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

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NPTEL Video Course - Ocean Engineering - NOC: Structural Health Monitoring
Subject Co-ordinator - Dr. Srinivasan Chandrasekaran
Co-ordinating Institute - IIT - Madras
                                        MP3 Audio Lectures - Available / Unavailable
Sub-Titles - Available / Unavailable
Lecture 1 - Introduction to SHM - Part 1
Lecture 2 - Introduction to SHM - Part 2
Lecture 3 - Necessity of SHM - Part 1
Lecture 4 - Necessity of SHM - Part 2
Lecture 5 - Components of SHM - Part 1
Lecture 6 - Components of SHM - Part 2
Lecture 7 - Challenges in SHM - Part 1
Lecture 8 - Challenges in SHM - Part 2
Lecture 9 - Advantages of SHM - Part 1
Lecture 10 - Advantages of SHM - Part 2
Lecture 11 - Components of SHM process - Part 1
Lecture 12 - Components of SHM process - Part 2
Lecture 13 - SHM issues applied to concrete structures - Part 1
Lecture 14 - SHM issues applied to concrete structures - Part 2
Lecture 15 - Level of uncertainties in SHM process - Part 1
Lecture 16 - Level of uncertainties in SHM process - Part 2
Lecture 17 - Short term and long term Structural Health Monitoring (SHM) - Part 1
Lecture 18 - Short term and long term Structural Health Monitoring (SHM) - Part 2
Lecture 19 - Local and Global Health Monitoring
Lecture 20 - Data Evaluation and Assessment
Lecture 21 - Estimation of Structural Health i.e. Structural Health Monitoring (SHM)
Lecture 22 - Estimation of Structural Health using Static SHM
Lecture 23 - Structural Health Monitoring (SHM) Planning and Management - Part 1
Lecture 24 - Structural Health Monitoring (SHM) Planning and Management - Part 2
Lecture 25 - Vibration based health monitoring scheme - Part 1
Lecture 26 - Vibration based health monitoring scheme - Part 2
Lecture 27 - Structural Health monitoring methods
Lecture 28 - Structural Health monitoring methods
Lecture 29 - Damage identification using lumped mass and Element modal stiffness - Part 1
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Lecture 30 - Damage identification using lumped mass and Element modal stiffness - Part 2
Lecture 31 - Damage identification by visual Inspection method - Part 1
Lecture 32 - Damage identification by visual Inspection method - Part 2
Lecture 33 - Various vibration based method in SHM-1 - Part 1
Lecture 34 - Various vibration based method in SHM-1 - Part 2
Lecture 35 - Comparison of Damage Detection Method - II
Lecture 36 - Damage Detection Method - II
Lecture 37 - Structural Health Monitoring (SHM) and Statistical Pattern Recognition (SPR)
Lecture 38 - Long term SHM (Structural Health Monitoring)
Lecture 39 - Non-Destructive evaluation - I - Part 1
Lecture 40 - Non-Destructive evaluation - I - Part 2
Lecture 41 - Non-Destructive evaluation - II
Lecture 42 - Non-Destructive evaluation - III
Lecture 43 - Crack detection in Composites
Lecture 44 - Various sensor technologies - Part 1
Lecture 45 - Various sensor technologies - Part 2
Lecture 46 - Fibre Optic sensors - Part 1
Lecture 47 - Fibre Optic sensors - Part 2
Lecture 48 - Smart sensing for SHM - Part 1
Lecture 49 - Smart sensing for SHM - Part 2
Lecture 50 - Sensing requirements in special structures
Lecture 51 - The sensor requirements and Data acquisition - Part 1
Lecture 52 - The sensor requirements and Data acquisition - Part 2
Lecture 53 - Acquisition system and Networking for SHM - Part 1
Lecture 54 - Acquisition system and Networking for SHM - Part 2
Lecture 55 - Wireless Sensor Networking (WSN) - Part 1
Lecture 56 - Wireless Sensor Networking (WSN) - Part 2
Lecture 57 - SHM layout design of offshore structures
Lecture 58 - Vibration Based damage detection
Lecture 59 - SHM design - Part 1
Lecture 60 - SHM design - Part 2
Lecture 61 - Artificial Intelligence (AI) in structural health monitoring (SHM)
Lecture 62 - Plausibility of errors in SHM
Lecture 63 - Artificial Neural Network (ANN) in the SHM process.
Lecture 64 - Damage detection
Lecture 65 - Application of SHM in Infrastructure Engieering - Part 1
Lecture 66 - Application of SHM in Infrastructure Engieering - Part 2
Lecture 67 - Design of sensor layout for SHM - Part 1
Lecture 68 - Design of sensor layout for SHM - Part 2
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Lecture 69 - SHM applied to BSLRP - Part 1
Lecture 70 - SHM applied to BSLRP - Part 2
Lecture 71 - SHM design for BSLRP - Part 1
Lecture 72 - SHM design for BSLRP - Part 2
Lecture 73 - SHM design-2 for BSLRP - Part 1
Lecture 74 - SHM design-2 for BSLRP - Part 2
Lecture 75 - SHM design by experimental investigations for lab scale model of TLP-I - Part 1
Lecture 76 - SHM design by experimental investigations for lab scale model of TLP-I - Part 2
Lecture 77 - SHM design by experimental investigations for lab scale model of TLP-II - Part 1
Lecture 78 - SHM design by experimental investigations for lab scale model of TLP-II - Part 2
Lecture 79 - Structural Health Monitoring (SHM) of lab scale model of TLP-III - Part 1
Lecture 80 - Structural Health Monitoring (SHM) of lab scale model of TLP-III - Part 2
Lecture 81 - Structural Health Monitoring (SHM) of lab scale model of TLP-IV - Part 1
Lecture 82 - Structural Health Monitoring (SHM) of lab scale model of TLP-IV - Part 2
Lecture 83 - Future Scope of SHM - Part 1
Lecture 84 - Future Scope of SHM - Part 2
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