



## Season Greetings

While the New Year is going to open the corridors to new dreams and possibilities, Chinese National Committee on Large Dams (CHINCOLD) wishes you a Happy, Healthy and Successful New Year 2014. We would like to express our sincere appreciation to you for your continuous support to CHINCOLD.

**Merry Christmas and Happy New Year!**



WANG Shucheng

President of CHINCOLD

Former Minister of the Ministry of Water Resources

CHINCOLD

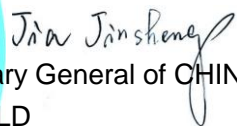


JIA Jinsheng

Vice President and Secretary General of CHINCOLD

Honorary President of ICOLD

Vice President of China Institute of Water Resources and Hydropower Research



Happy  
New  
Year

## ■ Current activities of CHINCOLD

### 1. Symposium on new damming technology in June, 2013

Symposium on new damming technology, organized by CHINCOLD, was held in June, 2013. More than 200 CHINCOLD members and professionals participated in the symposium. Representatives from the Ministry of Water Resources and local Department of Water Resources attended. The Symposium accepted about 50 papers and arranged 25 presentations, mainly focus on digital design and construction management of dam, Cemented Material Dam technology, Rock-fill Concrete Dam technology, underwater detection and rehabilitation, and technical progress related. Modern technologies, methods, equipments on dam construction and operation have been discussed to promote communication and cooperation.



### 2. Chinese delegation attended the 81<sup>th</sup> ICOLD Annual meeting in August, 2013

CHINCOLD organized a delegation of more than 80 professionals to attend the 81<sup>th</sup> ICOLD Annual meeting in Seattle, USA in August, 2013.

- Mr. Wang Shucheng, President of CHINCOLD, was awarded as Honorary Member of ICOLD
- As Chairmen of Technical Committees of ICOLD, Mr. Cao Guangjing, Board Chairman of China Three Gorges Corporation, chaired the Meeting of Committee on Integrated operation of Hydropower Stations and Reservoirs and Ms. Jiang Enhui Chaired the Meeting of Committee on sedimentation of reservoirs.
- ICOLD Technical Committee on Cemented Material Dams chaired by Dr. Jia Jinsheng, Vice President of S. G. of CHINCOLD, was established during the Executive meeting and convened the first meeting.
- Mr. Zhou Jianping, Deputy S.G. of CHINCOLD and Vice president of HYDROCHINA Cooperation made a keynote report at the symposium on Changing Times: infrastructure Development to infrastructure Management.





Happy New Year

- CHINCOLD representatives attended the APG Club Meeting and discuss with members of APG member countries.
- CHINCOLD representatives had a meeting with USSD board members on technical cooperation and training of young engineers based on the Agreement for Technical Cooperation and Exchange signed in 2010.



USSD & CHINCOLD Meeting



APG Club Meeting



First meeting of Committee on CMDs



Meeting of Committee on sedimentation of reservoirs

### 3. Hydropower 2013--CHINCOLD 2013 Annual Meeting and the 3<sup>rd</sup> International Symposium on Rockfill Dams in November 2013

The event was held on 1-3 November 2013 in Kunming City of Yunnan Province, China. More than 800 participants attended, including 700 Chinese professionals and over 100 foreign professionals from 33 countries.

Participants included Dr. Jiao Yong, Vice Minister of Water Resources of China, Mr. Yang kun, Chief Engineer of National Energy Administration of China, Hon. President of ICOLD, Mr. C.B. Viotti and Mr. Luis Berga, President of CHINCOLD, Mr. Wang Shucheng, President of CBDB, Mr. Erton Carvalho, Executive Director of IHA, Mr. Richard Taylor, President of Mexican Academy of Engineering, Mr. Humberto Marengo Mogollon, Germany BMBF Minister Representative, Mr. Reinhold Ollig and etc..



Happy New Year

The Symposium accepted about 160 papers and arranged 90 presentations. Technical sessions included: Sustainable Development of Hydropower & Dams, Construction Technologies of Rockfill Dam, Operation, Experience and Development Trend of Rockfill Dam, High Dam Design and Construction, and Safety Assessment and Rehabilitation Technology of Dams. Workshops on Cemented Material Dams, Asphalt concrete rockfill Dams and Joints Seals for Concrete Structures of Dams were organized during the symposium.

5 projects have been awarded as International Milestone Rockfill Dam Projects during the Symposium. The certificates were signed by President of ICOLD, President of CHINCOLD and President of CBDB.

- Bakun dam in Malaysia
- Jiudianxia dam in China
- La Yesca dam in Mexico
- Nam Ngum 2 dam in Laos
- Sao Simao dam in Brazil

Three young engineers were awarded CHINCOLD Wang Wenshao Youth Award.



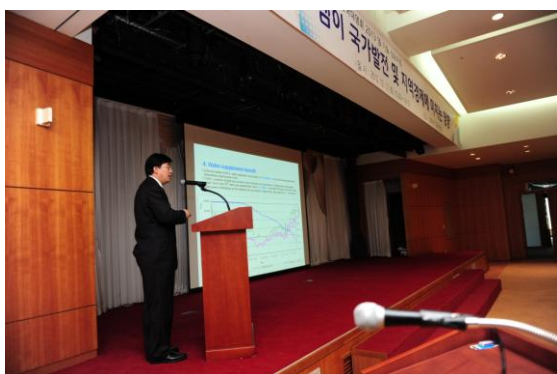
#### 4. The 4<sup>th</sup> Round Table Meeting and Technical Tour for African countries in Nov., 2013

Following the ***World Declaration on Hydropower and Dams for African Sustainable Development*** issued by ICOLD and other international organization, CHINCOLD organized the "Round Table Meeting on Sustainable Development of Dams and Hydropower" in Kunming on 2 Nov. This was the 4<sup>th</sup> round table meeting for Africa. Ten representatives from Angola, Benin, Ethiopia, Ghana, Togo, Morocco, Nigeria, Mozambique, Senegal and South Africa attended the meeting. Participants introduced the current situation of hydropower development in their countries as well as future intention and prospect of cooperation and had a communication with Chinese professionals. After the meeting, African professionals visited the Three Gogers Project, Shuibuya Geheyan Hydropower projects. The series round table meetings are expected to play a positive role in promoting the hydropower development in African countries.





## 5. Dr. Jia Jinsheng attended 2013 World energy Congress in Daegu, Korea



The 22<sup>nd</sup> World energy Congress was held in 13-17 October 2013, gathered more than 7500 participants from 123 countries. Dr. Jia Jinsheng, Hon. ICOLD President, Vice President & S.G of CHINCOLD, participated in the event, and gave keynote speech with the title of “Dam construction in China up to 2012”.

## ■ What's going on next year?

### 1. Organize Chinese delegates to join ICOLD activities

CHINCOLD will organize Chinese delegates to join the 82<sup>th</sup> ICOLD Annual Meeting in Indonesia in June 2014, the 8<sup>th</sup> East Asian Dam Conference (EADC) in Korea and Hydropower 2014 in Italy. CHINCOLD would like to promote academic exchange and cooperation with other ICOLD member countries.

### 2. CHINCOLD will organize Meetings and activities

**CHINCOLD 2014 Annual Meeting:** Oct. 2014, Guiyang City of Guizhou Province

**The 3<sup>rd</sup> Symposium on New Damming Technology:** May, 2014, Guangzhou City of Guangdong Province

**The 7<sup>th</sup> International Symposium on RCC Dams** will be held in Chengdu City of Sichuan Province in 2015 according to the agreement between SPANCOLD and CHINCOLD.

### 3. CHINCOLD will publish a book in English Version of Large Dam Construction in China – A Sixty Year Review in 2014

## ■ Dams and hydropower in China

### 1. Dams

By the end of 2012, China had a total of 5639 dams higher than 30m in operation or under construction. For those dams, there were 170 dams with a height of 100-150m, 13 dams with a height of 150-200m, and 13 dams with a height of larger than 200 m.

There are 138 dams 30 m or higher under construction, of which 99 will be more than 60 m high. The highest are: Jinping 1 arch dam (305 m), Lianghekou rockfill dam (295 m), Xiluodu arch dam (284.5 m), Baihetan arch dam (277m), Nuozhadu rockfill dam (261.5 m), Changheba rockfill dam (240 m), Houziyan CFRD (223.5 m), Jiangpinghe CFRD (219 m), Dagangshan arch dam (210 m).

Happy  
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## 2. Hydropower

According to the results of the latest Nationwide Hydropower Resource Assessment in 2005, China's total potential capacity of technically feasible hydropower is 541.64 GW, with an annual power generation potential of 2474 TWh. The total potential capacity of economically feasible hydropower is 401.8 GW, with an annual power generation potential of 1753.4 TWh. By the end of 2012, the installed hydropower capacity had reached 249GW (864.1TWh/year), 21.8 per cent of the country's power infrastructure, which has a combined installed capacity of 1144GW.

China is planning to have 300 GW of hydropower capacity installed by 2020.

## 3. Jiudianxia CFRD was awarded as International milestone rockfill dam

Jiudianxia Project located at the narrows of Jiudianxia Gorge at the middle Tao River, a tributary of the Yellow River. The reservoir has a total storage volume of 0.943 billion m<sup>3</sup>. The Installed capacity is 300MW and electricity generation is 0.994 billion KWh/y. The maximum height of the concrete faced rock-fill dam (CFRD) is 133m.

Jiudianxia CFRD is laid on deep alluvium foundation. The maximum thickness of overburden layer is 45m. Laboratory tests, field tests, numerical analysis and physical model test were carried out to study key technologies for building CFRD with high seismic intensity in narrow valley and on deep alluvium foundation. With technical innovation, the project was completed 9 months ahead of time and save cost of RMB178 million. The project has been in good condition after impounding with no structural cracks in concrete slab and leakage is 60L/s. It provides an example for the construction of high CFRD deep alluvium foundation. Jiudianxia CFRD was awarded as International Milestone Rockfill dam project in 2013.



	<p>Proceedings of United Nations Symposium on Hydropower and Sustainable Development (Beijing, China, 27-29 October, 2004) <b>Price for CD:\$80</b></p>		<p>Proceedings of International Symposium on Dam Safety and Detection of Hidden Troubles of Dams and Dikes (Xi'an, China, 1-3 November, 2005) <b>Price for CD:\$30</b></p>
	<p>Proceedings of Hydropower 2006 International Conference (Kunming, China, 23-25 October, 2006) <b>Price for CD:\$30</b></p>		<p>Proceedings of International Symposium on Modern Technology of Dams - the 4th EADC Symposium (Chengdu, China, 13-14 October, 2007) <b>Price for CD:\$30</b></p>
	<p>New Progress on Roller Compacted Concrete Dams (Guiyang, China, 2-4 November, 2007) <b>Price: \$120</b></p>		<p>Modern Rockfill Dams – 2009 (Chengdu, China, 18-20 October, 2009) <b>Price: \$120</b></p>
	<p>Studies on Modern Technologies and Long-term Behavior of Dams (Zhengzhou, China, 28-29 September, 2011) <b>Price: \$120</b></p>		<p>Study on Modern Technology of Rock fill Dam Construction and Hydropower Development (Kunming, China, 1-3 November, 2013) <b>Price: \$200</b></p>
	<p>Current Activities - Dam construction in China 2009 (CHINCOLD, 2009) <b>Price:\$30</b></p>		<p>Current Activities - Dam construction in China 2010 (CHINCOLD, 2010) <b>Price:\$30</b></p>

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