

# Kriti Jain Metallurgical Engineering & Material Science Indian Institute of Technology, Bombay Specialization: Ceramics & Composites

09D11017

 $UG\ Third\ Year(Dual\ Degree\ )$ 

**Female** 

DOB: 09/09/1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	8.26
Intermediate/+2	C.B.S.E	Modi Public School, Kota	2009	93.60
Matriculation	C.B.S.E	Modern Senior Secondary School, Kota	2007	92.20

#### **ACADEMIC ACHIEVEMENTS**

• Cleared **IIT-Joint Entrance Exam** in first attempt with **99.35 percentile** (2009)

• Cleared All India Engineering Entrance Exam with 99.99 percentile (2009)

• Placed among the top 1% candidates in National Chemistry Olympiad at state level (2009)

Placed among the **top 10% candidates** in **National Physics Olympiad** at state level (2009)

Cleared first level of National Science Olympiad with 99.5 percentile (AIR-49) and secured AIR-369 in level 2

Cleared first level of National Science Olympiad with 98.27 percentile (AIR-238) and secured AIR-125 in level 2 (2003)

• Awarded the Certificate of Merit by C.B.S.E. in Mathematics in AISSE 2007 (Matriculation)

• Awarded the General Proficiency certificate for 2005-2006 by Modern Senior Secondary School

## **ACHIEVEMENTS & AWARDS**

- Recipient of **KPMG Scholarship** for 2 consecutive years for appreciable academic performance in IIT Bombay
- Recipient of **Central Sector Scholarship** for excellent academic performance in AISSCE 2009 awarded by C.B.S.E.
- Recipient of IIT Bombay Heritage Fund Scholarship for appreciable academic performance in IIT Bombay
- Recipient of **SSS Brilliant Student Medal 2 times** (awarded by **Mrs. Pratibha Patil**, then Governor of Rajasthan and **Mr. Ghanshyam Mantri**, Education Minister of Rajasthan, respectively) in year 2004 and 2006

## **SUMMER INTERNSHIP**

## Project: Characterization of Cu-Zn-Al Shape Memory Alloys

(45 days, May-June, 2011)

Guide: Prof. Madangopal Krishnan, Head, Functional Materials Section, MSD, Bhabha Atomic Research Center

- Studied the microstructure and phase transformation characteristics using **X-ray diffraction technique**, differential scanning calorimetry and optical microscopy
- Involved **indexing of complex internally faulted 18R martensite structure**, distinguishing the various self accommodating arrangements using polarized light microscopy
- A new observation was made on the nature of the disordered-B2 and B2-DO3 order-disorder transformations in Cu-Zn-Al alloys during heating & cooling in a DSC
- A visit to the nuclear reactor, introducing the various concepts involved in its working in detail

## KEY ACADEMIC PROJECTS

• C++ project: Mini National UID for IIT Campus

(autumn 2009)

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

Part of the 5 member team, worked on fingerprint verification and detection of any fake entry into the system.

• 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 Howrah Bridge, Kolkata and studied the mechanics of materials 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, MEMS, IIT Bombay)

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

#### ADDITIONAL LEARNING

Control Systems & Communication Engineering, Introduction to Analog Electronics

## **TECHNICAL SKILLS**

- Tools & Software Packages: Photoshop, CSS, Microsoft Office
- Programming Languages: C,C++, HTML and JavaScript
- Operating Systems: Linux, Windows Xp/Vista/7

#### POSITIONS OF RESPONSIBILITY

Web System Administrator, MEMS Dept., IIT Bombay

(April 2011- present)

- Handling the department website, including web designing, site structure planning and content collection & development
- Responsibilities include gathering latest information, catering to all faculty members, students & staff members of the department
- Heading 2 secretaries directly, part of a 16 member 2-tier team, all headed by a General Secretary
- Hostel Maintenance Secretary, Hostel 10

(2010-2011)

- Part of a 2-tier team, involving 5 councilors & 20 secretaries, headed by a General Secretary
- Catering to all maintenance related issues in the hostel, hosting around 500 students
- Coordinator, Media and Marketing, Techfest 2010, Asia's biggest technical college festival (2010-2011)
  - Involves handling of media and publicity of the event
  - Contacting financial institutions for marketing of the event

# **EXTRA CURRICULAR ACTIVITIES**

- Designed and fabricated a wireless remote controlled car in autumn 2009 for an institute level competition
- Stood 4<sup>th</sup> in **Hindi creative writing general championship**, an inter-hostel event
- Secured 4<sup>th</sup> position in Ad-making general championship
- Stood 1<sup>st</sup> in mixed cricket, a fun event held at institute level
- Performed in 'Kshitiz' in the annual sophomore productions, a dramatics event (**Sophie Prod**)
- Performed in the play 'Zoon' in the **Performing Arts Festival (PAF) 2010** as part of the dramatics team, stood 2<sup>nd</sup> in the event
- Performed a **street play in Hiranandani, Mumbai** for the purpose of creating public awareness regarding increasing cell tower radiations of mobile phones
- Stood 1<sup>st</sup> in T-Shirt making & 3<sup>rd</sup> in material scavenger hunt organized as a part of Padarth 2011 & Padarth 2010 respectively, the annual department fest, MEMS, IIT Bombay
- **Exhibitor at TechConnect**, part of the Technical festival of IIT Bombay, Techfest, representing the department, reaching to approximately 20,000 people