Structural use of fibre reinforced concrete in precast segments

6 April 2018

Paris – FNTP, 3 rue de Berry

Objective: To give a detailed view of the different issues related to the use of FRC for precast segments and to provide methods and tools for their design and construction.

Session 1: Main principles and design methods

08.45-09.00: Welcome and opening : AFTES/ITACET/BEKAERT MACCAFERRI UNDERGROUND SOLUTIONS
09.00-09.45: Global context and presentation of the main issues (P. Guedon – AFTES GT 38)
09.45-10.30: Lessons from 20 years of application (E. Chiriotti - WG2)

10.30-11.00: Coffee Break

11.00-12.15: Design procedure for precast fibre reinforced concrete (Prof. A. Meda)
12.15-12.45: Concrete mix formation for FRC (D. Rogat – Vicat)
12.45-13.00: Questions and Answers – Design issues

13.00-14.00: Lunch

Session 2: Cases studies and durability issues

14.00-14.30: Case study 1 : Example of the design of FRC segments (V. Nasri - AECOM)
14.30-15.00: Case study 2 : Application in the Doha metro (F. Renault - Vinci)
15.00-15.30: Case study 3 : Paris metro ligne 14 (T. Lockhart & G. Gauguelin - Bouygues)

15.30-16.00: Coffee Break

16.00-16.30: Case study 4 : FRC lessons learnt from experience (Prof C. Eddie – CECL)
16.30-17.00: Case study 5 : FRC precast segment production and quality control (Prof C. Eddie – CECL)
17.00-17.30: Case study 6 : Performance criteria, testing and control: example of the NICE tramway (B. De Rivaz – Bekaert Maccaferri)
17.30-18.00: Questions and answers - perspectives