Arpit Jain **08002026**
Chemical Engineering **B.Tech.**
Indian Institute of Technology, Bombay **Male**
DOB: 11/09/1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.81
Intermediate/+2	CBSE	DAV Public School	2008	91.00
Matriculation	CBSE	Atomic Energy Central School	2006	94.00

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 712** among 3,20,000 aspirants of the IIT JEE *(2008)*
- Placed in **top 1%** in the Indian National **Physics Olympiad** *(2008)*
- Consistently ranked among the **top 15** students in the chemical engineering B. Tech batch *(2011)*
- Secured **All India Rank 6** in National level Science Talent Search Examination *(2006)*
- Awarded **silver medal** thrice in National Mathematics Olympiad *(2003,05,06)*
- Recipient of **National Talent Search** Scholarship given to top 750 students in India *(2006)*
- Felicitated by **Smt. Pratibha Patil** for outstanding performance for consecutive years in All Rajasthan Talent Scholarship Award Examination *(2005,06)*
- **Honourable mention** in Junior Science Olympiad conducted by **HBCSE, TIFR** *(2005)*
- Awarded **AP** grade in **Industrial Design** Course for exceptional performance *(2011)*

INTERNSHIPS

Tata Steel, Jamshedpur *(May '11-Jul '11)*

Solvent Extraction of coal: Optimizing Feed Composition

- Experimented extensively and optimized co-solvent to solvent ratio attaining maximum yield and minimum ash content
- **Reduced** the **costs** by INR **4 Lakh** annually by lowering the coal to total solvent ratio from 1:10 to 1:6
- Initiated work on oxidized coal which led to decrease in ash by 4% and **enhancing the profit by 2%**
- Proposed separate extraction of finer particles resulting in **additional reduction** in ash content by **1%**
- Recommended lower operating temperature leading to **huge energy savings**

Oil and Natural Gas Corporation of India limited(ONGC), Mumbai *(May '10-Jun '10)*

Formulation of Scale Inhibitor

- Analyzed the various parameters responsible for scaling due to salts deposition in pipes
- Researched on various polymers and phosphonates and formulated a scale inhibitor with **95% efficiency** thereby **saving outsourcing costs** for cleaning the oil pipe lines in sea water
- Optimized the dosage and the composition of inhibitor for the maximum inhibitor efficiency

KEY ACADEMIC PROJECTS

Biodiesel Plant-Project BioSynth *(May '09-Apr '11)*

- Core team member of a **student initiative** to design and install a biodiesel plant in IIT Bombay, with a budget of INR **60 Lakh**
- Involved in extensive laboratory experiments, PFD, piping, layout and design calculation verification
- Diligently looked after safety aspects participating in **HAZOP study** and interacting with experts
- Lowered the feed to methanol ratio from 1:15 to 1:9 thereby making the process **economically cheaper**
- Participated in the **installation** and **commissioning** process of the biodiesel plant at IIT Bombay
- Received the award for 'Innovation and Research in the field of Green Chemistry and Engineering' in the students' category at **Industrial Green Chemistry Workshop 2009**, as a part of BioSynth team

Product Strategy formulation *(Sep '09-Apr '09)*

- Researched on **ITC's** diversified product portfolio and conceived the product idea of **Packaged Tea** to increase the company's market share based on the **SWOT** analysis
- Carried out an **in-depth analysis** of the domestic as well as global Tea market
- Developed a marketing **strategy** using technique of STP analysis
- Compiled the **marketing mix** (Product, Price, Promotion and Place/Distribution) for the product launch

Energy Forecasting in India *(Feb '11-Apr '11)*

- Focussed on agricultural, service and industrial sector and identified key factors that influence the energy consumption in India
- Developed a model equation for energy demand in India based on the past GDP and population trends

TECHNICAL SKILLS

- **Languages:** C++, Matlab, Scilab
- **Softwares:** Aspen, Fluent, Viso, Autocad, Statistica, Stata
- **Laboratory:** Hands on experience with distillation column, cooling tower, heat exchangers, GC, HPLC as a part of **BioSynth** project

POSITIONS OF RESPONSIBILITY

Team Leader, Design and Production, Team BioSynth, IIT Bombay *(May '10-Apr '11)*

- Led a 12 member Design and Production department of BioSynth
- Successfully **coordinated** and **troubleshooted** activities on site setup and fabrication
- **Supervised** project teams of conversion of batch plant to continuous and life cycle assessment
- Represented Team BioSynth at **International Energy Conference 2009**, held at IIT Bombay

Coordinator, Mood Indigo (Annual Cultural Festival of IITB) *(Dec '09)*

- Led a team of **10** students and was responsible for the hospitality of the participants
- Responsible for proper execution of the festival by managing the participant database

Vice Captain,Tilak House, Atomic Energy Central School No. 4 *(Jul '05-Apr '06)*

- Led my house to **win** overall trophy by instilling and maintaining high enthusiasm all year round
- Responsible for the **conceptualization** and **smooth execution** of extra-curricular and sports Events
- **Initiated** a new 'Wall Magazine' competition thereby attracting huge student participation
- Facilitated interaction between the student body and the faculty

EXTRA CURRICULAR ACTIVITIES

Sports

- Selected among the top 15 for the Basketball Training Camp organized by Rajasthan Sports Association
- Selected in top 20 players in Badminton in **NSO**, IIT Bombay

Cultural

- Played the role of **lead actor** and secured **third** position in Film making in the Freshizza, IIT Bombay
- Active member of PAF 2011 production team of that secured **first** position after a long wait of 5 years
- Secured awards in essay writing competitions and fine arts events

Others

- **Journalist, Aawaaz** (Institute Media Body): Instrumental in execution of video coverage of events like PAF review, Orientations etc