NPTEL : NOC:Phase Field Modelling: The Materials Science, Mathematics and Computational Aspects (Metallurgy and Material Science)

Co-ordinators : Dr. M.P. Gururajan

NPTEL : NOC:Dealing with Materials Data: Collection, Analysis and Interpretation (Metallurgy and Material Science)

Co-ordinators : Dr. M.P. Gururajan

NPTEL : NOC:Aqueous Corrosion and its Control (Metallurgy and Material Science)

Co-ordinators : Prof. V. S. Raja

NPTEL : NOC:Cathodic Protection Engineering (Metallurgy and Material Science)

Co-ordinators : Prof. V.S. Raja

NPTEL : NOC:Introduction to Materials Science and Engineering (Metallurgy and Material Science)

Co-ordinators : Prof. Rajesh Prasad

NPTEL : NOC:Crystals, Symmetry and Tensors (Metallurgy and Material Science)

Co-ordinators : Prof. Rajesh Prasad

Lecture 32 (10b)

Lecture 33 (11a)

Lecture 34 (11b)

Lecture 35 (11c)

Lecture 36 (11d)

Lecture 37 (12a)

Lecture 38 (12b)

Lecture 39 (13a)

Lecture 40 (13b)

Lecture 41 (14a)

Lecture 42 (14b)

Lecture 43 (15a)

Lecture 44 (15b)

Lecture 45 (15c)

Lecture 46 (16a)

Lecture 47 (16b)

Lecture 48 (17)

Lecture 49 (18a)

Lecture 50 (18b)

Lecture 51 (18c)

Lecture 52 (18d)

Lecture 53 (19a)

Lecture 54 (19b)

Lecture 55 (19c)

Lecture 56 (19d)

Lecture 57 (20a)

Lecture 58 (20b)

Lecture 59 (20c)

Lecture 60 (20d)

Lecture 61 (20e)

Lecture 62 (21a)

Lecture 63 (21b)

Lecture 64 (21c)

NPTEL : NOC:Corrosion-Environmental Degradation-Surface Engineering (Metallurgy and Material Science)

Co-ordinators : Prof. (Hag) Harish Hirani

NPTEL : NOC:Introduction to Crystal Elasticity and Crystal Plasticity (Metallurgy and Material Science)

Co-ordinators : Prof. Swarup bag

NPTEL : Advanced Characterization Techniques (Metallurgy and Material Science)

Co-ordinators : Dr. Krishanu Biswas, Prof.N.P.Gurao

Lecture 32 - Advanced Characterization Techniques

Lecture 33 - Advanced Characterization Techniques

NPTEL : Electroceramics (Metallurgy and Material Science)

Co-ordinators : Dr. Ashish Garg

NPTEL : Fuels Refractory and Furnaces (Metallurgy and Material Science)

Co-ordinators : Prof. Satish Ch. Koria

NPTEL : Introduction to Biomaterials (Metallurgy and Material Science)

Co-ordinators : Dr. Kantesh Balani, Dr. Birkamjit Basu

NPTEL : Materials and Energy balance in Metallurgical Processes (Metallurgy and Material Science)

Co-ordinators : Prof. Satish Ch. Koria

NPTEL : Optoelectronic Materials and Devices (Metallurgy and Material Science)

Co-ordinators : Prof. Deepak Gupta, Prof. Monica Katiyar

NPTEL : Steel Making (Metallurgy and Material Science)

Co-ordinators : Prof. Satish Ch. Koria, Prof. Dipak Mazumdar

NPTEL : Structure of Materials (Metallurgy and Material Science)

Co-ordinators : Dr. Anandh Subramaniam

NPTEL : Environmental Degradation of Materials (Metallurgy and Material Science)

Co-ordinators : Dr. Kallol Mondal

NPTEL : NOC:Phase Diagrams in Materials Science and Engineering (Metallurgy and Material Science)

Co-ordinators : Dr. Krishanu Biswas

NPTEL : NOC:Fundamentals of Material Processing - I (Metallurgy and Material Science)

Co-ordinators : Prof. Shashank Shekhar

NPTEL : NOC:Heat Treatment and Surface Hardening - I (Metallurgy and Material Science)

Co-ordinators : Dr. Kallol Mondal, Prof. Sandeep Sangal

NPTEL : NOC:Fundamentals of Material Processing - Part 2 (Metallurgy and Material Science)

Co-ordinators : Prof. Shashank Shekhar, Prof. Jitesh J Thakkar

NPTEL : NOC:Nature and Properties of Materials - An Introductory Course (Metallurgy and Material Science)

Co-ordinators : Dr. Ashish Garg

NPTEL : NOC:Defects in Crystalline Solids - Part I (Metallurgy and Material Science)

Co-ordinators : Prof. Shashank Shekhar

NPTEL : NOC:Corrosion - Part I (Metallurgy and Material Science)

Co-ordinators : Dr. Kallol Mondal

NPTEL : NOC:Solar Photovoltaics: Principles, Technologies and Material (Metallurgy and Material Science)

Co-ordinators : Dr. Ashish Garg

NPTEL : NOC:Defects in Crystalline Solids - Part II (Metallurgy and Material Science)

Co-ordinators : Prof. Shashank Shekhar

NPTEL : NOC:Corrosion - Part II (Metallurgy and Material Science)

Co-ordinators : Dr. Kallol Mondal

NPTEL : NOC:Fundamentals and Applications of Dielectric Ceramics (Metallurgy and Material Science)

Co-ordinators : Dr. Ashish Garg

NPTEL : NOC:Properties of Materials (Nature and Properties of Materials-III) (Metallurgy and Material Science)

Co-ordinators : Dr. Ashish Garg

NPTEL : NOC:Diffusion in Multicomponent Solids (Metallurgy and Material Science)

Co-ordinators : Prof. Kaustubh Kulkarni

NPTEL : NOC:Corrosion Failures and Analysis (Metallurgy and Material Science)

Co-ordinators : Prof. Kallol Mondal

NPTEL : NOC:Nanomaterials and their Properties (Metallurgy and Material Science)

Co-ordinators : Prof. Krishanu Biswas

NPTEL : NOC:Mechanical Behaviour of Materials - Part I (Metallurgy and Material Science)

Co-ordinators : Prof. Shashank Shekhar, Prof. Sudhanshu Shekhar Singh

NPTEL : NOC:Mechanical Behaviour of Materials - Part II (Metallurgy and Material Science)

Co-ordinators : Prof. Sudhanshu Shekhar Singh, Prof. Shashank Shekhar

NPTEL : NOC:Electronic Properties of the Materials: Computational Approach (Metallurgy and Material Science)

Co-ordinators : Prof. Somnath Bhowmick

NPTEL : NOC:Corrosion Protection Methods (Metallurgy and Material Science)

Co-ordinators : Prof. Kallol Mondal

NPTEL : Advanced ceramics for strategic applications (Metallurgy and Material Science)

Co-ordinators : Prof. H.S. Maiti

NPTEL : Non-ferrous Extractive Metallurgy (Metallurgy and Material Science)

Co-ordinators : Prof. H.S. Ray, Mr. L. Pugazhenthy

NPTEL : Principles of Physical Metallurgy (Metallurgy and Material Science)

Co-ordinators : Prof. R.N. Ghosh

NPTEL : Processing of Semiconducting Materials (Metallurgy and Material Science)

Co-ordinators : Dr. Pallab Banerji

NPTEL : Science and Technology of Polymers (Metallurgy and Material Science)

Co-ordinators : Prof. B. Adhikari

NPTEL : Advanced Materials and Processes (Metallurgy and Material Science)

Co-ordinators : Prof. B.S. Murty

NPTEL : NOC:Principles of Polymer Synthesis (Metallurgy and Material Science)

Co-ordinators : Prof. Rajat K Das

NPTEL : NOC:Advanced Materials and Processes (Metallurgy and Material Science)

Co-ordinators : Prof. Jayanta Das

NPTEL : NOC:Surface Engineering for Corrosion and Wear Resistance Application (Metallurgy and Material Science)

Co-ordinators : Prof. Jyotsna Dutta Majumder, Prof. I. Manna

NPTEL : NOC:Ironmaking and Steelmaking (Metallurgy and Material Science)

Co-ordinators : Prof. Gour Gopal Roy

NPTEL : NOC:Non-Metallic Materials (Metallurgy and Material Science)

Co-ordinators : Prof. Subhasish Basu Majumder

NPTEL : NOC:Scanning Electron-Ion-Probe Microscopy in Materials Characterization (Metallurgy and Material Science)

Co-ordinators : Prof. Debabrata Pradhan

NPTEL : NOC:Techniques of Material Characterization (Metallurgy and Material Science)

Co-ordinators : Prof. Shibayan Roy

NPTEL : NOC:Electrochemical Energy Storage (Metallurgy and Material Science)

Co-ordinators : Prof. Subhasish Basu Majumder

NPTEL : NOC:Texture in Materials (Metallurgy and Material Science)

Co-ordinators : Prof. Somjeet Biswas

NPTEL : NOC:Bulk Material Transport and Handling Systems (Metallurgy and Material Science)

Co-ordinators : Prof. Khanindra Pathak

NPTEL : NOC:Environmental Degradation and Surface Engineering (Metallurgy and Material Science)

Co-ordinators : Prof. Indranil Manna, Prof. Jyotsna Dutta Majumdar

NPTEL : NOC:Fracture, Fatigue and Failure of Materials (Metallurgy and Material Science)

Co-ordinators : Prof. Indrani Sen

NPTEL : NOC:Mine Closure and Sustainability Planning (Metallurgy and Material Science)

Co-ordinators : Prof. Khanindra Pathak

NPTEL : NOC:Fundamentals of Composite and Cellular Materials (Metallurgy and Material Science)

Co-ordinators : Dr. Siddhartha Roy, Dr. Tapas Laha

NPTEL : Advanced Metallurgical Thermodynamics (Metallurgy and Material Science)

Co-ordinators : Prof. B.S. Murty

NPTEL : Materials Characterization (Metallurgy and Material Science)

Co-ordinators : Dr. S. Sankaran

NPTEL : Physics of Materials (Metallurgy and Material Science)

Co-ordinators : Dr. Prathap Haridoss

NPTEL : Electronic materials, devices, and fabrication (Metallurgy and Material Science)

Co-ordinators : Prof. Parasuraman S

NPTEL : NOC:Fundamentals of optical and scanning electron microscopy (Metallurgy and Material Science)

Co-ordinators : Dr. S. Sankaran

NPTEL : NOC:Fundamentals of electronic materials and devices (Metallurgy and Material Science)

Co-ordinators : Prof. Parasuraman S

NPTEL : NOC:Introduction to Reciprocal Space and its use in Solids (Metallurgy and Material Science)

Co-ordinators : Dr. Prathap Haridoss

NPTEL : NOC:Analysis and Modeling of Welding (Metallurgy and Material Science)

Co-ordinators : Dr. G. Phanikumar

NPTEL : NOC:Fundamentals of X-ray Diffraction and Transmission Electron Microscopy (Metallurgy and Material Science)

Co-ordinators : Dr. S. Sankaran

NPTEL : NOC:Theory and Practice of Non Destructive Testing (Metallurgy and Material Science)

Co-ordinators : Dr. Ranjit Bauri

NPTEL : NOC:Defects in Materials (Metallurgy and Material Science)

Co-ordinators : Prof. Sundararaman M

NPTEL : NOC:Elementary Stereology for Quantitative Metallography (Metallurgy and Material Science)

Co-ordinators : Dr. S. Sankaran

NPTEL : NOC:Welding of Advanced High Strength Steels for Automotive Applications (Metallurgy and Material Science)

Co-ordinators : Prof. Murugaiyan Amirthalingam

NPTEL : NOC:Welding Processes (Metallurgy and Material Science)

Co-ordinators : Prof. Murugaiyan Amirthalingam

NPTEL : NOC:Creep Deformation of Materials (Metallurgy and Material Science)

Co-ordinators : Prof. Srikant Gollapudi

NPTEL : NOC:Nanotechnology, Science and Applications (Metallurgy and Material Science)

Co-ordinators : Dr. Prathap Haridoss

NPTEL : NOC:Powder Metallurgy (Metallurgy and Material Science)

Co-ordinators : Dr. Ranjit Bauri

NPTEL : NOC:Carbon Materials and Manufacturing (Metallurgy and Material Science)

Co-ordinators : Prof. Swati Sharma

NPTEL : NOC:Mechanical Behavior of Materials (Metallurgy and Material Science)

Co-ordinators : Prof. S. Sankaran

Lecture 32 - Strengthening Mechanisms in Crystalline Materials - V

Lecture 33 - Mechanical Testing - I

Lecture 34 - Mechanical Testing - II

Lecture 35 - Mechanical Testing - III

Lecture 36 - Mechanical Testing - IV

Lecture 37 - Mechanical Testing - V

Lecture 38 - Mechanical Testing - VI

Lecture 39 - Mechanical Testing - VII

Lecture 40 - Mechanical Testing - VIII

Lecture 41 - Mechanical Testing - IX

Lecture 42 - Mechanical Testing - X

Lecture 43 - Creep - I

Lecture 44 - Creep - II

Lecture 45 - Creep - III

Lecture 46 - Creep - IV

Lecture 47 - Creep - V

Lecture 48 - Creep - VI

Lecture 49 - Fracture Mechanics - I

Lecture 50 - Fracture Mechanics - II

Lecture 51 - Fracture Mechanics - III

Lecture 52 - Fracture Mechanics - IV

Lecture 53 - Fracture Mechanics - V

Lecture 54 - Fracture Mechanics - VI

Lecture 55 - Fracture Mechanics - VII

Lecture 56 - Fracture Mechanics - VIII

Lecture 57 - Fracture Mechanics - IX

Lecture 58 - Fracture Mechanics - X

Lecture 59 - Fracture Mechanics - XI

Lecture 60 - Fatigue - I

Lecture 61 - Fatigue - II

Lecture 62 - Fatigue - III

Lecture 63 - Fatigue - IV

Lecture 64 - Fatigue - V

NPTEL : NOC:Aluminium based Alloys and Metal Matrix Composites (Metallurgy and Material Science)

Co-ordinators : Prof. Ranjit Bauri

NPTEL : NOC:Welding Science and Technology (In Tamil) (Metallurgy and Material Science)

Co-ordinators : Prof. Murugaiyan Amirthalingam

NPTEL : NOC:Thermodynamics and Kinetics of Materials (Metallurgy and Material Science)

Co-ordinators : Prof. Saswata Bhattacharya

NPTEL : NOC:Surface Engineering of Nanomaterials (Metallurgy and Material Science)

Co-ordinators : Prof. Kaushik Pal

NPTEL : NOC:Material Science and Engineering (Metallurgy and Material Science)

Co-ordinators : Dr. Vivek Pancholi

NPTEL : NOC:Structural Analysis of Nanomaterials (Metallurgy and Material Science)

Co-ordinators : Prof. Kaushik Pal

NPTEL : NOC:Thermo-Mechanical and Thermo-Chemical Processes (Metallurgy and Material Science)

Co-ordinators : Prof. S. R. Meka

NPTEL : NOC:Welding Metallurgy (Metallurgy and Material Science)

Co-ordinators : Dr. Pradeep K. Jha

NPTEL : NOC:Modeling of Tundish Steelmaking Process in Continuous Casting (Metallurgy and Material Science)

Co-ordinators : Dr. Pradeep K. Jha

NPTEL : NOC:Biomaterials for Bone Tissue Engineering Applications (Metallurgy and Material Science)

Co-ordinators : Prof. Bikramjit Basu

NPTEL : NOC:Iron Making (Metallurgy and Material Science)

Co-ordinators : Prof Govind S Gupta

NPTEL : NOC:Friction and Wear of Materials: Principles and Case Studies (Metallurgy and Material Science)

Co-ordinators : Prof. Dr. B. V. Manoj Kumar, Prof. Bikramjit Basu