

- [f](#)
- [X](#)
- [in](#)
- [@](#)
- [▶](#)

- [📄](#)

- [A-](#)
- [A](#)
- [A+](#)

- [📖 Screen Reader](#)

- [👤 Recruitment](#)

- [Tenders](#)



मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर (राष्ट्रीय महत्व का संस्थान)

Malaviya National Institute of Technology Jaipur (An Institute of National Importance)



- [🏠](#)
- [Institute](#)




- About MNIT

- [📄 About MNIT](#)
- [👁 Vision & Mission](#)
- [📋 Strategic Plan](#)
- [🏗 Infrastructure](#)

NIT Statutes & Act

- [📖 NIT Statutes & Act](#)

Reports

-  [Annual Reports](#)
-  [Data for NIRF](#)
-  [Data for ARIIA](#)

MNIT Newsletters

-  [Newsletter](#)
-  [Magazine](#)

• [Administration](#)




○ Administration

-  [Visitor](#)
-  [Council of NITs](#)
-  [Board of Governors](#)
-  [Senate](#)
-  [Chairman](#)
-  [Director](#)
-  [Registrar](#)
-  [Deans](#)
-  [Heads](#)
-  [Institute Functionaries](#)
-  [Chief Vigilance Officer](#)
-  [Institute Authorities](#)





Committees

-  [Finance Committee](#)
-  [Building & Works Committee](#)
-  [Grievance Redressal Committees](#)

Minutes of Meetings






-  [Minutes of BoG Meetings](#)
-  [Minutes of FC Meetings](#)
-  [Minutes of Senate Meetings](#)

Others

-  [Organization Chart](#)
-  [Administration](#)
-  [Budget Estimates](#)
-  [Miscellaneous](#)

• [Students](#)

○ Continuing Students

-  [Students' Welfare Office](#)
-  [E-Resources](#)
-  [Scholarship & Awards](#)
-  [Academic Calender](#)
-  [Class Time Table](#)
-  [Fee Structure](#)
-  [Notices/Information](#)
-  [Office Orders](#)
-  [Hostel](#)
-  [Anti-Ragging Campaign](#)
-  [UG Regulations](#)
-  [PG Regulations](#)

- [🔗 Formats and Forms](#)
- [🔗 Documents & Certificates](#)
- [🔗 Institute Digital Repository](#)
- [🔗 Training & Placement Cell](#)
- [🔗 Cultural Society](#)
- [🔗 IEEE Student Branch](#)
- [🔗 Convocation](#)
- [🔗 ALCOM-Alumni Affairs](#)

Prospective Students

- [🔗 Admissions](#)
- [🔗 Academic Programme](#)
- [🔗 Campus Life](#)
- [🔗 Scholarship & Awards](#)
- [🔗 Placement Results](#)
- [🔗 Virtual Tour](#)
- [🔗 MNIT Jaipur Admission Counselling Hub \(MAC\)](#)
- [🔗 Joint Seat Allocation Authority \(JoSAA\)](#)
- [🔗 Central Seat Allocation Board \(CSAB\)](#)
- [🔗 Direct Admission of Students Abroad \(DASA\)](#)
- [🔗 Centralized counselling for M.Tech./M.Arch./M.Plan. Admissions \(CCMT\)](#)
- [🔗 Centralized counselling for M.Sc./M.Sc.\(Tech.\) Admissions \(CCMN\)](#)

- [Academics](#)

- Departments

- [🔗 Architecture and Planning](#)
- [🔗 Artificial Intelligence & Data Engineering](#)
- [🔗 Chemical Engineering](#)
- [🔗 Chemistry](#)
- [🔗 Civil Engineering](#)
- [🔗 Computer Science and Engineering](#)
- [🔗 Electrical Engineering](#)
- [🔗 Electronics & Communication Engineering](#)
- [🔗 Humanities and Social Sciences](#)
- [🔗 Management Studies](#)
- [🔗 Mathematics](#)
- [🔗 Mechanical Engineering](#)
- [🔗 Metallurgical and Materials Engineering](#)
- [🔗 Physics](#)

Centres

- [🔗 Centre for Energy & Environment](#)
- [🔗 Materials Research Centre](#)
- [🔗 National Centre for Disaster Mitigation & Management](#)
- [🔗 Centre for Rural Development \(CRD\)](#)
- [🔗 Centre for Cyber Security \(CCS\)](#)
- [🔗 Continuing and Digital Education Center](#)

- [Research](#)

- Research @ MNIT

- [🔗 Major Research Area\(s\)](#)
- [🔗 Research Facilities @ MNIT](#)
- [🔗 Recent Research](#)
- [🔗 Research Projects](#)
- [🔗 Journal Publications](#)

-  [Conference Publications](#)
-  [Patents](#)
-  [Books/Chapter Publications](#)
-  [Regional Academic Centre for Space](#)
-  [MNIT Innovation & Incubation Centre](#)
-  [MNIT NISP](#)
-  [IP & TT Cell](#)
-  [Funding Opportunity](#)
-  [R & C Office](#)
-  [Industry Institute Interaction \(I3\)](#)

- [Central Facilities](#)

- Facilities






-  [Digital Infrastructure and Services](#)
-  [Central Library](#)
-  [Sports](#)
-  [Dispensary](#)
-  [Guest House](#)
-  [Canteen](#)
-  [Banks](#)
-  [Post Office](#)
-  [Shopping Complex](#)

- [Miscellaneous](#)

- Office of Deans

-  [Academics](#)
-  [Student's Welfare](#)
-  [Faculty Welfare](#)
-  [Research & Consultancy](#)
-  [International and Alumni Affairs](#)
-  [Planning & Development](#)
-  [Digital Infrastructure & Services](#)

Other Central Units

-  [E & ICT Academy \(Phase I\)](#)
-  [GIAN Cell](#)
-  [Unnat Bharat Abhiyan - RCI](#)
-  [Alumni Affairs](#)
-  [Training & Placement Cell](#)

Media

-  [MNITJ Press Release](#)
-  [MNITJ @ Media](#)
-  [Institute Lecture Series](#)
-  [Gallery](#)
-  [MNITJ Concluded Events](#)
-  [MNITJ Video](#)

Recruitment

-  [Recruitment @ MNITJ](#)



Department of Metallurgical and Materials Engineering

1. 

2. [Academics](#)
3. [Metallurgical and Materials Engineering](#)
4. Facilities

Facilities

Department of Metallurgical and Materials Engineering is one of the foundation departments in this institute. It has nine laboratories. Most of the laboratories cater not only to undergraduate and Post Graduate courses but also to research work in the form of sponsored research project, industrial consultancy, postgraduate dissertation, doctoral dissertation and B.Tech.project work.

Electrometallurgy and Corrosion Lab

1. ● Cu-Plate Corrosion Tester
2. ● Digital Photo Calorimeter
3. ● Electroless Coating System
4. ● Conductivity meter
5. ● Muffle Furnace (900 °C)
6. ● Oven
7. ● Fume Hood
8. ● Digital Weighing Balance
9. ● Hot Plate
10. ● Potentiostat
11. ● DC power source
12. ● pH meters

Extractive Metallurgy Laboratory

1. ● Muffle Furnace
2. ● Vacuum Furnace
3. ● Tube Furnace
4. ● pH meter
5. ● Laboratory Centrifuge
6. ● Programmable DC Power Supply
7. ● Weighing Balance

Powder Metallurgy Laboratory

1. ● Pusher Type Sintering Furnace (1200 °C)
2. ● Horizontal High Energy Ball Mill
3. ● Hydraulic Press
4. ● Universal Testing Machine
5. ● Vacuum Oven
6. ● Sieve Analyser
7. ● Carneys Apparatus
8. ● Data Acquisition System
9. ● Attrition Mill
10. ● Digital Weight Balance

Mineral Processing Laboratory

1. ● Jaw Crusher
2. ● Roll Crusher
3. ● Disc Pulveriser
4. ● Rod Mill
5. ● Ball Mill

6. ● Single and Double Deck Screener
7. ● Air Classifier
8. ● Froth Flootation Cell
9. ● Magnetic and Pneumatic Separator
10. ● Solid State Reactor
11. ● Induction Furnace (2nos)

Testing of Materials Laboratory

1. ● Hounsfield Tensometer
2. ● Vertical Tensometer
3. ● Brinell Hardness Tester (3nos)
4. ● Rockwell Hardness Tester
5. ● Vickers hardness Tester
6. ● Impact Testing Machine (2nos)
7. ● Erichsen cupping Tester
8. ● Shore Hardness Tester

Physical Metallurgy and Heat Treatment Lab

1. ● Disc polishing machine
2. ● Induction Furnace
3. ● Tubular controlled atmosphere furnace
4. ● Muffle furnaces
5. ● Salt bath furnaces
6. ● High temperature viscometer
7. ● Atomic absorption spectrometer
8. ● Optical microscopes
9. ● Automatic polishing machine
10. ● Pin-on-disc wear testing machine
11. ● Tabor tester

Mechanical Working of Metals Laboratory

1. ● Rolling machine
2. ● Shaper machine
3. ● Drilling machine
4. ● Lathe machine
5. ● Forging machine

Materials Science and Plasma Nitriding

1. ● Flat plate collector
2. ● Solar concentrator
3. ● PV energy system
4. ● Solarimeter
5. ● Modelling and simulation software
6. ● Thermal scanner
7. ● Flue gas analyser
8. ● Energy simulation software
9. ● CFD software

Steel Research Laboratory

1. ● Multi-viewer Microscope (Leica DM6000M)
2. ● Inverted Microscope (Zeiss Vert.A1)

3. ● Differential Scanning Calorimeter (DSC404F3A01)
4. ● Image Analyser (Leica DM 6000 M)
5. ● Micro Hardness Tester (UHL VMHT VMH-002V)
6. ● Rockwell Hardness Tester (Tinius Olsen FH031-0000)
7. ● Vicker's Hardness Tester (RVM50)
8. ● Universal Testing Machine (Tinius Olsen H25KL-0030)
9. ● Universal Testing Machine (Instron-8862)

Metallography Laboratory

1. ● Inclined Monocular Microscope (15nos)
2. ● Trinocular Metallurgical Microscope
3. ● Disc Polishing Machine

Fuels and Furnaces Laboratory

1. ● Salt bath vertical muffle furnace (2nos)
2. ● Muffle Furnace
3. ● Oven (2nos)
4. ● Raising Hearth Furnace (1400°C)
5. ● Rotary Furnace
6. ● Tube furnace
7. ● Bottom pouring pot furnace/li>
8. ● Viscometer (Redwood and Engler apparatus)
9. ● Flash and Fire point apparatus (Cleave land, Pansky Martin and Abels)
10. ● Bomb Calorimeter
11. ● Boy's Calorimeter

Foundry Laboratory

1. ● High-Temperature Muffle Furnace (1200°C)
2. ● Vertical Muffle Furnace (900°C)
3. ● Horizontal Muffle Furnace (900°C)
4. ● Oven (300°C)
5. ● Slurry Pot Tester With Controller
6. ● Airjet Erosion Tester Tr-471-400 Material Characterisation Systems
7. ● Peel Back Tester
8. ● Sand Washer
9. ● Infrared Moisture Sensor
10. ● Sieve Shaker
11. ● Digital Universal Testing Machine
12. ● Hot Tensile Tester
13. ● Stick Point Tester
14. ● Core Gas Determinator
15. ● Permeability Tester
16. ● Sand Rammer
17. ● Shatter Index
18. ● Hydraulic Press
19. ● Rapid Slurry Formation setup with Furnace
20. ● Silicon Carbide Furnace (1400°C)
21. ● Vertical Drilling Machine
22. ● Sand Siever
23. ● Wear Testing Machine With Controller
24. ● High Shear Mixing Device
25. ● Digital Weighing Balance

Related Links

- [Home](#)
- [People](#)
- [Academics & Time Table](#)
- [Facilities](#)
- [Publications](#)
- [Projects](#)
- [Patents](#)
- [Event Organized](#)
- [Awards & Honours](#)
- [The IIM Jaipur Chapter](#)
- [METMASS \(Student Society\)](#)
- [Placements](#)
- [Contact Us](#)



Malaviya National Institute of Technology Jaipur
 Jawahar Lal Nehru Marg,
 Jaipur-302017 (Rajasthan) INDIA
 webmaster[at]mnit.ac.in

-
-
-
-
-



- [Right To Information Cell](#)
- [Public Grievance](#)
- [CVC Portal](#)
- [ICC \(Women Cell\)](#)
- [SC/ST/PWD/OBC Cell](#)
- [Anti-Ragging Campaign](#)
- [Ministry of Education](#)
- [Council of NITSER](#)
- [CCMT](#)
- [CCMN](#)
- [CSAB](#)
- [DASA](#)
- [Intranet Portal](#)
- [GST Registration Detail](#)
- [Emergency Numbers](#)
- [Contact Us](#)
- [Privacy Policy for Online Fee Payment](#)
- [Holidays](#)
- [BIS Corner](#)

13756979

-  [Admission
Related Query.](#)
-  [Tenders/NITs](#)

