

ITA Activity Report 2019



The information supplied will be published in the ITA Activity Report magazine and distributed at WTC 2019 in Naples and with the June/July issue of Tunnelling Journal. Please complete the form below (please type everything in upper and lowercase – no CAPITALS) and return it to secretariat@ita-aites.org (or [dropbox](#)) no later than 28 February 2019. See example below :

Name of Country: Brazil

Name of Association: Brazilian Tunnelling Committee (CBT)

Type of Structure: CBT is a committee of the Brazilian Society for Soil Mechanics and Geotechnical Engineering (ABMS). It is an open society based on membership

Number of Members: 287 Individual Affiliate Members and 17 Corporate Affiliate Members.

Association logo:



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Association Activities during 2019 and to date

Events:

January - Beggining of the new board of directors

e-form online survey: 'Tunnel Works in 2018' and contribute to the country's tunnel engineering

February 02nd Lecture Geotechnical Baseline Report (GBR)- 70 participants – São Paulo.

February 21 to 22rd · FloripaTUN - International Tunnel Seminar – 150 participants - Florianópolis, Santa Catarina.

February 23 to 24th ITA Executive Council meeting – Florianópolis, Santa Catarina.

March 12th · CBT participates in a round table at the São Paulo State University (FEI) addressing cases of works and academic area

March 20th CBT Young Members organizes guided tour of the Sabesp (São Paulo Water Supply Department) tunnel – 20 participants.

April 10th WTC2019 Pre-Congress Meeting - São Paulo.

May 03 to 09th WTC 2019 and ITA General Assembly - Naples – Italy.

May 21 to 23th CBT-YM promotes course "Tunnels and Underground Works" during the Mauá University Week of Innovation, Leadership and Entrepreneurship – 50 participants.

June 13th Talk: "The insertion of tunnels as a planning element for major infrastructure works", Dnit planning week - Brasília

June 11th Echoes of WTC 2019 – Local event to bring some impressions from WTC for the local community that did not join WTC. – 120 participants - São Paulo.

July 24th : Lecture about the Tietê Project, handed by Geologist Bruno Rodrigues Leite – 50 participants - São Paulo.

August 02 to 03rd Practical Aspects of the Construction of Conventional (NATM) and Mechanized Tunnels (TBM) - Auditorium Villa Lobos Office – 150 participants - São Paulo.

August 15 to 16th · Concrete Show participation - "Waterproofing Solutions for Underground Works" ABMS corporate associates - CBT (Metro SP- Soprema- MC Bauchimie), invited geologist Bruno Leite, from Telar- 20 participants - São Paulo Expo

October 15th Talk: Innovative solution for the construction of vertical wells, by Eng. Edson Peev from Herrenknecht AG – 50 participants - São Paulo.

October 17th CBT participate in Geotechnical Seminar from Brazilian South Region. Talk: Trends in underground excavations influenced by industry 4.0, by Eng. Alex Nowak. – 450 participants - Joinville, Santa Catarina.

November 17th CBT participate in Geotechnical Seminar from Brazilian Northeast Region. Talk: Rock Tunnels, by Eng. Felipe Gobbi – 500 participants - Recife, Pernambuco.

December 04th Tunnel Day Small Diameters, Big Solutions. One day conference in São Paulo. 152 participants.

Publication:

Journal: Soils & Rocks (www.soilsandrocks.com.br), in English, published by the Brazilian Society for Soil Mechanics and Geotechnical Engineering (ABMS), the Brazilian Association for Engineering Geology and the Environment (ABGE) and the Portuguese Geotechnical Society (SPG). Three issues are released per year. As a sample, the following papers were published in 2019:

Volume 42, N. 1, January-April 2019 - http://www.soilsandrocks.com.br/soils-androcks/SR42-1_Cover_Contents.pdf

Volume 42, N. 2, May-August 2019 - http://www.soilsandrocks.com.br/soils-androcks/SR42-2_Cover_Contents.pdf

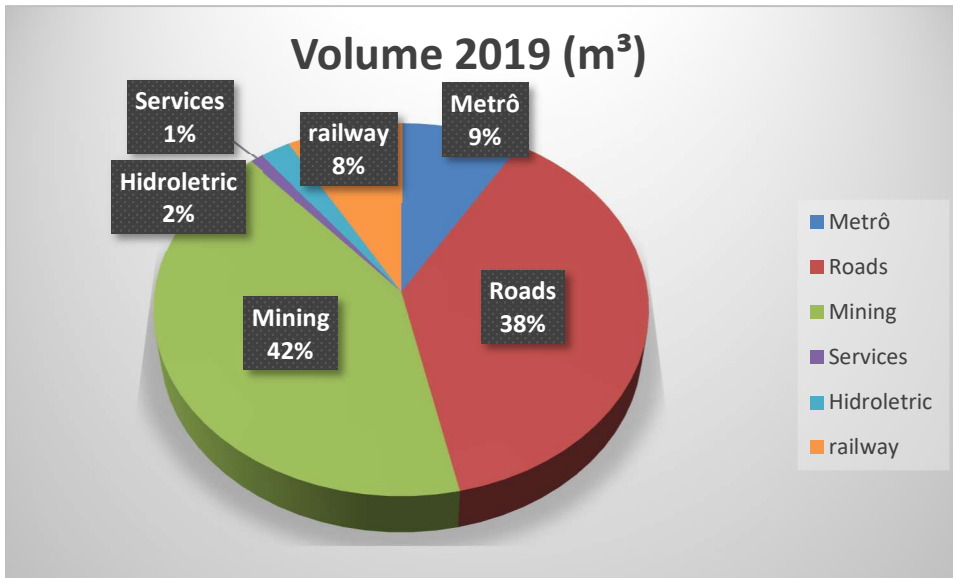
Volume 42, N. 3, September-December 2019 - http://www.soilsandrocks.com.br/soils-androcks/SR42-3_Cover_Contents.pdf

Press and social media: 101 published articles on CBT website; 33 mailing on CBT@News; 02 podcasts and 216 posts on facebook, Instagram and LinkedIn.

Current Tunnelling Activities

The estimated total volume of tunnels excavated in Brazil is 1,1 mi m³ in 48km of tunnels. It includes roads, railways, hidroelectric facilities, mining and services. The mining and services tunnels length and volume are estimated based on previous data and informal report about 2019 productivity, because we did not get the real table from the mines.

The distribution, in percentage is:



Future Tunnelling Activities

Metro de Fortaleza is one of the projects expected for 2019.

São Paulo Metrô, Lines 2 and 6.

Road ring around Florianópolis (was expected to 2019, postponed to 2020);

New concessions around the country bring some provisions for new tunnels in SP, RJ, RS, but probably later than 2020.

Statistics

1. Length: total 48.116 km (32% mechanized and 68% conventional)

2. Volume: total 1.021.000 m³ (1,1% mechanized and 98,9% conventional)

3. Amount (USD or EUR) of tunnelling / underground space facilities awarded in 2019: estimated USD 200 mi USD

Education on Tunnelling in the Country

No undergraduate courses in Brazil that focus on tunnel. Yet. Some universities have one or two disciplines related to underground construction, like Mackenzie, USP, UNB.

On post graduate courses our references in Brazil are Brasilia Federal University and São Paulo Federal University, São Carlos school. Efforts are being done in order to spread the knowledge in tunnelling, by CBT mainly.

Completed By

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Should we have any questions or need any additional information we will contact you

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