

**DIVYANSH GUPTA**

Metallurgical Engineering and Material Science  
Indian Institute of Technology, Bombay  
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UG Third Year (B.Tech Hons.)

Nationality-Indian

DOB-6/11/1992

<u>Enrolled Programs</u>	<u>Department</u>
B. Tech	Metallurgical Engineering and Material Science

<u>Examination</u>	<u>University/School</u>	<u>Year</u>	<u>CPI/Percentage</u>
B.Tech Hons.(MEMS)	IIT Bombay	2015	8.18/10(curr.)
Intermediate/+2( CBSE)	Holy Child Public School, Rewari	2010	91.0%
Matriculation ( CBSE)	St. Anselms School, Alwar	2008	93.0%

**Scholastic Achievements:**

- Ranked among top **0.3%** (**All India Rank 1863** out of 0.5 million) in IIT-JEE-2011
- Second rank at district level** in 12<sup>th</sup> class board exams (Intermediate) for the academic session 2009-10
- Recipient of Certificate of Merit in "NATIONAL STANDARD EXAMINATION IN CHEMISTRY"(NSEC 2009-10)
- District topper** in the 10th class board exams (Matriculation) for the academic session 2007-08
- Qualified for the National Science Talent Search Examination (NSTSE) in the year 2006

**Positions of Responsibility:**

- Institute Speaking Arts Secretary** (2013-14)
  - Currently responsible for all forms of speaking activities in the institute
  - Initiated annual fest of Speaker's Club as "**Speaking Arts Festival**" which aimed at improving personality and communication skills through workshop and talks conducted by professionals
  - Introduced **intra and inter** college competitions to improve student participation in genres like Debate,GD and JAM
  - Successfully published "**Spandan**" annual production of Vaani club containing Hindi literary works of the students/faculty
- Convener, "Vaani" – Club for Hindi Literary and Speaking Arts** (2012-13)
  - Initiated** several new genres in the institute during the tenure like -Stand-up comedy, Hindi quizzing etc.
  - Initiated** annual fest of club as "**Hindi Utsav**", a three day festival dedicated to Hindi Literary Arts and Speaking Arts.
- Mentor, Avanti Fellows (NGO)** (2012-14)
  - Working with Avanti fellows, an NGO which aims at mentoring and coaching students who cannot afford high fees
  - Responsibility includes weekly conversations, meetings, extensive academic monitoring, goal setting and counseling, tutoring and doubt solving sessions of the fellow till he/she completes his/her Intermediate
- Coordinator , Mood Indigo'12** (2011- 12)
  - Worked with '**Competitions**' for conceptualization of events for **Mood Indigo'12, IIT Bombay's Cultural Fest (Asia's largest Cultural Fest)** which sees participation of **more than 80000 students** from all over India and outside
  - Solely responsible for **logistics and services** for judges of speaking events
  - Drafted** an event "**Kavi Samelan**"—a national level competition dedicated to Hindi literary (poetry) and speaking arts
- Founding student Coordinator of "Mandali"-Street Play Club of IIT Bombay** (Feb 2012)
  - Established the exclusive street play club in IIT Bombay to propagate the culture of this particular genre of dramatic within the campus and outside amongst the students

### Technical Skills:

- **Operation Systems:** Windows, Linux
- **Programming Languages:** QBASIC, C ,C++, HTML
- **Image Processing:** MS Office, Adobe Photoshop, Sony Vegas, Mat lab
- **Engineering Software:** Socrates 9.1,Predict 6.0

### Key Projects:

- **H<sub>2</sub>S induced risk on material of construction for CIL under the guidance of Mr. Diwedi ,IOGPT .ONGC ,Mumbai (May'13-June'13)**
  - Analyzed the effect of H<sub>2</sub>S on the existing equipment and piping, identified the equipment and associated piping those are susceptible to damage due to H<sub>2</sub>S at Mangala Oil Field for CRAIN INDIA LTD. (CIL)
  - Revisited the material selection based upon the current and potential well condition for future well and recommended the appropriate measures for mitigating the risk
- **Study of corrosion in oil and gas lines under the guidance of Mr. B.C. Gupta, IOGPT .ONGC ,Mumbai (May'13-June'13)**
  - Project involved study of type, reason, solutions of corrosion at Rajahmundry oil wells
  - Did data analysis, software study (Socrates and Predict) for predicting the corrosion rate and working on material selection for oil and gas pipelines of Rajahmundry Asset of ONGC to minimize corrosion
  - Analyzed various corrosion inhibitors through laboratory test (Wheel Test) to and selecting the best suited with the chemical, physical conditions of the oil/gas well
- **Project to compare strength of cans used for Coke and Pepsi under the guidance of Prof. Prita Pant (May'13-July'13)**

Through tensile loading test compared the strength (yield strength) and identified the reason for the difference between the Coke and Pepsi cans through chemical composition tests like FTIR, SEM-EDX. Etc.
- **Difference between low dust and conventional chalk under the guidance of Prof. Parag Bhargava (Jan'13-April'13)**

Identified the chemical/physical reason for the difference in the amount of dust produced and cost of the two types of chalks through multiple experiments and observations which includes SEM-EDX, IR Spectroscopy, X-Ray Diffraction (XRD) etc.
- **Metallography and Structural Characterization under the guidance of Prof. Prabhu (2012-13)**
  - Working on Metallography and Structural Characterization of selected metals of industrial importance
  - Developing a relationship between the microstructure and the physical properties of metals
  - Project aims to distinguish them on the basis of phase transformation and heat treatments of casting
- **Project to study defects in materials under the guidance of Prof.Ajay Singh Panwar (Mar 2012)**
  - Studied point and line defect in macroscopic material for e.g. defect patterns developed in bricks of the wall of old building due to decay and damage
  - Presented a microscopic study on the reasons and impact of the defects on the crystal lattice
- **Coding project in C++ under the guidance of Prof. M.P. Gururajan (Nov 2011)**
  - Implemented the Dictionary game “Boggle” in C++ programming language.
  - The code provides a (NxN) matrix of alphabets to the user and user need to make words in any continuous way possible (horizontal/ vertical/diagonal) from right to left or vice versa
  - Points were awarded according to the length of word only if the word is correct; code also displayed his/her score as well as the highest score at the end of the game
- **Project in Micro Economics under the guidance of Prof. Gundimeda (Aug 2011)**
  - Studied cement industry and its impact on the global market with data and statistics based on last 10 years records.
  - Project involved profiling of top 10 firms of Indian market-complete with their production strength, market share, supply chain, Infrastructure, distribution network and marketing strategies

<b>Extra-Curricular Activities:</b>
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- **Member** of English / Hindi **Speaking Arts club** and English / Hindi **Literary Arts club** which involves in Debates ,JAM, MUN Extempore, Creative Writing, Potpourri, Dumb C etc.
- Part of winning team of Debate General Championship'12 of IIT Bombay (Aug 2012)
- Performed in **first ever street play** in the institute by "**Mandali**" –street play club of IIT Bombay
- **Wrote, directed and acted (as lead)** in a play for "**Sophie prod'12**"-a annual theatre show by students of IIT Bombay
- Won several competitions in Creative Writing, Potpourri, Debate, MUN and Quizzes including **Silver in State Level Debate Championship 2007**
- Have conducted several workshops at the institute level for speaking and literary arts attended by over 150 student