new phase of the joint project on monitoring technology, KACST and JCCP exchanged an MOU for implementation of the second international workshop, in an answer to requests from those concerned. With the newly-joined King Abdullah University of Science and Technology (KAUST) as co-sponsor, the workshop was agreed to be held in March 2014 in KAUST's hometown of Jeddah, as the "2nd International KACST-KAUST-JCCP Workshop on Surface and Subsurface 4D Monitoring."

<by Sadao Wada, Technical Cooperation Dept.>



Presentation by Dr. Junzo Kasahara, Technical Advisor, Kawasaki Geological Engineering Co., Ltd.



Scene of the signing ceremony at KACST