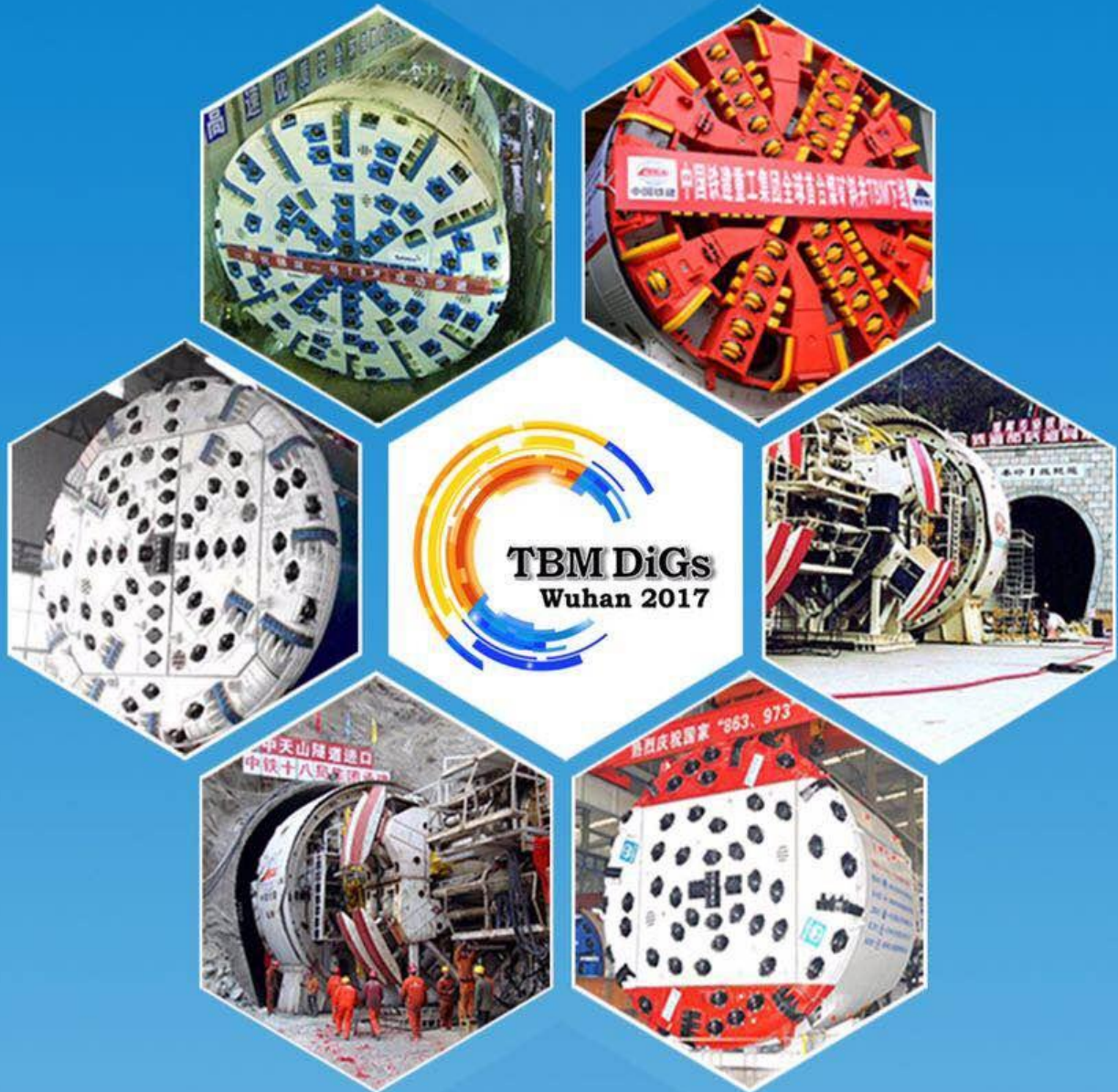


# 3<sup>rd</sup> International Conference on Tunnel Boring Machines in Difficult Grounds

## TBM DiGs 2017



20-22 November 2017  
Wuhan China



<http://www.tbmdigs2017.org/>

## Invitation

Following the success of the First International Conference on “Tunnel Boring Machines in Difficult Grounds” in Singapore in November 2015 and the ongoing second conference in this series in Istanbul Turkey in November 2016 (TBM DiGs 2016), the Third International Conference on “Tunnel Boring Machines in Difficult Grounds” (TBM DiGs 2017) will be held in Wuhan China in November 2017.

TBM DiGs is planned to be an international conference series to provide a specialized technological forum discussing and exchanging knowledge related to TBM works in difficult grounds. The conference plans to cover a wide range including characterization of difficult grounds, field observations and case studies, physical and laboratory tests, numerical modelling and techniques, treatments of difficult grounds, TBM design and installation, tunnel support design, monitoring and risk management. TBM DiGs 2017 is the third conference in this series.

TBM DiGs 2017 is jointly organized by the universities and the industrial companies, supported by the tunneling community worldwide, and interested in TBM tunneling technologies. The Organizers would like to welcome researchers and practitioners involved with TBM tunneling to the TBM DiGs 2017 conference to share, to cooperate, and to progress.



**Prof. Quansheng LIU**

Organizing Committee Chair



**Prof. Jian ZHAO**

Scientific Committee Chair

## Conference Themes

- Case studies of TBM in various difficult grounds and complex geology
- Characterization of difficult grounds for TBM tunnelling
- Laboratory testing and physical modelling of TBM excavation
- Numerical modelling of TBM interaction with grounds
- Ground treatment for TBM in difficult grounds, and application of foam
- Support design for TBM tunnels in variable and complex grounds
- Monitoring and back analysis for TBM tunnels in difficult grounds
- Machine and tool development for difficult and varying grounds
- Use of TBM in mines and for other special applications
- TBM selection, performance assessment and operation management
- Decision aids for tunnelling and risk management of TBM in difficult grounds

## International Scientific Committee

<b>Chair:</b>	<b>Jian ZHAO</b>	<b>Australia</b>
<b>Members:</b>	Karin BAPPLER	Germany
	Giovanni BARLA	Italy
	Nick BARTON	Norway
	Nuh BILGIN	Turkey
	Tarcisio CELESTINO	Brazil
	Zuyu CHEN	China
	Kairong HONG	China
	Seokwon JEON	Korea
	Jianbin LI	China
	Jianchun LI	China
	Shucui LI	China
	Wenhao LIANG	China
	Michael MOONEY	USA
	Priscilla NELSON	USA
	Qihu QIAN	China
	Jamal ROSTAMI	USA
Huiming TANG	China	
Kuroschi THURO	Germany	

Mengshu WANG	China
Zhijun WU	China
Huayong YANG	China

## Organizing Committee

<b>Chair:</b>	Quansheng LIU	Wuhan University
<b>Co-Chair:</b>	Qiuming GONG	Beijing University of Technology
	Junzhou HUO	Dalian University of Technology
	Yuyong JIAO	China University of Geosciences
	Jianbin LI	China Railway Engineering Equipment Group Co., Ltd.
	Jianchun LI	Southeast University
	Shucaí LI	Shandong University
	Qiang XUE	Institute of Rock and Soil Mechanics, CAS
	Qianbing ZHANG	Monash University
<b>Members:</b>	Weizhong CHEN	Institute of Rock and Soil Mechanics, CAS
	Xing HUANG	Institute of Rock and Soil Mechanics, CAS
	Yongshui KANG	Institute of Rock and Soil Mechanics, CAS
	Bin LIU	Shandong University
	Liujie JING	China Railway Engineering Equipment Group Co., Ltd.
	Qingchao SUN	Dalian University of Technology
	Xuhai TANG	Wuhan University
	Zhicheng TANG	China University of Geosciences
	Lijun YIN	Beijing University of Technology
	Wei ZHANG	Dalian University of Technology
	Xiaoping ZHANG	Wuhan University
	Zhenwei ZHAO	China Railway Engineering Equipment Group Co., Ltd.
	Hui ZHOU	Institute of Rock and Soil Mechanics, CAS
	Yuanguang ZHU	Institute of Rock and Soil Mechanics, CAS

## Full Papers Submission

Prospective authors are invited to submit abstracts and papers on various topics within the conference scheme. Please follow the rules and guidelines before submitting.

**Full paper:** The content of the papers submitted should be scientific, advanced, innovative, and must not have been published in any academic journals or reported in any prior academic meetings. The corresponding author of the selected paper will be invited to make a presentation in the 3<sup>rd</sup> TBM DiGs international conference, and the deserving manuscripts will be introduced to the **Tunnelling and Underground Space Technology**.

## Important Dates

• <b>Abstract Submission Deadline</b>	15 April 2017
• <b>Notification of Abstract Acceptance</b>	1 May 2017
• <b>Full Paper Submission Deadline</b>	15 June 2017
• <b>Notification of Full Paper Acceptance</b>	1 August 2017
• <b>Revised Full Paper Submission Deadline</b>	1 September 2017
• <b>Early Bird Registration Deadline</b>	15 September 2017

## Keynotes

<b>Speaker</b>	<b>Theme</b>
<b>Giovanni BARLA</b>	Contribution to the understanding of subsidence during TBM excavation of a twin tunnel in difficult ground
<b>Nick BARTON</b>	TBM in Difficult Rock Conditions
<b>Jianbin LI</b>	Developments of TBM Manufacture Technology in China
<b>Shuca LI</b>	Advance detection and prediction of unfavorable geological condition in TBM tunneling
<b>Quansheng LIU</b>	Behavior of rock fragmentation by TBM cutters under high confining pressure and guide to TBM tunneling in deep mixed formations
<b>Michael MOONEY</b>	Soft Ground TBM Tunnelling
<b>Jian ZHAO</b>	New Technologies Assisting Hard Rock Cutting in Tunnelling Machines

## Invited Speech

<b>Yongliang CHENG</b>	China Railway Construction Heavy Industry Co., LTD.
<b>Kairong HONG</b>	China Railway Tunnel Group
<b>Junzhou HUO</b>	Dalian University of Technology
<b>Dujuan WANG</b>	China Railway Engineering Equipment Group Co., Ltd.
<b>Yongzhi TANG</b>	Huainan Mining Industry (Group) Co., LTD.
<b>Xudong ZHANG</b>	China Railway Construction Industry Co., LTD.

## Tentative Conference Program

	20 Nov 2017	21 Nov 2017	22 Nov 2017	23 Nov 2017
Morning		<b>Opening &amp;Presentations</b>	<b>Presentations</b>	<b>Technical visits</b>
Afternoon	<b>Registration</b>	<b>Presentations</b>	<b>Presentations &amp;Closing</b>	
Evening		<b>Banquet</b>	<b>Dinner</b>	

## Registration

Registration type	Early Bird Rate (Before 15 September, 2017)	Regular Rate	Including
Full Registration	¥3300RMB \$565USD	¥600RMB \$600USD	Reception, lunch/coffee, proceedings, souvenir
Student Registration	¥1500RMB \$300USD	¥1800RMB \$300USD	Reception, lunch/coffee, proceedings, souvenir

The cost of transportation, hotel, banquet (¥300RMB or \$50USD) and visits must be self-funded. The organizing committee will help all participants to book the hotel accommodation.

## Exhibitors and Sponsors

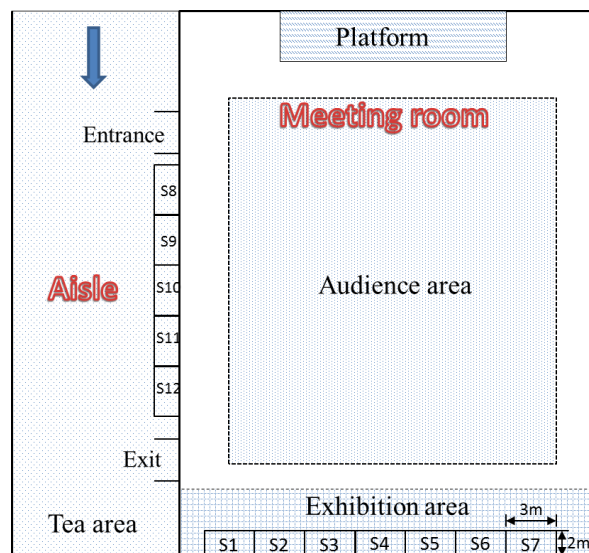
An exhibition will be held in conjunction with the conference, to provide opportunities for TBM manufacturers, material and equipment suppliers, engineering consultants, tunneling contractors and R&D institutes to showcase their products and services. Sponsorships of the conference in various forms are welcome and appreciated. Interested exhibitors and sponsors are advised to contact the conference organizer for details. Please contact Dr. Xuewei LIU on [liuxw@whrsm.ac.cn](mailto:liuxw@whrsm.ac.cn) using subject 'Interested exhibitors for TBM DiGs 2017'. TEL: +86 13971674898.

### Exhibition

3m×2m stand in exhibition area (1 panel, 1 desk, 2 chairs, electricity). We have only 14 limited stands. Complimentary standard delegate registration for two people.

**\$ 4,000 USD or**

**¥27,000 RMB**



### Advertising

- ◆ Full Page Colour Advertisement in Conference Final Program (H210 x W150 mm)
- ◆ Half Page Colour Advertisement in Conference Final Program (H105 x W150 mm)
- ◆ Company Brochure and Promotional Material in Bags

**\$ 2,500 USD or**

**¥17,000 RMB**

**\$ 1,500 USD or**

**¥10,000 RMB**

**\$ 1,500 USD or**

**¥10,000 RMB**

## Visa & Invitation letter

Attendees from most countries will be required to obtain a visa to enter the People's Republic of China; Attendees can apply for a Chinese visa through a travel agency or directly at the nearest Chinese embassy.

Once you have paid for the conference registration, we will issue you an official invitation letter (also called Authorized Notification Form for Visa Application) to assist you to obtain a visa to China. The invitation letter will state the conference name, the duration of the conference, your detailed correspondence that will be extracted from your enquiry. Please contact Dr. Xuewei LIU on [liuxw@whrsm.ac.cn](mailto:liuxw@whrsm.ac.cn) using subject 'Invitation letter for TBM DiGs 2017'.

## Technical Visits

### Rectangular TBM construction site

Rectangular TBM (RTBM) construction site is located in China Railway Engineering Equipment Group Co., Ltd. (CREG), Zhengzhou, China. It takes 2.5 hours by train from Wuhan. RTBM, developed and manufactured by CREG, is the first time to be used to construct underground parking in China. RTBM cuts a square face rather than a circular one by conventional TBMs. Moreover, as a trenchless way to excavate short-distance tunnels at shallow depths, its space utilization has increased by 20% in comparison to that of circular TBMs.



## Conference Venue

The TBM DiGs 2017 International Conference will be held in Chutian International Hotel, Wuhan, China.

**Address:** Wuchang Eastlake Road NO.181, Wuhan, Hubei, P.R.C.

**Tel:** +86-4006998818.

More information can visit <http://www.chutianhotel-wuhan.com/>

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