

## Symposium on Innovative Environmental Technologies

### Research Planning Group

Symposium on Innovative Environmental Technologies was held November 4, 2009 at Mielparque-Kyoto supported by Minister of Economy, Trade and Industry (METI), Kyoto Prefecture and Kinki Regional Countermeasure Promotion Meeting on Energy and Global Warming, attended by 245 delegates from various field including industry, academia and government.

The advanced information on CO<sub>2</sub> fixation and effective CO<sub>2</sub> utilization were presented by researchers from RITE and other institutions to provide the importance of environmental technologies and the strategies of developing technologies. Active discussion was carried out among the participants to expand the collaboration with industry and academia, and to contribute to devise the Technology Strategy Map.



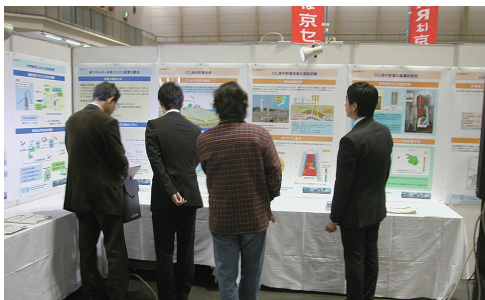
## Kyoto Eco Festival

### Research Planning Group

RITE participated in “Kyoto Eco Festival 2009” held in Pulse Plaza on November 21 and 22, 2009 to present how RITE has dedicated to the mitigation of global warming and to promote understanding of its activities to the public.

“Kyoto Eco Festival” is held every year and the exhibitors are from NPO, educational institutions and private sectors based in Kyoto. Each exhibition was designed to enjoy, experience and learn environmental issue and technologies. “Kyoto Eco Festival 2009” attracted 28,000 visitors in two days.

RITE exhibited posters about its research activities and a model of CO<sub>2</sub> geological storage. A video on CO<sub>2</sub> geological storage was also shown to the visitors during the period.



## IIASA-RITE International Symposium 2009

### Systems Analysis Group

The IIASA-RITE International Symposium 2009 was held at Keidanren-Kaikan in Tokyo on March 3<sup>rd</sup>, 2009. This symposium was co-hosted by the International Institute for Applied Systems Analysis (IIASA), the Japan Committee for IIASA, and the Research Institute of Innovative Technology for the Earth (RITE) with support from the Ministry of Economy, Trade and Industry, Japan (METI).

We are honored to have a variety of leading experts in the field of climate change and energy issues, including Prof. Winterfeldt, the new director of the IIASA, Prof. Nakicenovic and Dr. Amann from the IIASA, Prof. Misono, the president of the National Institute of Technology Evaluation (NITE), and Mr. Sugiyama, Senior researcher of the Central Research Institute of the Electric Power Industry (CRIEPI). They introduced latest research developments and discussed how to create a sustainable social economy and exchange views on necessary measures.

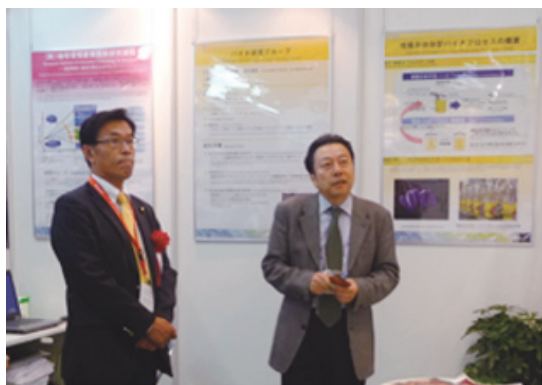
We had an attendance of 230 people, such as participants from industries, ministries, and universities, leading people to build a sustainable social economy and individuals who commit themselves to environmental issues locally. Their active discussion motivated us to dedicate further efforts to our research and development.



## Many Visitors to BioJapan2009 (World Business Forum)

### Molecular Microbiology and Biotechnology Group

World Business Forum organized by BioJapan Organizing Committee and Nikkei Business Publications Inc. was held at Pacifico Yokohama from October 7 to October 9, 2009. Director, Dr. Hideaki Yukawa moderated the seminar of Biorefinery summit [Energy /Chemicals production from sustainable biomass]. We also displayed the highly efficient bio-conversion technology, 'RITE-Bioprocess', along with posters and a video presentation, which allowed to introduce our group activity. Also our collaborative companies joined the exhibition and their panels were displayed in the same booth. We would like to take this opportunity to express our thanks for coming to BioJapan2009. We are planning to give a presentation and exhibition this year too, and we hope to show our latest works at the next BioJapan.



Mr. Chiaki Takahashi, left, parliamentary secretary of Minister of Economy, Trade and Industry, stopped by our exhibition booth.



RITE exhibition booth in BioJapan 2009.

## CSIRO-RITE Science & Technology Symposium -Amines for Post Combustion Capture-

Chemical Research Group

The CSIRO-RITE Science & Technology Symposium -Amines for Post Combustion Capture- was held at the Kyoto International Conference Center on May 26 (Tue), 2009.

This symposium was co-hosted by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Research Institute of Innovative Technology for the Earth (RITE), under the auspices of the Australian government.

The symposium ended in a great success with 121 participants from the Australian Embassy, Tokyo, the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the New Energy and Industrial Technology Development Organization (NEDO), as well as universities and private companies from around the world.

The following speakers delivered lectures to participating experts on the subject of research & development results of amine-based CO<sub>2</sub> capture technologies and the current performance assessments of pilot plants in the world:

- Professor Gary Rochelle (The University of Texas, the United States)
- Professor Akira Miyamoto (Tohoku University, Japan)
- Professor Hallvard Svendsen (Norwegian University of Science and Technology, Norway)
- Professor Paitoon Tontiwachwuthikul (University of Regina, Canada)
- Mr. Cai Ming (Thermal Power Research Institute, China)

Researchers of CSIRO and RITE also provided lectures, helping participants increase the understanding of amines exhibiting higher CO<sub>2</sub> capture capacity. For further details on the symposium, please visit the “Events” page of RITE’s website.



Kyoto International Conference Center

## International Zero Emission Coal-fired Generation IZEC Symposium 2009

CO<sub>2</sub> Storage Research Group

The IZEC symposium 2009 -International Zero Emission Coal-fired Generation- was held at Hotel Pacific Tokyo on 19<sup>th</sup> November 2009. This symposium was supported by Ministry of Economy, Trade and Industry, Agency for Natural Resources and Energy, New Energy and Industrial Technology Development Organization, and Japan Coal Energy Center.

Measures against CO<sub>2</sub> issues are required that Coal-fired generation keep playing a role of major source of electricity in the future; CCS (Carbon dioxide Capture and Storage) has a key role.

Stakeholders are invited from European Commission, the regulatory agency of EU member nations, suppliers of power generating plant, and so forth for this symposium.

The current status of CCS was introduced as well as the status of FutureGen project promoted by US DOE and the activities of GCCSI (Global CCS Institute) which received attention as the promotion of CCS by Australian government.

The effort for supporting the CCS demonstration project networks in EU was introduced. Carbon Capture Readiness (CCR, a way to address the practical issues that will enable CCS facilities to be installed at a later date) regulated by the U.K. government ahead of the EU Directive on CCS was explained that it is valuable preliminary step towards CCS in order to avoid “carbon lock-in”. Additionally, suppliers in EU provided a detailed explanation of technical development on CCS demonstration projects including CCR.



IZEC Symposium, Hotel Pacific Tokyo

## 4<sup>th</sup> Japan-China Energy Conservation Forum

CO<sub>2</sub> Storage Research Group

On November 8<sup>th</sup> 2009, 4<sup>th</sup> Japan-China Energy Conservation Forum was held at Beijing Great Hall of the People hosted by the Ministry of Economy, Trade and Industry (METI) and the Japan-China Economic Association together with the National Development and Reform Commission (NDRC) and the Ministry of Commerce of the People's Republic of China gathering round 500 related persons from Japan and China respectively.

On the Overall meeting, after speeches were made by Masayuki Naoshima, Minister of METI, Akio Mimura, Vice President of the Japan-China Economic Association, Li Keqiang, Vice Premier of People's Republic of China, Xie Zhenhua, Vice Chairman of NDRC and so on, exchange of 41 Agreement Documents regarding Japan- China energy conservation and environmental cooperation were carried out successfully. Agreement of Japan-China CCS-EOR cooperation between RITE and International Department of China National Petroleum Corporation was included in 41 Agreements.

Moreover, fruitful discussion was made on the seven section meetings of top- runner system, economic circulation, conversion of sea water into fresh water, automobiles, power generation/coal, chemicals and long term trade.



Agreement Document Exchange of Japan-China CCS-EOR Cooperation