

**9th INTERNATIONAL SYMPOSIUM ON
ROLLER COMPACTED CONCRETE DAMS AND CEMENTED MATERIAL DAMS**
Guangzhou, China
4th-8th December, 2023

Organized By:

Chinese National Committee on Large Dams (CHINCOLD)
Spanish National Committee on Large Dams (SPANCOLD)
Japan Commission on Large Dams (JCOLD)
French Committee on Large Dams (CFBR)

Supported By:

China Southern Power Grid Energy Storage Co., Ltd
Others to be decided

Website: <https://www.chincold-smart.com/meetings/rcc2023/index.html>



INVITATION

Spanish National Committee on Large Dams (SPANCOLD), Japan Commission on Large Dams (JCOLD), French Committee on Large Dams (CFBR) and Chinese National Committee on Large Dams (CHINCOLD) have the honor to invite professionals to the 9th International Symposium on Roller Compacted Concrete (RCC) Dams and Cemented Material Dams (CMD), which will be held in Dec. 4th-8th, 2023 in Guangzhou City, China.

RCC dams have the virtues of saving a great deal of concrete, building quickly, making project cost down and early bringing into playing project advantages and so on. Hence, the technique of constructing dams has been quickly spread and applied since it came out. Today there are more than 400 RCC dams in more than 40 countries. Great successful experiences and advanced technologies have been achieved. CHINCOLD and SPANCOLD have devoted to promote the technology from early 1990's. The first Symposium on RCC dams was jointly organized by the two committees in 1991 in Beijing China, which was a success start of the series of RCC Symposiums.

Cemented Material Dam (CMD) is a new type of dams, which includes Hardfill dam, Cemented Sand and Gravel dam (CSG), Cemented Sand, Gravel and Rock dam (CSGR), Rock-filled Concrete dam (RCD), Cemented Soil dam (CSD), and so on. There are more than 200 CMD projects constructed and under construction.

Following those successful and fruitful Symposiums held in Beijing (China) in 1991, Santander (Spain) in 1995, Chengdu (China) in 1999, Madrid (Spain) in 2003, Zaragoza (Spain) in 2012 and Chengdu (China) in 2015, the 9th International Symposium on Roller Compacted Concrete (RCC) Dams and Cemented Material Dams will provide a platform for practitioners, engineers, researchers, scientists, managers and decision makers from all over the world to exchange ideas and technology about the latest developments dealing with RCC dams and CMDs. The participants will have the occasion to visit some famous RCC dams and CMDs in China in operation or under construction.

VENUE

Guangzhou as the host city

Guangzhou (pronounced /gwung-jo/) is the capital city of Guangdong Province in southeast China. The city has been a provincial capital city since the Han Empire era 2,200 years ago and a major trading port since about the year 226. It is also the top transportation hub of southern China and has very convenient transport systems. The best time to visit Guangzhou is autumn and winter, from October till March of the next year, as temperatures are mild, and rainfall is lower.



Hotel information

Easeland Hotel Guangzhou is a high-star hotel for conferences and leisure-seeking. It is surrounded by famous institutions and back to Baiyun Mountain, one of the national AAAAA Tourist Resorts in China. The hotel has advanced facilities in perfect condition for conferences and banquets.

Address: No.2 Baiyun Ave. North, Baiyun District, Guangzhou, China

Transportation to the Hotel

1. From Baiyun International Airport, by taxi: approx. 25 minutes, ¥ 70.
2. From Guangzhou Railway Station, by Taxi: approx. 30 minutes, ¥ 25.
3. From Guangzhou East Railway Station, by taxi: approx. 30minutes, ¥ 40.
4. From Guangzhou South Railway Station, by taxi: approx. 40 minutes, ¥ 120.



PROGRAM

- | | |
|---------------------------|---|
| ● Registration | 3 rd December, 2023 |
| ● International Symposium | 4 th -5 th December, 2023 |
| ● Post study tour | 6 th -8 th December, 2023 |

TOPICS

- Innovation and mix proportion of RCC Dams and CMDs materials
- Design and construction development of RCC Dams and CMDs
- Application of roller compacted concrete and cemented materials in the dam protection against overtopping
- Rehabilitatin technology of RCC Dams and cases
- Application of digitization and artificial intelligence technology
- Others

LANGUAGE

The official languages of the Symposium are English and Chinese. Simultaneous translation will be provided for the symposium.

CALL FOR PAPERS

English papers are now invited on the related topics. Please submit your papers in the website of 9th International Symposium on RCC Dams and CMD. You are also welcomed to email papers to the correspondence address of the symposium.

IMPORTANT DATES

- | | |
|--|---------------------------------|
| ● Full paper submission deadline | 31 st August 2023 |
| ● Notification from paper review process | 20 th September 2023 |
| ● Deadline for early bird registration | 30 th October 2023 |
| ● Deadline for presentation submission | 20 th November 2023 |

TECHNICAL EXHIBITION

During the Conference, a technical exhibition related to the hydropower and dams will be organized. Organizations and companies are welcomed to display their supplies and services to delegations from all over the world. Those who are interested in the exhibition are kindly invited to contact the secretariat for further details.

INTERNATIONAL MILESTONE RCC PROJECT

To recognize major achievements of dam technology and define milestone projects in this field, with the support of international experts, CHINCOLD and SPANCOLD initiated the International Milestone Project Award on RCC Dams. This proposal gained the support of ICOLD and the positive responses from many ICOLD National Committees.

The milestone projects are representative of the main achievements in dam projects until now, and they are also the basis for the new projects. The experiences of them can be used as a valuable reference for the future developments.

There are a great number of RCC dams constructed in the world. A number of them were recognized as International Milestone RCC Projects at the past Symposiums on RCC dams, including Longtan dam, Miel I dam, Miyagase dam, Olivenhain dam , Ralco dam, Rialb dam, Salto Caxias dam, Wolwedans dam, Tau Sauk dam , Guangzhao dam, La Brea II dam, Shapai dam, Changuinola 1 hydroelectric plant, Murum Hydropower Project, Portugues Dam, Huangdeng Hydropower Project, Upper Kalekoy Dam and HEPP, Oroville Spillways Recovery Project.

The recommended RCC Dam Project should fulfill the following requirements:

- The project is well known in the world. Its innovation of dam design and construction is significant, which can be used for reference by other projects
- The project has been completed and been in good operation for more than 3 years
- During the dam construction and management, measures have been taken to improve the environment and resettlement
- The project has achieved great benefits in hydropower generation, flood control, irrigation, water supply and etc. and has played important roles in promoting the social and economic development of the dam area
- The relevant innovative achievements have been well applied in 2 or more projects, and achieved great social, economic and ecological benefits.

The Organizing Committee of the 9th Symposium on RCC Dams and CMD would like to invite experts and countries to recommend some projects as Candidate of International Milestone RCC Dam Projects.

The application documents for the nominated project can be download at <https://www.chincold-smart.com/BjChincoldFiles/downloads/Attachment-RCCProject.doc> and shall be submitted before 30th September by email to chincold-en@vip.126.com.

More information on the awarded International Milestone RCC Dam Projects could be visited at: <http://www.chincold-smart.com/en/awards/projects-awards/list/1>

POST STUDY TOURS

On 6th -8th December, the participants will have the opportunity to visit

Tour 1

Guangzhou city - Yangjiang Pumped Storage Power Station (completed) - Meizhou Pumped Storage Power Station (completed) - Guangzhou city

The Yangjiang Pumped Storage Power Station is located in Yangjiang City, Guangdong Province. It provides support for the operation of the power grid in Guangdong-Hong Kong-Macao Greater Bay Area. The upper reservoir dam is the RCC gravity dam with maximum height 101 meters, concrete pouring volume 652000 cubic meters. The lower reservoir dam is asphalt concrete core wall rockfill dam, with maximum height of 55.1 meters and a total filling volume of 4.8 million cubic meters. The installed capacity of the power station is 2.4 million kilowatts and the operation of the power station will save 171000 tons of standard coal annually and reduce CO₂ emissions by approximately 428000 tons.



The Meizhou Pumped Storage Power Station is located in Wuhua County of Meizhou City, Guangdong Province. The main dams of its upper and lower reservoirs are roller compacted concrete gravity dams, with the maximum dam heights of 60 meters and 85 meters respectively, the reservoir capacity of 41.02 million cubic meters and 43.82 million cubic meters respectively. The installed capacity of the station is 1.2 million kilowatts, which is of great significance in optimizing the power supply layout of Guangdong Province, safeguarding the safety of the power grid in the eastern Guangdong Province.



Tour 2

Guangzhou city - Quanzhou Bailai Project (under construction) - Xi Yin Project (under construction) - Fuzhou city

Quanzhou Bailai Project is located in Baiai Village, Anxi County, Fujian Province. The total capacity of reservoir is 544 million cubic meters, the installed capacity of the power station is 57000 kilowatts, and the average annual power generation is 181 million kilowatt hours. The average annual water supply can be increased by 297 million cubic meters after complete. The main dam is a roller compacted concrete gravity dam with the maximum dam height of 106 meters, the dam crest width of 8.0 meters, the dam crest length of 596.0 meters. The normal water storage level is 288 meters. The first concrete pouring of the dam was carried out in January 2022, and the closure of the river was carried out in December 2022. The project is planned to be completed by the end of 2025.



Xi Yin Project is located in Putian City, Fujian Province. The normal water storage level is 190.5 meters, the total storage capacity is 27.55 million cubic meters, and the installed capacity of the power station is 1500 kilowatts. The barrage is a cemented sand-gravel-rock dam (CSGRD) with a maximum height of 52.0 meters, a maximum bottom width of 63.2 meters, a crest width of 6.0 meters, and a crest length of 395 meters. The filling volume of cemented sand-gravel-rock is 329400 cubic meters, and of conventional concrete is 56900 cubic meters. The construction of project officially started on October 10, 2021, with a total of 28000 cubic meters of concrete pouring and 59000 cubic meters of cemented sand and gravel filling to date.



Tour 3

Guangzhou city - Dongyang Project (under construction) - Qianwei Project (completed) - Chengdu city

Dongyang Project is located in Qingchuan County, Sichuan Province. The normal water storage level is 932 meters, the normal storage capacity is 5.32 million cubic meters, and the total storage capacity is 7.17 million cubic meters. The project consists of a hub project and an irrigation area project with multi-purposes such as agricultural irrigation and rural water supply. The dam of the hub project is a cemented sand-gravel-rock dam(CSGRD), with a crest length of 135.5 meters, a crest width of 6m, and a maximum dam height of 66.5 meters. The cross-section of the dam is a trapezoidal section, with an upstream slope of 1:0.4 and a downstream slope of 1:0.7. The construction of dam officially started in May 2022 and is scheduled to be completed in 2024.



Qianwei Project is located in the downstream section of the Minjiang River in Sichuan, with a total storage capacity of 227 million cubic meters and a total installed capacity of 500MW. The project development is mainly focused on shipping, combined with power generation, water supply and irrigation. The protection project is an important component of the Qianwei Hub. The material of levee in Tangba village adopted cemented sand-gravel-rock. The axis of the levee is about 2.71 kilometers long, the crest elevation is 336.1 meters, the elevation of the top of the wave wall is 337.3m, the width of the embankment top is 5 meters, and the minimum elevation of the foundation surface is 323.2 meters, and the maximum height of the dam is 14.1 meters. In 2020, it successfully withstood the test of overtopping.



REGISTRATION FEES

The Registration Form is enclosed in the last of this bulletin.

Type of participant	Before 30 October 2023	After 30 October 2023
Participant	US\$ 600	US\$ 650
Accompanying person	US\$ 300	US\$ 350
Post study tours	Tour 1: Yangjiang Pumped Storage Power Station and Meizhou Pumped Storage Power Station, US\$ 600	
	Tour 2: Quanzhou Bailai Project and Xiyin Project, US\$ 600	
	Tour 3: Dongyang Project and Qianwei Project, US\$ 600	
Technical Exhibition	US\$ 3000	

- **The Participant fee includes:**
 - ✧ Documentation and access to the sessions of the Symposium
 - ✧ Working lunches
 - ✧ Coffees in the morning and afternoon breaks
 - ✧ Opening session
 - ✧ Social event
- **The Accompanying person fee includes:**
 - ✧ Credentials for the accompanying person
 - ✧ City Tour
 - ✧ Social event related
 - ✧ Accompanying person program
- **Post study tours fee includes:**
 - ✧ Local transport
 - ✧ Hotel
 - ✧ Meals
 - ✧ Entrance ticket
 - ✧ Tours are subject to change, if minimum number of delegates are not met
- **Technical Exhibition fee includes:**
 - ✧ One Exhibition stand (Details to be announced soon)
 - ✧ One free participant registration

Registration will be confirmed after the total payment has been received. Total payment in the registration form could be by bank transfer to the following account:

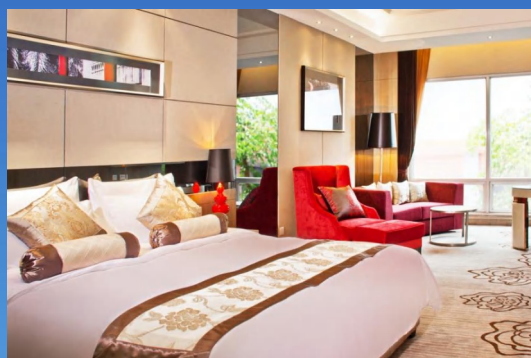
- Name of organization: Chinese National Committee on Large Dams
- Bank: Industrial and Commercial Bank of China, Shijitan Branch
- Account No.: 0200 0963 0900 0039 706
- Swift Code: ICBKCNBJBJM

*CHINCOLD **don't** afford any incurred transfer fee

ACCOMMODATION

It is suggested to book the hotel accommodations via CHINCOLD since there is negotiation between the Easeland Hotel Guangzhou and CHINCOLD. The delegates pay the accommodation fees at the hotel when check in.

Room type	Fee per night (including tax) (USD)
Deluxe Double Room	100
Deluxe King Size Room	100



CORRESPONDENCE ADDRESS

If you need invitation letters to apply for the visa, please send registration form, CV and copy of passport to CHINCOLD Secretariat as the following,

Ms. CHEN Mi

Secretariat of Chinese National Committee on Large Dams

Room 1266, IWHR Building A, A1 Fuxing Road, Beijing 100038, P.R. China

Tel: +86-10-68585310 Cell Phone: +86-18511977801 Fax: +86-10-68712208

Email: chincold-en@vip.126.com

Website: <https://www.chincold-smart.com/meetings/rcc2023/index.html>

Registration online:

<https://www.chincold-smart.com/meetings/rcc2023/createaccount-tianbaokeyi.html?i=0.24007252778697663>

9th International Symposium on Roller Compacted Concrete (RCC) Dams and Cemented
Material Dams (CMD)

Registration Form

4th -8th December, 2023, Guangzhou, China

Please complete and return before September 30th, 2023

Please type or write in legible letters

Last name _____ Given name _____

Prof. ☐ Dr. ☐ Mr. ☐ Ms. ☐

Affiliation _____

Mailing address _____

_____ City _____ Country _____ Zip code _____

Telephone _____ Mobile _____

E-mail _____

Country for visa application _____ Passport No. _____

For the following, please tick appropriate:

- ☐ I am planning to attend the Conference
- ☐ I am planning to submit a paper, paper title: _____
- ☐ I am willing to make a presentation, title: _____

Registration and Technical tours fee

Items	Price before 30 Oct. (USD)	Price after 30 Oct. (USD)	Number of persons	Total (USD)
Participant	600	650		
Accompanier	300	350		
Post study tour	Tour 1: Yangjiang Pumped Storage, Meizhou Pumped Storage Power Station			
	Tour 2: Bailai Project and Xiyin Project			
	Tour 3: Dongyang Project and Qianwei Project			
In total				
Accommodation	Room Type		Rooms	
	Check in date		Check out date	

Signature _____

Date _____