#### **ABOUT THE INTERNSHIP**

# Dive into the Microscopic World: Summer Internship in Material Characterization

This intensive summer internship offers a hands-on exploration into the fascinating field of **Material Characterization**. Material characterization uses a range of analytical techniques to probe the **structure**, **properties**, **and performance** of materials at various scales – from the macroscopic down to the atomic level. It's the crucial link between material processing and its real-world applications. Understanding the fundamental characteristics of materials is essential for:

- Materials Selection: Choosing right material
- Quality Control: Ensuring materials meet required specifications.
- Failure Analysis: Determining the root cause of material failures.
- Research & Development: Developing new improved materials.
- **Process Optimization:** to achieve desired material properties.

## **During this internship, you will:**

- Gain hands-on experience of key characterization techniques.
- Learn the theoretical principles behind each technique.
- Analyze real-world samples and interpret the resulting data.
- Develop critical thinking and problem-solving skills
- Interact with experienced researchers and professionals

This internship is ideal for Diploma, B. Tech., M. Tech. students in Materials Science, Mechanical Engineering, Chemical Engineering, Metallurgy, Physics, Chemistry & Related disciplines

Embark a journey to unravel inner workings of materials and gain invaluable skills for your future scientific or engineering career!

#### **DURATION & COURSE FEE PER PARTICIPANT**

**Schedule:** Starting from 2<sup>nd</sup> June to 25<sup>th</sup> July 2025.

**Course fee:** Rs. 1000/- payable to 'student fund' A/C No. 10635508860, IFSC: SBIN0011812

To register go to the link given below:

https://forms.gle/TbeahBwZM36hCcPC8

#### ORGANIZING COMMITTEE



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Director
BIT Sindri.



Coordinator
Dr. Chaitanya Sharma,
Associate Professor,
Dept. of Mech. Engg.
BIT Sindri



<u>Convener</u>
Prof. Vijay Pandey, Head
Dept. of Mech. Engg.
BIT Sindri



Coordinator
Dr. S. K. Chaudhary,
Assistant Professor,
Dept. of Mech. Engg.
BIT Sindri



**Co-Coordinator** 

Dr. Dhaneshwar Mahto, Associate Professor, Dept. of Mech. Engg. BIT Sindri

#### **Contact Person:**

Dr. Chaitanya Sharma, Assistant Professor, Dept. of Mechanical Engg. BIT Sindri, Dhanbad-828123, Jharkhand.

> Mob: +91 8447574135 Email: cs.me@bitsindri.ac.in



# DEPARTMENT OF MECHANICAL ENGINEERING BIT SINDRI, DHANBAD



'Unlocking Material Secrets: A Summer Internship In Characterization'



**Offers** 

### SUMMER INTERNSHIP

On

**Material Characterization** 

Period: 2<sup>nd</sup> June – 25<sup>th</sup> July 2025

AT
DEPARTMENT OF
MECHANICAL ENGINEERING
BIT SINDRI, DHANBAD
JHARKHAND