newsletter

China Australia Geological Storage of CO₂



No. 4

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From the CAGS team

Dear CAGS partners, associates, and interested readers,

Welcome to the fourth issue of the CAGS newsletter.

The CAGS newsletter is released periodically to update you on project news, activities and upcoming events. The newsletter will be available on our website, or you can subscribe to receive it by email.

For the overview of the project, please visit our website, www.cagsinfo.net.

To contact us directly with any comments or queries, please email us at info@cagsinfo.net.

We wish you a happy and safe Easter holiday.

Sincerely,

The CAGS Project Team



Headlines

- Our first student exchange/visit began in March 2011.
- Technical workshop 3: *CO*₂ *Storage and EOR* will be held in Beijing, China, 13 – 15 July 2011.
- The second CCS School is planned to be held in China in August 2011.



Beijing, China

Project Updates

The focus for the CAGS team so far this year has been on planning the second CCS school, coordinating the visiting program for Chinese researchers and students to Australia, and organising the third and final technical workshop for the current phase of this project. Please read below for more details on these activities.

Technical Workshop 3: CO₂ Storage and EOR

The third and final CAGS technical workshop will be held in Beijing from the 13th to the 15th of July 2011. The workshop will be hosted by the China University of Petroleum (Beijing) with assistance from the Administrative Centre for China's Agenda 21 and Geoscience Australia. The two previous workshops have focused almost exclusively on geological storage of CO₂ in saline aquifers. In contrast, this workshop will focus on the use and storage of CO2 through Enhanced Oil Recovery (EOR). We will bring together participants from academia, industry and government to present and share knowledge about the latest progress and trends in this area.

Participation in the Workshop 3 is by invitation. Please contact us at info@cagsinfo.net if you are interested in participating. Presentations will be made available online after the workshop.

CCS School 2

We are planning to hold a second CAGS CCS school in August 2011 in China as a result of the success of the first CCS School late last year and the great interest from Chinese students. The school targets graduate students and early career professionals working in or interested in geological storage of CO₂. Materials from CCS School 1 are available on the CAGS website.

Successful applicants will be invited to participate in the CCS School. Please register your interest in participating by contacting us at info@cagsinfo.net. You will be asked to submit your CV and an application at a later date.

Researcher and Student Visits

The researcher and student visiting program is well and truly underway.



Ms Jia (left) from ACCA21 visiting the CO2CRC Otway Basin *CO*² injection project

The first visit was completed in December 2010. Li Jia, from the Administrative Centre for China's Agenda 21 (ACCA21), worked with Geoscience Australia and the Australian Department of Resources, Energy Tourism in Canberra on policy and regulation issues related to geological storage of CO₂. Through this program she gained an understanding of Australia's position and experience in these issues. This knowledge will assist with the formulation of similar legislation and regulation in China as well as a CCS roadmap for China. Ms Jia also had the opportunity to visit the CO2CRC Otway Basin

CO₂ Injection Project in Victoria after attending the National CCS Week conference in Melbourne in November.

The second Chinese visitor to Australia is Shu Luo, a PHD student from Tsinghua University. Mr Luo commenced work at Geoscience Australia in late March this year and will be working with Geoscience Australia staff for the next six months on understanding integrated numerical simulation and performance of CO₂ plumes in saline aquifers after CO₂ injection.

At least three other researchers and PHD students will be arriving in Australia this year to work with the Cooperative Research Centre for Greenhouse Gas Technologies (CO2CRC), the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and the University of Adelaide.

Research Projects

CAGS supports three research projects in China on aspects of geological storage of carbon dioxide. All projects are on track. A mid-term review meeting will be held in China in April and the projects will conclude by December 2011.

Research Project 1: Site Selection Methodology and Criteria for CO₂ Geological Storage

This project is led by the China Geological Survey with the Institutes of Geology and Geophysics and Rock and Soil Mechanics (China Academy of Sciences) and Tsinghua University. Researchers have been undertaking a comprehensive literature review of key papers on geological storage of carbon dioxide and have visited CO₂ injection sites. Site selection criteria have been put together for saline reservoirs, oil and gas fields and coal seams, although saline reservoirs are the key concern for this project. Researchers are also investigating CO₂ flow through porous rocks and conducting practical experiments in this area. The Liaohe Oil Field is being analysed according to the findings of this project.

Research Project 2: Selection Criteria for Oil/Gas Reservoirs for CO₂ EOR and Storage

The China University of Petroleum is undertaking this project to develop selection criteria for oil and gas reservoirs for CO₂ storage including geological characteristics, oil/water/CO₂ properties in the reservoir and interaction of these fluids with the rock. Researchers have completed a literature review relating to CO₂ EOR and storage and are now focusing on understanding CO₂/water/rock reactions and the enhanced oil recovery potential in the Liaohe Oil Field.

Research Project 3: Environmental Impact and Risk Management of CO₂ Storage

The third project is led by the Chinese Academy of Environmental Planning with partners from the Institute of Rock and Soil Mechanics (Chinese Academy of Sciences), Tsinghua University and China Geological Survey. Researchers are conducting a literature review on this topic including environmental management approaches in several countries and have identified key areas relevant to this topic such as the impact of CO₂ on groundwater, soil, vegetation and waste. The project team has established environmental indicators of the leakage of CO₂ and are conducting numerical simulations of leakage through a well.

Upcoming Events

CAGS workshop 3 will be held in Beijing, China 13-15 July 2011

August 2011 Second CCS school, in China

Late 2011 Study Tour to Australia for Chinese policy makers

To find out more about CAGS events, or to apply for CAGS support for conferences, please contact us at info@cagsinfo.net and check the website regularly.

Contact Information

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