

**Sharth Mandan**  
**Metallurgical Engineering and Materials Science**  
**Indian Institute of Technology, Bombay**  
**Specialization: Metallurgical Process Engineering**

**10D110004**  
**Dual degree (B.Tech + M.Tech)**  
**Male**  
**DOB: 28/07/1993**

Examination	University	Institute	Year	CPI
Engineering (7 <sup>th</sup> Semester)	IIT Bombay	IIT Bombay	2012	7.3

### **Internships & Projects:**

- 1. Research Intern, Thermax Industries** [May 2013- July 2013]
  - Worked on “*Technical Evaluation of Materials under Extreme Conditions*” under the guidance of Dr. Nagesh Kini, Head, Research, Materials Science, Thermax Ltd
  - Completed an evaluation of 4 materials under consideration and presented a report on the same
  - Suggested the material for use in the multi-crore Gasifier project of the company
- 2. Research Intern, Rakshak Foundation** [May 2012- July 2012]
  - Completed research work and submitted the final report on the topic- ‘Tackling Corruption from the Supply Side’. Completed this research under the **mentorship** of esteemed Anti-Corruption expert, *Shri P Venkata Rama Sastry, Inspector General, National Investigation Agency*.
  - Worked as a **research intern** at Rakshak Foundation, a premier organization working on policy research and development issues, and had a chance to interact with various **distinguished personalities** for the purpose of gathering information for the project.
- 3. Business Plan on an Innovative Materials technology.**
  - Presently working on a course project, involved in preparation of a business plan for a new venture on “Innovation in Wood- Plastic Composites”, under the mentorship of *Prof N. Venkataramani, Dept. of MEMS*.
  - The business plan will include the details of Wood Plastic Composites; financial aspects of the venture like **capital generation**, investment, profits and break-even point for the venture; as well as **marketing plans and target customer base for the venture**. The subject covers various financial aspects like Interest rates, debts, equities, amortization, etc. which are essential to know in the current business environment.
- 4. Crystal Interfaces.** [July 2011]
  - Completed a summer project involved in preparation of Initial Design Draft, under the mentorship of *Prof. Gururajan, MEMS Department, IIT Bombay*.
  - The project will be uploaded on the **OSCAR IITB** website, which is a project undertaken by IIT Bombay in collaboration of **Ministry of Human Resource Development**, Govt. of India.

### **Positions of Responsibility:**

- 1. Maintenance Councilor- Hostel 4, IIT Bombay** [May 2012- Present]
  - **Elected** from over 500 hostel students, for the post of Maintenance Councilor of Hostel-4, the **biggest Undergraduate Hostel** in terms of strength of students, for the year 2012-13.
  - **Heading** a 2-tier Maintenance Council, with 3 Maintenance secretaries working under me, and solely responsible for handling the maintenance amenities and projects in the Hostel.

- Introducing amenities like **coffee vending machine**, home theatre system and **solar water heaters** in the hostel to improve the infrastructure of the hostel.
- Undertaking and Heading the ambitious Hostel Renovation Project, worth about **ten millions INR**.
- Along with hostel student council, responsible for handling of the Hostel Annual Budget of around **one million INR**.

## 2. Services Coordinator, Mood Indigo 2011.

[June 2011- Dec 2011]

- As a part of a 16 member team, handled all the infrastructure requirements of the **Mood Indigo 2011**, Cultural festival of IIT Bombay.
- Successfully contributed in providing the **infrastructure and service requirements** at one of the most important venues of the festival, **Lecture Theatre**.
- Had the distinction of strictly following the **timeline** of all the events at the venue.

## 3. Awarded **Hostel Special Mention** for Exceptional contribution in Organizational Activities (awarded to 6 out of 600 students) for the year 2011-12. Worked as 'Hostel Maintenance Secretary' in the year 2011-12.

### Proficiencies:

- **Languages Known:** English, Hindi and Gujarati. Currently undertaking a 70- hour course in **Basic Japanese** Language at IIT Bombay Language classes.
- **Software Skills:** Proficient in use of software including Microsoft Word, Excel, PowerPoint; Video editing software like **Sony Vegas, Adobe Flash** and Adobe After Effects; Programming language: C++; and working knowledge of HTML.

### Academic Course Projects:

- **Study of material properties of Spinel Structure:** Using techniques like XRD, EDX, SEM and weight analysis, studied the material properties of Spinel. [Jan 2012- April 2012]
- **The Structural Properties of CN Tower, Canada:** Completed a Case Study on the topic. The study consisted of the study of the mechanical properties in the structure of the tower, its peculiarities and in depth analysis and criticism of the same. [Nov 2011]

### Key Extra-Curricular Activities & Achievements:

- Awarded **Student Director of the Month** (Feb-2012) by SFMI, an All India Online Film Festival.
- Was involved in the making of "**R&D at IITB**" video, the **official research & development video** of IIT Bombay which was shown in the Fresher's Orientation 2011. [June 2011]
- Director of the 1-minute short film, *Fright*, which was the winner at Nashville Film Institute's Shorts International Competition, 2011. [August 2011]
- Made an Ad-movie using **stop-animation** for Antaragini, IIT Kanpur's annual cultural festival, on the subject of **Stop Aids**. The ad won 2<sup>nd</sup> position in the competition. [Oct 2011]
- Ranked **4<sup>th</sup> in the GUJCOST state level quiz**, organized by Indian Planetary Society at secondary school level. Also got a special mention among the winners from Dr. J. J. Rawal, leading astrophysicist of India. [2006-07]
- Secured **first** place in the Group Extempore event in Freshizza 2010, a premier cultural event for all the freshmen at IIT Bombay.
- Avid Trekker, having trekked several mountains of Maharashtra.
- **Other Interests:** Reading newspapers, debating, movie making.