



Welcome to the seventh CAGS newsletter. This newsletter provides you with an update on the project progress since February 2013. CAGS is funded by the Australian Government and is jointly managed by Geoscience Australia (GA) in Australia and the Administrative Centre for China's Agenda 21 (ACCA21), Ministry of Science and Technology (MoST) in China.

In the past few months, we have been busy completing the first technical workshop and the first training school planned under phase two of the project, establishing and progressing four research projects and organising seven exchange programs. We are now preparing for the second workshop and school, which are likely to be held in May 2014 in China.

If you wish to subscribe to CAGS newsletter or to provide feedback, please email us at [info@cagsinfo.net](mailto:info@cagsinfo.net).

We wish you a safe and happy festive season and look forward to your continued interest in our project.



## Project Updates

### CAGS2 Technical Workshop 1

The first CAGS2 technical workshop on monitoring for the geological storage of CO<sub>2</sub> was held in Melbourne, Australia from 7 to 10 May 2013, and included a site visit to the CO2CRC Otway Project and EnergyAustralia's Iona Gas Plant. The workshop was organised and hosted by GA with assistance from ACCA21.

More than 20 delegates from Australia and China participated in the workshop. Selected participants were invited to share their knowledge and experience through presentations. Participants from China included: China's Ministry of Science and Technology, China Geological Survey, Chinese Academy for Environmental Planning, Chinese Academy of Sciences, China University of Geosciences, and PetroChina. Australian participants included: Department of Resources, Energy and Tourism, Geoscience Australia, Global CCS Institute, the Cooperative Research Centre for Greenhouse Gas Technologies (CO2CRC) and the University of New South Wales.

The full workshop program and presentations can be found at [www.cagsinfo.net](http://www.cagsinfo.net).



CAGS2 Workshop 1 participants

## CAGS2 Training School 1



The first CAGS2 geological storage of CO<sub>2</sub> training school was held in Chengdu, China from 14 to 17 October 2013. The school was hosted by the Sichuan Clean Development Mechanism Center, with assistance from ACCA21 and GA.

The training school was attended by 30 students, including 29 postgraduates and young professionals from 12 Chinese universities and research institutes, and one PhD exchange student to China from Heriot-Watt

University (Edinburgh). A total of 15 speakers from China, Australia, UK, USA and New Zealand gave presentations at the training school.

The training school was regarded as a great learning, knowledge sharing and networking opportunity for participating students and experts.

The full training school program and presentations can be found at [www.cagsinfo.net](http://www.cagsinfo.net).



CAGS2 training school 1 participants

## CAGS2 Research Projects

CAGS2 has funded the following four research projects:

1. CO<sub>2</sub> Geological Storage: Target Area Selection and Evaluation Method
2. Possibility and Potential of CO<sub>2</sub> Enhanced Shale Gas Recovery in the Ordos Basin
3. Current Status and Gaps in Essential Technology, Equipment and Material for Implementing CO<sub>2</sub> Saline Aquifer Storage Projects in China
4. Key Parameters for Environmental Impact and Risk Assessment for CO<sub>2</sub> Geological Sequestration

These projects commenced in early 2013 and are on schedule to be completed by June 2014.

More information on the research projects can be found at [www.cagsinfo.net](http://www.cagsinfo.net).

## CAGS2 Exchange Programs

Over the past few months, we have been busy setting up and supporting exchange programs, which include six Chinese researchers undertaking training and research in key organisations in Australia and one Australian researcher conducting studies in China in the field of geological storage of CO<sub>2</sub>.



Guodong Yang, from China University of Geosciences (Wuhan), has concluded his three-month exchange at the Queensland Geothermal Energy Centre of Excellence in August 2013.

Yang submitted a report on the study of advanced technologies on CO<sub>2</sub> geological sequestration and geothermal utilization to address climate change and improve the economic and environmental delivery of geothermal energy. He also presented his findings and shared his experience at CAGS2 Training School 1.



Hui Zhang, from the China Geological Survey, just finished her placement at Geoscience Australia in November 2013. She attended the "IEAGHG Combined Monitoring and Environmental Research Network Meeting" in Canberra in August 2013.

During her three-month exchange, Zhang participated and contributed to a monitoring project at GA focusing on ecological plant influence mechanisms and monitoring technology under high concentrations of carbon dioxide stress.



Lancui Liu, from the Chinese Academy of Environmental Planning finished her exchange at Geoscience Australia in November 2013. Liu's research project focused on the environmental impact assessment of CO<sub>2</sub> storage projects.

During the six-week program, Liu undertook a desk study of Australian CCS environmental regulations and met with senior scientists at GA, researchers at CSIRO in Melbourne, the Australian National University in Canberra and the University of New South Wales in Sydney discussing topics related to her research.



Keyu Liu, from the Earth Science and Resource Engineering Division, CSIRO, is currently being hosted by the Research Institute of Petroleum Exploration and Development in China and will complete his four-month exchange in December 2013.

He is undertaking research on physical and numerical simulations of CO<sub>2</sub>-Rock interaction under reservoir conditions, with specific reference to CO<sub>2</sub> storage.



Ning Wei, from the Institute of Rock and Soil Mechanics, Chinese Academy of Sciences, concluded his exchange at the Earth Science and Resource Engineering Division, CSIRO in October 2013. He is preparing a report summarising his study on numerical modelling and performance evaluation based on site monitoring data.



Le Zhang, from the Institute of Engineering Thermal Physics, Tsinghua University, is being hosted by Monash University from October to December 2013 to investigate shale supercritical CO<sub>2</sub> flow in support of supercritical CO<sub>2</sub> fracturing and geological sequestration during shale gas exploitation.



Shu Wang, from the Institute of Geology and Geophysics, Chinese Academy of Sciences, is scheduled to start her exchange at the University of Melbourne from January 2014 and finish her analysis on 2D and 3D characterisation of petrophysical heterogeneity of reservoir rocks in June 2014.

More information on the exchange programs can be found at [www.cagsinfo.net](http://www.cagsinfo.net).

## Upcoming Events

May 2014            CAGS2 Technical Workshop 2 and Training School 2, China

## Contact Us

If you have any comments, inquiries or wish to unsubscribe, please contact us.

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