



**Surbhi Kumari Jain**  
**Metallurgical Engineering & Material Science**  
**Indian Institute of Technology, Bombay**  
**Specialization: Metallurgical Process Engg.**

**09D11019**  
**UG Third Year(Dual Degree )**  
**Female**  
**DOB: 03/01/1991**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	6.97
Intermediate/+2	Rajasthan Board of Secondary Education	Shiv Jyoti Senior Secondary School, Kota	2008	74.00
Matriculation	Rajasthan Board of Secondary Education	Govt. Senior Secondary School, Lawa	2006	91.17

#### Academic Achievements

- Secured an All India Rank 2480 (99.35 percentile) in **IIT-Joint Entrance Exam -2009**
- Cleared **All India Engineering Entrance Exam** (year 2008 & 2009) with **99.99 percentile**
- Secured **2<sup>nd</sup> position at district level** in Rajasthan Board Secondary Examination-2006

#### Achievements and Awards

- Awarded **MCM Scholarship** continuously **for 3 years** for appreciable academic performance
- Recipient of **Rastriya Pratibha Chatravriti** 2007 and 2008 for excellent academic performance in Secondary School Board Examination
- Recipient of **SSS brilliant student medal**, awarded by **Mrs. Pratibha Patil , President of India** in 2007
- Awarded **Gargi Puraskar** by Rajasthan State Govt. for excellent academic performance

#### Internships

##### Hindustan Zinc Limited, Chittor, Rajasthan

June, 2011

- studied the process of Zinc production through pyro-metallurgical path involving sinter plant, Imperial Smelting furnace, Ausmelt, Lead and Zinc Refinery and Sulphuric Acid plant
- Studied pressure vessels in details

##### iDiscoveri Education, Gurgaon

Dec, 2010

- Curriculum development of learning materials used in the schools following XSEED program
- Created lesson plans for teachers and workbooks and textbooks for students
- Used new ideas like conducting activities in the class, making concept learning easier and more interesting for the students

#### KEY ACADEMIC PROJECTS:

##### • IIT BOMBAY- MINI U.I.D Project

Autumn 2009

(Guide: Prof. Deepak Phatak, Computer Science & Engineering, IIT Bombay)

Used C++ to develop a program which took fingerprints of residents of IITB and allotted a unique identity to each person. The program could be used for attendance purpose

##### • Study of the structure failure measures taken in building a mega structure

Autumn 2010

(Guide: Prof. Narsimhan, MEMS, IIT Bombay)

Prepared a presentation with a 3-D model on Rio-Antirion Bridge, Greece and studied the mechanics involved in building the mega structure and the measures taken to resist structure failure

##### • MATLAB project

Autumn 2010

(Guide: Prof. N. Vishwanathan, MEMS, IIT Bombay)

Using MATLAB worked on a problem involving transport phenomenon fundamentals and presented a demonstration on the same

##### • Study of slip by edge dislocation

Spring 2010

(Guide: Prof. Ajay Panwar, Metallurgical & Material science, IIT Bombay)

Made a 3-D model of slip by edge dislocation motion and studied its working process

### Technical Skills

- **Tools:** Photoshop, **MS Office** 2003/2007/2010 (Word, Excel, PowerPoint), MATLAB, Scilab
- **Programming Languages:** C++, HTML

### Positions of Responsibility

- **General Secretary, Metals & Materials Association, Metallurgical Engineering & Material Sciences, IIT Bombay** [March '11-Present]
  - Supervising the work of **18 member team of Padarth**, Technical Festival of the Department of Metallurgical Engineering & Material Sciences (reaching approximately 15000 students annually)
  - Ensure the smooth functioning of the **Dhatuki team**, the department newsletter
  - Supervising **Materials Research Symposium**, provides ample opportunities to all students and researchers from industries and R&D organizations around the country to come together and present their authentic work in the field of material research.
  - Initiate and conceptualize events like Kurta Day, Formal Day, Department Picnic, Freshmen orientation, Valedictory function etc. catering to **more than 700 students** to promote student-student and student-faculty interaction in the department.
- **Hostel Mess Secretary**,
  - Part of a four member apex student body
  - Supervising the work of 15 mess workers and ensure availability of good food quality in the hostel mess, catering to 500 students.
- **Coordinator, Media and Marketing, Techfest 2010**, Asia's biggest technical college festival
  - Handled the media and publicity of the event.
  - Contacted companies and other financial institutions for marketing of the event
- **Journalist, Aawaaz**, IIT Bombay, Institute newsletter
  - Gathered news regarding various events held in the institute.
  - Wrote articles on various matters published in the newsletter

### Courses Undertaken

- Computer Programming and analysis
- Calculus, Linear Algebra
- Electricity and Magnetism, Basic Schrödinger's Equation, Organic Chemistry, Modern Physics
- Theory of machine design
- Micro and Macro Economics, Sociology(ongoing), Statistics and Probability

### Extra Curricular Activities

- Awarded the **hostel PAF colour** in appreciation of PAF management team
- Represented hostel in the Kho-Kho General Championship
- Performed a **street play** in **Hiranandani, Mumbai**, creating public awareness regarding increasing cell tower radiations of mobile phones
- Secured **3<sup>rd</sup> position** in material scavenger hunt organized as a part of **Padarth 2010**, the annual fest of Metallurgical Engineering and Material Science, IIT Bombay
- Stood **first in Debating competition** at **district level** & participated in **many state level events**
- Stood **4th in Advertisement-making General Championship**
- Performed in the play 'Zoon' in the **Performing Arts Festival (PAF) 2010** as part of the dramatics team, stood 2nd in the event
- Stood first in T-shirt making competition in **Padarth 2011 (among 500 participations)**