

Department of Materials Science And Metallurgical Engineering

LAB FACILITIES

MSME Laboratories

The department has the following five laboratories:

- Material Characterization Laboratory
- Metallography Laboratory
- Ceramic Laboratory
- Corrosion Laboratory
- Furnance Laboratory

Material Characterization Laboratory

- Hall Effect
- Hall Effect (with Temperature variation)
- Four Probe Method
- Magneto Resistance
- Dielectric Constant
- P – N Junction
- Hysteresis Loop
- Planck's Constant
- Diode Characteristics
- Quinck's Tube Method



Hall Effect Setup



Hall Effect with Temperature Variation Setup



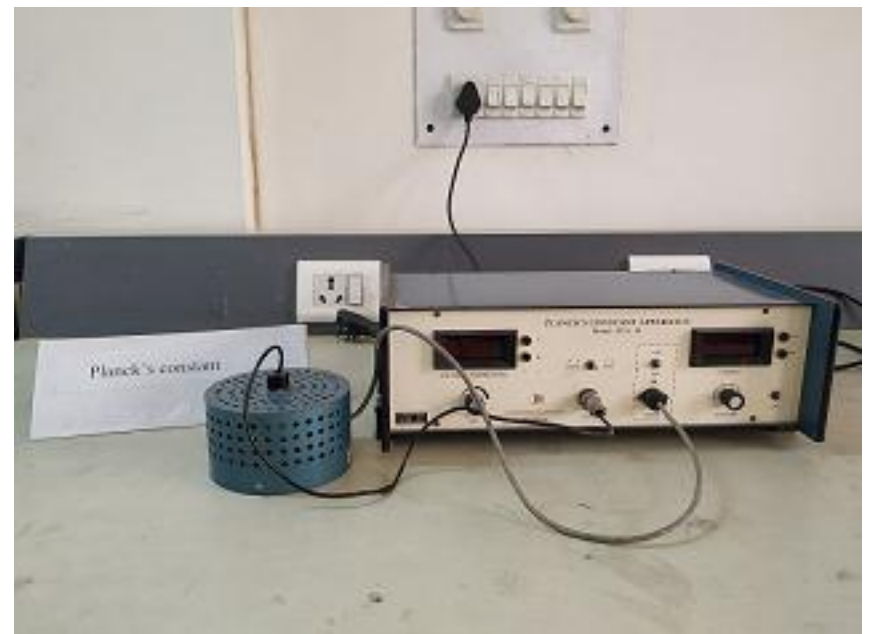
Dielectric Constant Setup



Four Probe Method



P-N Junction Setup



Plank's Constant Setup



Magnetoresistance
Setup



Diode Characteristics
Setup

Metallography Laboratory

- Cut off Wheel Machine
- Dry Belt Surfacers
- Hand Grinder
- Dry Disc Polisher
- Wet Disc Polisher
- Specimen Leveler
- Metallurgical Microscope



Single Disc Polisher



Dry Belt Surfacer



Hand Grinder



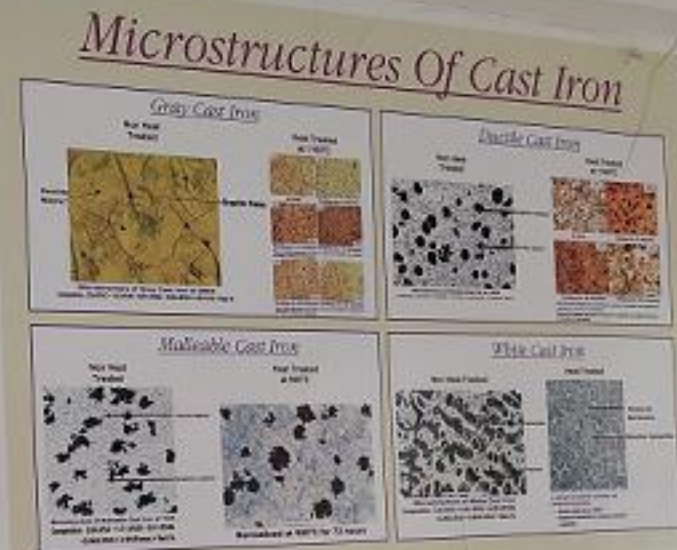
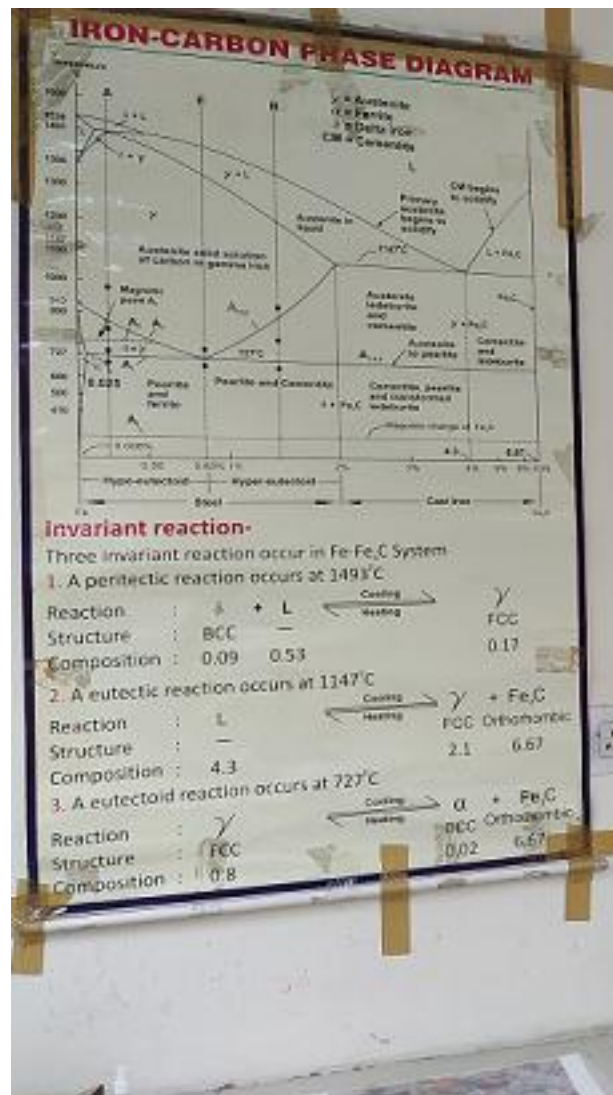
Two Disc Polisher



Cut Off Wheel Machine



Metallurgical Microscope



Metallography Lab

Corrosion Lab

- Hardness Tester
- Hydraulic Press
- Planetary Ball Mill
- Tribo Tester
- Salt Fog Spray Chamber



Hydraulic Press



Planetary Ball Mill



Multi Tribo Tester



Salt Fog Spray Chamber



Vickers Hardness Tester



Rockwell Hardness Tester

Furnace Lab

- Furnace 1- Tubular Furnace
- Furnace 2- Metallurgical Furnace
- Furnace 3- Metallurgical Furnace
- Furnace 4- Metallurgical Furnace
- Furnace 5- Metallurgical Furnace
- Oven (upto 200°C)



Oven



Tubular Furnace 1



Muffle Furnace 2



Muffle Furnace 3



Muffle Furnace 4



Muffle Furnace 5

Ceramic Lab

- Fume Hood
- Balance
- Magnetic Stirrer
- Magnetic Hot Plate
- Hydraulic Press
- Ball Mill 1
- Oven
- Refrigerator for keeping chemicals
- Chemicals and Glass wares
- Vernier Calipers and Micrometer
- Ball Mill 2
- weighing Balance
- Sieve Shaker
- Stirrer
- Vibrating Table



Hydraulic Press



Refrigerator for
Chemical Storage



Weighing Machine



Digital Balance



Stirrer



Fume Hood



Hot Plate



Magnetic Stirrer



Ball Mill 1



Ball Mill 2



Vibrating Table



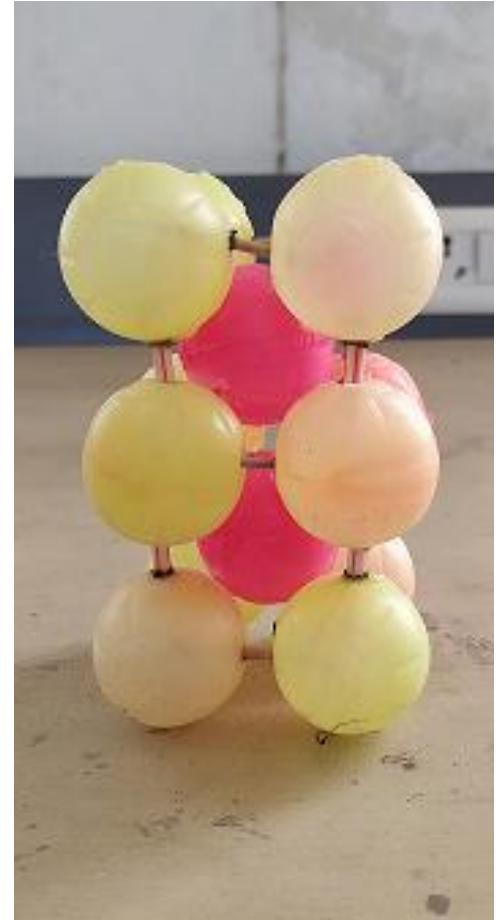
Sieve Shaker 1



Sieve Shaker 2



Ceramic Laboratory



Crystal Structure Models

FACULTIES



Er. Bhoomika Yadav

HOD

Assistant Professor
M.Tech (Materials Technology)
IIT- BHU Varanasi

Specialization: Electronic Ceramics



Dr. Vijay Kumar Kashyap

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FACULTIES



Dr. Anju Dixit

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Er. Shivendra Kr. Trivedi

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FACULTIES



Er. Ankur Katiyar
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Dr. Alka Gupta
Assistant Professor
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FACULTIES



Dr. Arun Kumar

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MSME Computer Lab

Thank You