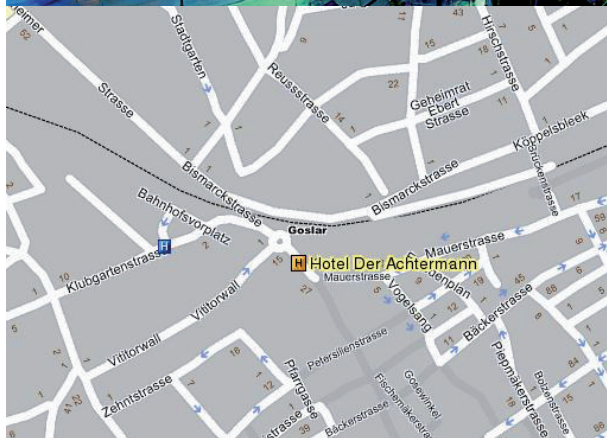


## Venue & Accommodation

Conference venue and accommodation will be at:  
Hotel - DER ACHTERMANN (\*\*\*\*)  
Rosentorstr. 20  
D-38640 Goslar, Germany  
Phone: +49 5321 7000-300  
Fax: +49 5321 7000-999  
E-Mail: [reservierung@der-achtermann.de](mailto:reservierung@der-achtermann.de)  
(Please give the key word "co2gas" and pay for your rooms in the hotel!)



## Conference Secretariat Address

Mrs. Karin Peya, EFZN in Goslar, Germany  
Phone: +49 5321 3816 8055  
Fax: +49 5321 3816 8196  
E-mail: [co2gas@tu-clausthal.de](mailto:co2gas@tu-clausthal.de)

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Secretariat: Mrs. Karin Peya, EFZN (D)  
Coordinator in China: Hongwei Zhou, CUMT in Beijing (CN)  
Coordinator in Germany: Patrick Were, EFZN (D)  
Olaf Franz, LBEG Niedersachsen (D)  
Leonhard Ganzer, TU Clausthal (D)  
Chunhe Yang, Institute of Rock & Soil Mechanics, CAS (CN)

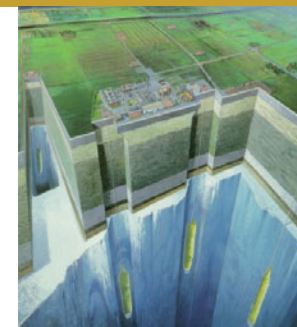
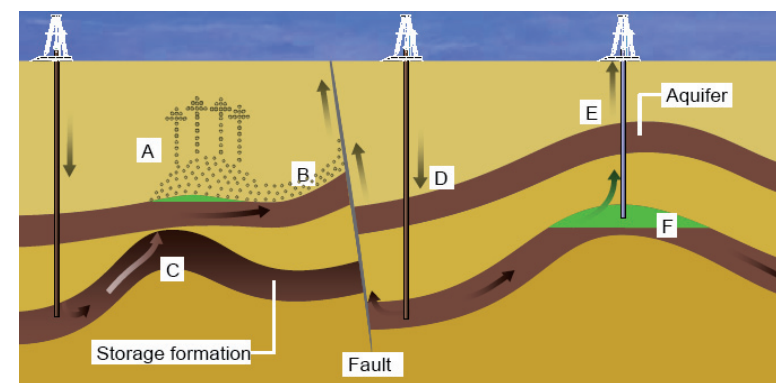


TU Clausthal



## 3<sup>rd</sup> Sino-German Conference & Excursions

Underground storage of CO<sub>2</sub> and energy



Organized by:

Clausthal University of  
Technology & EFZN (D),  
Sichuan University &  
Northeast Petroleum  
University (CN)

Second Announcement  
(August 2012)

21-26 May 2013 in Germany:

Goslar, Asse, Etzel, Ketzin, Berlin

## Invitation

CO<sub>2</sub> emission in China increased from 2500 Mt in 1991 to 6200 Mt in 2008, thus making China the world largest CO<sub>2</sub> emitting country, while Germany, with 800 Mt per year, the largest emitter in Europe.

Both countries are together responsible for approximately 23% of the total CO<sub>2</sub> global emission (20 and 3% for China and Germany, respectively). From a global point of view, CCS Technology in cooperation with China (68% primary energy consumption of carbon) could significantly contribute to environmental protection. Both countries plan to reduce CO<sub>2</sub> emissions in spite of the continuous growth. Germany wants to reduce its emission by 40% until 2020 and China's target is to reduce its carbon intensity by 40 to 45% till 2020 compared with the 2005 level.

Although to date China possesses only 6 natural gas storages in porous media with a working gas volume of 1.0 Billion m<sup>3</sup> in operation, it also owns 14 storages of natural gas in salt caverns with a working gas volume of approx. 380 Mio. m<sup>3</sup> belong to a subproject of the famous West-East Pipeline Project consisting of exploitation and leaching caverns in Jintan (located between Shanghai and Nanjin). China will catch up significantly with Germany's working gas volume within the next years. With regard to the third phase of the strategic oil reserves as well as the rapid rise of petroleum usage, China is compelled to construct much more storages of crude oil and natural gas than Germany in the foreseeable future.

Via a targeted cooperation in the above mentioned "Energy and Environmental" topics, a Sino-German Network of science & technology, public authorities and industry has been established with the support of both governments.

Thomas Hanschke, XIE Heping and Michael Z. Hou would like to invite the scientific community and the responsible authorities as well as the energy & environment industries to attend the third Sino-German Conference & Excursions which will be held on May 21-26, 2013 in Germany (Goslar, Konrad, Etzel, Ketzin & Berlin). For more information please contact the Coordinators of the Organizing Committee:

Dr. Patrick Were  
Energie Forschungszentrum Niedersachsen (EFZN)  
Am Stollen 19, 38640 Goslar, Germany  
Phone: +49-5321 3816 8115  
E-Mail: [co2gas@tu-clausthal.de](mailto:co2gas@tu-clausthal.de)  
Prof. Dr. Hongwei Zhou  
China University of Mining & Technology (Beijing)  
D11 Xueyuan Road, Beijing 100083, China  
Phone: +86-139 1058 5080, E-Mail: [zhw@cumtb.edu.cn](mailto:zhw@cumtb.edu.cn)

## Program

Tuesday May 21 PM – Thursday May 23 AM: Scientific sessions

Tuesday May 21 AM: Visit of TU Clausthal and EFZN

Wednesday evening May 22: Banquet

Friday May 24 – Sunday May 26 (extra registration required):

Excursions to

- Nuclear waste repository in Asse salt mine
- Salt cavern storage of natural gas and oil in Etzel
- CO<sub>2</sub> storage pilot project in Ketzin
- Bundestag in Berlin (planned)

## Main Topics

1. Integrated Energy and Environmental Utilization of Deep Underground Space: Safety, Risk Management, Policy & Law
2. Geological CO<sub>2</sub> Storage in Deep Saline Aquifer
3. CO<sub>2</sub> for Enhanced Gas and Oil Recovery, Coal Bedded Methane and Geothermal System (CO<sub>2</sub>-EGR / EOR / ECBM / EGS)
4. Trapping Mechanisms and Multi-Barrier Sealing Systems for Long-Term CO<sub>2</sub> Storage
5. Natural Gas Supply and Storage with the High-Frequency Operation
6. Underground Storage of Renewable Energy (e.g. transferred in Hydrogen, Compressed Air or Pumped Water etc.)
7. Storage Caverns in Less Favorable Rock Salt Formations (e.g. Thin, Highly Impure, Interlayer etc.)
8. Rock Mechanical Behavior and Constitutive Models in Consideration of High Frequency Cycle Load, Dilatancy, Damage, Self-Sealing and Healing
9. Coupled THMC-Processes and Numerical Modeling
10. Field and Remote Monitoring

## Founded by



## Registration Fees

Conference registration (May 21–23, 2013 in Goslar) (includes a 3-day conference, proceedings, coffee and beverages during coffee breaks, 3 lunches and a banquet in the Kaiserpfalz) **400 €**

Conference registration for invited students (without proceedings and dinner) **0 €**

The 3-day excursion from May 24–26, 2013 (includes bus-transfers, lunch and dinner) **450 €**

## Registration Form

Registration is possible by fax +49 5321 3816 8196 or mailto: [co2gas@tu-clausthal.de](mailto:co2gas@tu-clausthal.de).

Registration for \_\_\_\_\_

Name, First Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Zip Code, City \_\_\_\_\_

Country \_\_\_\_\_

Phone / Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

## Payment

Payment is accompanied by your registration form and made only by wire transfer to TU Clausthal:

Bank: Sparkasse Goslar/Harz

Account number: 422

IBAN: DE44268500010000000422

SWIFT-BIC: NOLADE21GSL,

Please give the key word: "80030690, Your Name"

## Important Dates & Deadline

Paper manuscripts (see [temperat.dot](#) & [readme-journ.pdf](#)) must be submitted both as word document and pdf file to [co2gas@tu-clausthal.de](mailto:co2gas@tu-clausthal.de) until the 30th September 2012.

More than 60 abstracts have been peer-reviewed successfully and accepted. All papers will be peer-reviewed, only highly qualified papers can be considered either for the EI indexed proceedings, or for the Special Issue in the ISI/SCI-Journal "Acta Geotechnica".

• **Deadline for full paper:** September 30, 2012

• **Final acceptance:** December 20, 2012