



QUESTION TIME

A PRESENTATION ON

INNOVATIONS IN CONCRETE INDUSTRY

By **Dil Tirimanna (MSc, MBA)**



ABSTRACT

In the past 20 years, we have undertaken different innovative projects in the construction industry in The Netherlands and other European countries. Here, I have chosen three topics where I will elaborate about the possibilities that lay for further development and application.

- 1. UHPC (Ultra High Performance Concrete).** Concrete Technology in The Netherlands has developed rapidly in the past 20 years starting from C30 quality concrete to C65 High strength concrete to C175 Ultra high performance concrete. C40-C60 has become the standard used concrete and we are moving towards C90 for standard bridges and other structures. Especially, the prefabrication industry in the Netherlands is highly developed using High strength concretes and self compacting concretes. Recyclable concrete is the step explored currently with different European research projects.
- 2. Printing of Concrete Bridges.** Printing of concrete structures is also being explored by many groups and we have done research in designing and printing a heavy traffic bridge by doing different load tests on printed bridge beams. As labour has become expensive in Europe and finding skilled labourers is difficult, prefabrication by printing could be a possible solution.
- 3. Floating Concrete Structures.** The Dutch have specialised in floating structures such as boat houses in the Amsterdam canals since the 1900. We are trying to take this a step further by building large buildings on the water as space in large cities is scarce.

By Dil Tirimanna (MSc, MBA)

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Studied Civil Engineering at Delft University of Technology, The Netherlands in 1995; specializing in concrete structures and floating concrete structures. Further an MBA degree in 2016 from UK. Currently working on different topics such as High Strength Concrete, Ultra High Performance Concrete and Recycled Concrete.



QT Event will be followed by
'Hopper Night and Fellowship'
at the IESL Lounge.



Date - July 28 Tuesday
Time - 5.00 p.m onwards (GMT+5.30)
Platform via ZOOM
Meeting ID: 890 5929 6922
Password: 577837

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<https://us02web.zoom.us/j/89059296922?pwd=dVICSSiONW1PYnlGTW9jV1dmU09oUT09>