## NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Civil Engineering - NOC: Advanced Topics in the Science and Technology of Concrete
Subject Co-ordinator - Prof. Manu Santhanam, Dr. Ravindra Gettu
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Calcium sulfoaluminate cement-based binder
Lecture 2 - Micro-structural characterisation of cementitious materials - Part 1
Lecture 3 - Micro-structural characterisation of cementitious materials - Part 2
Lecture 4 - Micro-structural characterisation of cementitious materials - Part 3
Lecture 5 - Interview with Prof Karen Scrivener
Lecture 6 - Performance of Fiber reinforced materials
Lecture 7 - Ultra-High performance concrete (UHPC)
Lecture 8 - Ultra-High performance concrete (UHPC)
Lecture 9 - Closed-Loop testing - Part 1
Lecture 10 - Closed-Loop testing - Part 2
Lecture 11 - Uni-axial tensile test of textile reinforced concrete (TRC) panel
Lecture 12 - Fiber reinforced concrete
Lecture 13 - Strain softening response of concrete Under uniaxial compression
Lecture 14 - Tension test of 7-wire steel strand
Lecture 15 - Bond Test of Strand-concrete System
Lecture 16 - Interview with Prof. S. P. Shah
Lecture 17 - Introduction to concrete durability
Lecture 18 - Sulphate attack of concrete
Lecture 19 - Development and performance approach for durability and service life production for structures
Lecture 20 - Colorimetric test to assess carbonation resistance in concrete
Lecture 21 - Experiments on durability index
Lecture 22 - Prof. Mark Alexander
Lecture 23 - Chloride induced corrosion and service life of reinforced concrete structures - Part 1
Lecture 24 - Chloride induced corrosion and service life of reinforced concrete structures - Part 2
Lecture 25 - Corrosion control and cathodic protection of steel reinforcement
Lecture 26 - LCA of cement and concrete - Part 1
Lecture 27 - LCA of cement and concrete - Part 2
Lecture 28 - 8. Chloride threshold testing using linear polarization resistance (LPR) and electrochemical imp
Lecture 29 - Interview with Prof George Sergi
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