

INTERNATIONAL SYMPOSIUM ON ROLLER COMPACTED CONCRETE (RCC) DAMS— "Celebration for 30 years' application of RCC in Dams"









Sponsored By:

Chinese National Committee on Large Dams
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Technical Committee on RCC dams, CSHEE
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Guizhou Wujiang Hydropower Development Co. Ltd.
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Other sponsors to be invited

Organized By:

China Institute of Water Resources and Hydropower Research



Co-sponsored By:

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Other Corporations, Companies and Institutes to be invited





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INVITATION

RCC technology has been applied in dam construction for about 30 years in the world. In order to celebrate its application and follow those successful and fruitful Symposiums held in Beijing (China) in 1991, Santander (Spain) in 1995, Chengdu (China) in 1999 and Madrid (Spain) in 2003, the 5th INTERNATIONAL SYMPOSIUM ON ROLLER COMPACTED CONCRETE (RCC) DAMS will be held in Guiyang, China on November 2~4, 2007.

It is our honor for Chinese National Committee on Large Dams (CHINCOLD) and Spanish National Committee on Large Dams (SPANCOLD) to invite you to participate the symposium, which will contribute significantly to the knowledge and application of RCC technology.

Based on the definition of large dam by ICOLD, there were more than 22 RCC dams completed or under construction located in Spain and more than 90 RCC dams completed or under construction located in China by the end of 2005. Spain and China, two leader countries in RCC dams would like to make their efforts to prepare the 5th Symposium with the biggest ambitions, both in contents and in international scope. This Symposium will provide all attendants to discuss and exchange on RCC dams issues such as design, construction, operation, rehabilitation, maintenance and application.

A technical exhibition for RCC dams will be held during the Symposium. Multi-day technical tours will be arranged to Longtan RCC Gravity Dam (H=216.5m), Suofengying RCC Gravity Dam (H=122m) and etc. after the symposium.





TOPICS

- 1. BACKGROUND AND NEW TRENDS IN RCC DAMS.
 - Cases and Histories
 - Experiences and scenarios in different countries
- 2. HIGH RCC DAMS: GRAVITY AND ARCH DAMS.
 - Design
 - Materials
 - ◆ Thermal considerations
 - Mixture proportions
- 3. CONSTRUCTION OF RCC DAMS
 - Quality control
 - Equipments
 - Innovations
- 4. PERFORMANCE, MONITORING AND REHABILITATION OF RCC DAMS.
 - Performance
 - ♦ Monitoring and evaluation
 - Rehabilitation
- 5. RCC IN OTHER HYDRAULIC STRUCTURES AND UPGRADING
 - ◆ Coffer dams
 - Upgrading work
 - Others
- 6. CSG AND ITS APPLICATION
 - Design
 - Construction
 - Performance

LANGUAGE

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

PAPERS SUBMISSION

By the end of April 2007, the secretariat of the symposium has received 146 abstracts, 90 from China, and 56 from abroad. Paper acceptance has been sent to the authors. The full paper should be submitted to the Secretariat before the **15**th **July** 2007. The proceedings of the symposium based on the selected papers will be formally published before October 2007.



PAPER ABSTRACTS SELECTED

(Total 146 abstracts, 56 from abroad, and 90 from China)

Topic 1: BACKGROUND AND NEW TRENDS IN RCC DAMS (Total 21 abstracts accepted)

1 Canada: George Casagran

RCC Dams - Inclined Internal Drain Holes

2 Colombia: Luis Fernando Restrepo

A Fragility Curve Model for RCC Gravity Dams

3 Germany: Francisco Ortega S.

Design Concepts of Forwork for RCC Dams

4 Iran: Ebrahim Ghorbani

Feasibility study of high RCC gravity dam in Bakhtyari project

5 Iran: Naser Tarkeshdooz

Dam Alternative Study and Selection of Optimum One in Rudbar Lorestan Dam

6 Iran: Jafar Asgari Marnani

The Influence of Foundation Condition on the Desgin of Rudbar Lorestan RCC Dam

7 Iran: Meysam Fadaee

Estimation of Deformation Modulus at Rudbar Lorestan Dam Site

8 Libya: A.MAli

New alternative method for bonding RCC layers

9 Myanmar: U.Win Kyaw

An Overview of the Development of the YEYWA Hydropower Project, Myanmar

10 Pakistan: Dr. Izhar ul Haq Diamer

Bash Dam Project Construction Materials Investigations for RCC Dam

11 Pakistan: Zahid Majeed

Scenario of Roller Compacted Concrete (RCC) Dams in Pakistan

12 Spain: Juan Carlos De Cea

RCC Dams in Spain

13 Switzerland: Dr. Alberto M.Scuero

Taishir RCC Dam in Mongolia

14 UK: Dr. M.R.H.Dunstan

Overview of RCC Dams at the end of 2006

15 China: PAN Luosheng

Dam Temperature Control and Crack RCC Key Technologies

16 China: PAN Luosheng

Comparison on Shear Resistance Test Results of Laboratory and Field for Longtan RCC Dam

17 China: ZHAO Quansheng

The RCC double-curvature arch dam of Linhekou Hydropower Station

18 China: GAO peng

Analysis of Influence that the Content of Fines Exercises on Property of RCC in Xiangjiaba Hydropower Station

19 China: LIU Guangyan

The actual simulating design and new structure of RCC arch dam



Topic 2: HIGH RCC DAMS: GRAVITY AND ARCH DAMS (Total 85 abstracts accepted)

1 France: Bernard Bouyge

A High RCC Dam with Low Grade Aggregates

2 Germany: Dr. Chongjiang Du

Effect of Thermal Shock and Overcooling due to Overtopping of Cold River Water on Dam Concrete

3 Iran: Prof. Reza Attarnejad

The compare of discrete crack and smeared crack methods in gravity dams.

4 Iran: Hamid Reza Kazemi Esfeh

Detail Design and Construction Considerations in Jegin RCC Dam Project

5 Iran: Dr. M. E. Omran

Materials investigation and mix design program for the Jahgin RCC dam in Iran

6 Iran: R. Berry Dizaji

A Case Study of Deformation Measurments in Rudbar Lorestan RCC Dam (IRAN)

7 Iran: Maryam Ghaffari Dolama

Design consideration of Bedacli RCC dam

8 Iran: Hamidreza Araghian

Thermal Analysis of Badovli dam

Effect of Plasticizers on mix efficiency and cement content of the roller compacted concrete

9 Iran: Ebrahim Ghorbani

Numerical Simulation of Temperature Variations during the Construction of the Roller Compacted Concrete Dams

10 Iran: Fakhreddin Takhte Mina

Design of Hydraulic Structures of Bedavli RCC Dam

11 Iran: Reza Najafzadeh

Study of shear safety factor and lift joint treatment zonation in RCC dams

12 Mexico: Amanda Garduno

High rcc dams: gravity and arch dams design and Mixture proportions

13 Morocco: Ahmed Chraibi

RCC Dams Design and Construction in Morocco

14 Myanmar: U.Win Kyi

Trial mixes and full-scale trials for Yeywa RCC dam

15 Pakistan: Rashid Ali Khan

Gomal Zam Dam Multipurpose Project; A Virgin Experience of High RCC Dam in Pakistan

16 South Africa: Quentin Shaw

An Investigation into the Thermal Behaviour of Roller Compacted Concrete in Large Dams

17 Spain: Enrique Grosso Casalini

Exposure time between lifts in RCC dams- A new design method used at El Esparragal Spanish Dam



18 Switzerland: Dr. Martin Wieland

Proposed Nam Theun 1 RCC Arch-Gravity Dam in Laos

19 UK: Tom Reao Control of RCC Temperature

20 Vietnam: Pham Hong Giang
The RCC DINH BINH dam in Vietnam
21 Vietnam: Nguyen Quyet Thang

Design and preliminary full-scale trial for the RCC dam at Son La HEP, Vietnam

22 China: Prof. FANG Kunhe

Study on phosphorous slag using for mineral admixture of RCC

23 China: LONG Jiankai

Test and study on the effect of powder coating aggregate on the properties of RCC

24 China: JIANG Rongmei

Impacts on mechanical properties of full grade roller compacted concrete due to layer and size

25 China: CHEN Gaixin

Limestone powder, a new kind of supplementary mineral fines for RCC

26 China: JI Guojin

Tests for Air Content Improvement of Roller Compacted Concrete

27 China: HE Xiang-an

The Research and Application of the New type Admixture in the Large-volume Hydraulic Concrete

28 China: HE Jinrong

Application researches on high frost-resistant durability RCC in severe cold region

29 China: Dr. RUAN Yan

Effect of fly ash on dissolution characteristic of roller compacted concrete

30 China: Prof. LI Penghui

The actual simulating design and new structure of RCC arch dam

31 China: XIAO Kaitao

Study on the Influence of Limestone Powder on Roller Compacted Concrete Performance and Action Mechanism

32 China: SHAO Yong

Dynamic Analysis on Nong-ling RCC Gravity Dam by Considering the Effect of Infinite Foundation Radiation Damping

33 China: Prof. WEI Dazhi

Temperature Control for Longtan RCC Dam

34 China: Dr. CHEN Xiutong

3-D Nonlinear Finite Element Dynamic Analysis on Guandi RCC Gravity Dam

35 China: Prof. YANG Lingqiang

The appliance of 3-D composite layers element in RCC arch dam



Topic 3: CONSTRUCTION OF RCC DAMS (Total 30 abstracts accepted)

1 Australia: Brian Forbes

Kinta RCC dam construction experiences

2 Germany: Francisco Ortega S.

Method for the Selection of Plant & Equipment for the Efficient Construction of RCC DAMS

3 India: V.C.Shelke

Construction of the first RCC dams in India at Ghatghar

4 Iran: Dr. M. E.Omran

Design and Construction Aspects of RCC Works at Jahgin Project, Iran

5 Iran: R.Peyrovdin

Construction of the Jahgin dam-the first large RCC dam in Iran

6 Myanmar: U Aung Koe

Construction Planning, Plants and Equipment for Concrete Works at Yeywa HPP

7 Myanmar: U.Myint Zaw

Construction of the RCC dam at Yeywa HEP

8 Spanish: Rafael Ibáñez de Aldecoa Lorente Plans for the Construction of labrena? Dam in Spain

9 Switzerland: Dr. Marco Conrad

Innovative monitoring devices for an integral observation of thermal stress behavior of large RCC dams

10 China: Xianjin LONG

Construction of the RCC dam at Longtan

11 China: DAI Bo

Study and Practice of the Construction Technique of Longtan Dam under the Condition of High Temperature

12 China: Prof. LI Chunmin

Achievement and revelation from Site Experiment on Thicker Compacted Concrete Layers of RCC Dams for Huanghuazhai Hydropower Station

13 China: WU Xiaohong

RCC Dam Design and Construction of PengShui Hydropower Station

14 China: RUAN Guanghua

Study and Application of New Technology for RCC Sand Production

15 China: LI Lee

The Significance of Calibration of Shallow Nuclear Density Gauge

16 China: GAO Peng

Analysis of indicators and their influencing factors of RCC construction quality

17 China: ZHENG Zhiren

Construction in full section in RCC gravity dam of Suofengying hydropower station in GuiZhou

18 China: HUANG Houlong

Construction of Roller Compacted Concrete Dam on Suofengying Hydropower Station

19 China: CAI Shenghua

Study on RCC Construction Technology of Pengshui Hydropower Station

20 China: TIAN Yugong

Research and Application of LongShou Arch Dam RCC of Dry severely Cold Local

21 China: WU Xu

Rapid Construction Technology for Compacted Concrete for Longton Hydropower Dam Project



Topic 4: PERFORMANCE, MONITORING AND REHABILITATION OF RCC DAMS.

1 Spain: Mr. Raimundo LaFuente

Final phase of the cooling process of the Rialb RCC dam

2 Germany: Matthias Goltz

Distributed fibre optic temperature measurements -an competitive alternative for temperature monitoring in high RCC dams

3 China: YU Sanda

Analysis for Monitoring Results of the Third-stage RCC Coffer dam in the Three Gorges Project

Topic 5: RCC IN OTHER Hydraulic Structures AND UPGRADING

1 USA: Jim Zhou

Designing the Tallest RCC Dam Raise for San Vicente Dam in Southern California

2 China: WANG Ping

Study on the Reserved Bricks made with Roller Compacted Concrete technique for flood control

Topic 6: CSG AND ITS APPLICATION

China: Dr. XIONG Kun
 Study on seismic safety of hardfill dam
 China: Dr. PENG Yunfeng





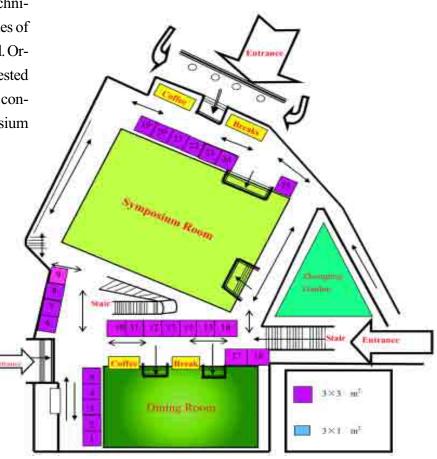
TECHNICAL EXHIBITION

During the symposium, a technical exhibition related to the themes of the Symposium will be organized. Organizations and companies interested in stands are kindly requested to contact the secretariat of the symposium for further details.

Contact: Ms. MA Zhongli Email: mazhongli@iwhr.com; chincold@iwhr.com;

Tel:+86-10-68435228,

Fax: +86-10-68712208



LOCATION

The 5th INTERNATIONAL SYMPO-SIUM ON ROLLER COMPACTED CONCRETE (RCC) DAMS will be held in Guizhou Huaxi Guest House, Guiyang, China on November 2~4, 2007.

Guiyang is the capital of Guizhou Province, located in the southwest of China. Guiyang is a Han Chinese-based multi-ethnic city where, more than 30 other minorities inhabited. It has a simple yet rich folk customs and habits and a splendid culture. Guizhou Huaxi Guest House is located in the southwest of Guiyang, 17km away from the center of the city, and 28km away from the Guiyang Airport.

GENERAL PROGRAM

Date	Time	Activity
Nov. 2 (Friday)	Full day	Registration
Nov. 3 (Saturday)	Morning	Opening Ceremony Invited Lectures
	Afternoon	Technical sessions
	Evening	Welcome Reception
Nov. 4 (Sunday)	Morning	Technical sessions
	Afternoon	Technical sessions
	Evening	Farewell Banquet
Nov. 5~8	Post study tour	



TECHNICAL TOURS

3 Post technical tours will be arranged after the symposium. Those who will take part in the tours will not only visit some high RCC dams completed, but also visit some RCC dams under construction.

Tour A: Guiyang-Longtan-Nanning, Nov. 5-8, 4 days, €480/person, Single room supplement €80/person

Day 1, Nov. 5 (Monday)

Depart Guiyang by bus (5 hours), arrive at Longtan Hydropower Plant. Lodging in the construction site of Longtan (H=216.5m).

Day 2, Nov. 6 (Tuesday)

Visit Longtan RCC Gravity Dam. Discussions and communications on the site. Lodging in the construction site of Longtan.

Day 3, Nov. 7 (Wednesday)

Leave Longtan to Nanning (the capital of Guangxi Autonomous Region) by bus (5 hours), Lodging in Nanning.

Day 4, Nov. 8 (Thursday)

Tour ends after breakfast.

Tour B: Guiyang-Xiuwen County-Silin-Guiyang, Nov. 5-9, 5 days, €640/person, Single room supplement €100/person

Day 1, Nov. 5 (Monday)

Depart Guiyang by bus (1.5 hours), arrive in Xiuwen County. Visit Suofengying RCC Gravity Dam (H=115.8m, completed). Return to Guiyang in the afternoon. Lodging in Guiyang.

Day 2, Nov. 6 (Tuesday)

Depart Guiyang by bus (8 hours) to Silin Hydropower Station. Overnightlodge in the Silin Hydropower station.

Day 3, Nov. 7 (Wednesday)

Visit Silin RCC Gravity Dam (H=117m, under construction), Lodging in the Silin Hydropower station.

Day 4, Nov. 8 (Thursday)

Return to Guiyang. Lodging in Guiyang.

Day 5, Nov. 9 (Friday)

Tour ends after breakfast.

Tour C: Guiyang-Kaiyang County-Silin-Guiyang, Nov. 5-9, 5 days, €640/ person, Single room supplement €100/ person

Day 1, Nov. 5 (Monday) 0

Depart Guiyang by bus (2.5 hours), arrive in Kaiyang County. Visit Dahuashui RCC Arch Dam (H=134.5m, completed). Return to Guiyang in the afternoon. Lodging in Guiyang.

Day 2, Nov. 6 (Tuesday)

Leave Guiyang by bus (8 hours) to Silin Hydropower Station. Overstay in the Silin Hydropower station.

Day 3, Nov. 7 (Wednesday)

Visit Silin RCC Gravity Dam (H=117m, under construction), Overstay in the Silin Hydropower station.

Day 4, Nov. 8 (Thursday)

Return to Guiyang. Lodging in Guiyang.

Day 5, Nov. 9 (Friday)

Tour ends after breakfast.





REGISTRATION

The Registration Form is enclosed in this bulletin. Participants are expected to complete the registration form and return it to secretariat of LOC as early as possible. Please be notified that registration can only be effective upon receiving both the Registration Form and the payment.

	Before Sep. 15 th ,2007	On or After Sep. 15th ,2007
Participant	€400	€450
Accompanying Person	€250	€280

The registration fee for the Symposium includes the documentation, simultaneous translation, working lunches, coffees during the breaks, and the participation in the various social activities foreseen. The registration fee for the accompanying persons includes the programmed excursions, the assistance at the sessions of the Opening and Closing of the Symposium, and the participation in the various social activities foreseen.

ACCOMMODATION

Participants will stay in Guizhou Huaxi Guest House, Guiyang, China.

Address: Linyin Road, Huaxi District, Guiyang City, China.

Tel: +86-851-5368000 Fax: +86-851-5368118 Web: www.huaxihotel.com.cn

Room Price in Huaxi Guest House

Category	Price per room per night
Singleroom	€45
Double room	€53

To make your hotel reservation, please complete the registration form and return it to the Secretariat before Sept. 30, 2007. The hotel booking will be made on the basis of first come, first served. No guarantee for reservations can be made after this date. If you want to share a double occupancy room, please indicate your roommate's name in the Registration Form.





PAYMENT

The Payment method should be marked in the registration Form and retuned to the secretariat of the symposium. Registration fee, hotel fee and tour fee should be in EURO Dollars and made payable by the one of following methods.

PAYMENT IN ADVANCE

Bank Transfer

Account No.: 000 380 1809 1014 Account Name: CICCST/RCC 2007

Swift Code: BKCHCNBJ

Bank Name: Bank of China Head Office, 1 Fuxingmennei Ave., Beijing 100818, China.

Bank charges are the responsibility of the payee and should be paid at source. To avoid any misunderstanding and for the protection of the participants' interests, a duplicate or photocopy of the remittance order from the bank should be sent with the **Registration Form** to the Secretariat. The name of the participant as well as details of payment should be clearly marked on the remittance order.

Bank Draft

Payment to: CICCST/RCC 2007

Mail to:

Mrs. Yulan Yuan

Chinese National Committee on Large Dams

20 Chegongzhuang West Road, P.O. Box 366, Beijing 100044, P.R. China

Tel: +86-10-68435228 Fax: +86-10-68712208 E-MAIL:chincold@iwhr.com

Credit Card

Only Master Card, Visa Card, American Express Card will be acceptable. Please fill the necessary information in the Credit Card payment and sign your name on the Registration Form. Fax or mail the Payment Form (B) to the Secretariat of LOC. Additional 4% bank charge will be charged in the case of payment by cards.

PAYMENT ON-SITE

Cash (in EURO or equivalent CNY) and credit card (Visa, Master Card and American Express) will be accepted.



OFFICIAL RECEIPT

All participants will receive a written confirmation from the LOC as soon as their registration form with correct payment have reached the account number mentioned above in form of fax, letter or E-mail. The confirmation letter must be shown on the registration desk upon his/her arrival. A formal receipt will be given at the on-site registration desk.

CANCELLATIONS

Cancellation must be made in writing to the LOC. The refund will be two months after the Symposium.

	By Sept. 30 2007	After Oct. 1 2007
Registration Fee	75% refund	50% refund
Tour Fee	90% refund	70% refund

CORRESPONDENCE ADDRESS

All registration forms, abstracts and correspondence concerning on the 5th international Symposium on RCC dams should be sent to Secretariat as the following,

Ms. Zhongli MA, Mrs. Yulan YUAN

Secretariat of RCC 2007

Chinese National Committee on Large Dams

20 West Chegongzhuang Road, P.O. Box 366, Beijing 100044, P.R. China

Tel: +86-10-68435228 Fax: +86-10-68712208

Email: chincold@iwhr.com;mazhongli@126.com Website: http://www.chincold.org.cn

