



Aishwary Dale
Chemical Engineering
Indian Institute of Technology, Bombay

07011003
Dual Degree (B.Tech+M.Tech.)
Male
DOB: 16/02/1989

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	8.85
Intermediate/+2	CBSE	Jawaharlal Nehru School, Bhopal	2007	93.40
Matriculation	CBSE	Jawaharlal Nehru School, Bhopal	2005	91.80

AWARDS AND ACHIEVEMENTS

- Awarded **MITACS Globalink Scholarship** for internship in Canada out of **800 applicants** from IITs ('10)
- Awarded **Campus France Scholarship**, given to **30 students** from India, for internship in France ('09)
- Awarded the Institute Academic Prize for **highest annual CPI** in the department ('09)
- Secured **1st position** at regional level in **National Mathematics Olympiad**, qualified for nationals ('06)
- Placed among the top 1% performers of the state in **National Physics Olympiad** ('06)
- Awarded Narotam Sekhsaria MCM Scholarship granted to **3 students from a batch of 85** ('08)

POSITIONS OF RESPONSIBILITY

OVERALL COORDINATOR, PROJECT BIOSYNTH (May '10 - Jul '11)

Project BioSynth is a campus initiative of setting up a plant to generate Biodiesel from waste oil

*Awarded **First Prize at Industrial Green Chemistry Workshop**, India, 2009 for outstanding research*

- Handpicked and led a team of **41 members** to set up a production plant with a budget of **INR 6 million**
- Spearheaded installation at the site from scratch and supervised plant **start up operations**
- Strengthened **industry-student collaboration** to facilitate a protocol for a technically robust process and efficient plant layout
- Initiated rigorous **team learning** sessions; conceptualized projects like Life Cycle Analysis, Soap Quantification and framework for **BioSynth Wiki**, a central platform for compilation of reports
- Achieved a **20% increase in funds** over the previous year from institute and department authorities

CABINET MEMBER, INSTITUTE STUDENT MENTORSHIP PROGRAM (ISMP) (Mar '11 - Present)

*Advisory team of 7 **senior mentors**, the 2nd tier in the 3 tier team, to help in ideation, planning and execution of various initiatives of the mentorship programme dealing with 880 freshmen*

- Acting as an **advisor** to mentor teams of Chemical and Chemistry Departments, coordinating faculty-student interactions, team selection and **counselling 24 mentors**
- Instrumental in planning and drafting **Curriculum Review Initiative** to review the post 2007 syllabus
- Designed the Mentoring Charter and Freshie Booklet, and revitalized the Freshmen Forum, leading to a **20% increase** in freshmen registrations
- Guided **28 freshmen** on a one-on-one basis over 2 years, enabling smooth transition into the IIT life

COMPANY COORDINATOR, INSTITUTE PLACEMENT CELL (Apr '11 - Present)

- Worked in tandem with a **32 member team** managing the campus recruitment of **1500 students**
- Formulated policies, scheduled events pertaining to placements and mediated between students, companies and the institute, maximizing benefits for all stakeholders
- Initiated **sector specific strategies** to increase corporate participation in the campus

TEAM LEADER, DESIGN AND PRODUCTION, PROJECT BIOSYNTH (Apr '09 - Apr '10)

- Led a 10 member team for design of heat exchangers, inspection manual and **Process Flow Diagram**
- **Remodelled** the plant layout and proposed adequate safety provisions to address contingencies identified by Hazards and Operability (**HAZOP**) analysis

DEPARTMENT ACADEMIC MENTOR (Jan '10 - Present)

- Mentoring 10 academically underperforming and 1 Academic Rehabilitation Programme (ARP) student
- **Facilitated** a unique annual **scholarship** of INR **60,000** for ARP student through personalized attention

SUMMER INTERNSHIPS

McMASTER UNIVERSITY, HAMILTON, CANADA

(May '10 - Jul '10)

Analysis of air particulate matter in Hamilton to identify potential air pollution sources

- Performed pollutant source identification using metals as source signatures and strengthened the analysis by **suggesting and implementing** usage of anions
- Project was sponsored by Hamilton Air Monitoring Network, a consortium of 23 companies like **Shell Canada, Arcelor Mittal and U.S. Steel**, and Clean Air Hamilton, local air quality control body
- Results were presented in NAME, at the research symposium at University of Toronto, Canada

LILLE CATHOLIQUE UNIVERSITY, LILLE, FRANCE

(May '09 - Jul '09)

Mass transfer and mixing effects of agitator speed and baffles

- Suggested optimum agitator speed and baffle configuration for maximum mass transfer and least mixing time
- Co-authored a review report, which was selected for poster presentation in **Northwest European Young Researchers Conference, 2010** in Villeneuve d'Ascq, France

KEY PROJECTS

NETWORK OPTIMIZATION IN SUPPLY CHAIN

(Aug '10 - Nov '10)

- Surveyed supply chain models for flow optimisation and cost minimisation at supplier and consumer nodes
- Modelled a **three echelon network** using mixed integer algorithm in CPLEX following the deterministic approach subject to constraints of demand, supply, fixed and variable costs
- Predicted the optimal transport pattern by incorporating **adaptive demand forecasting** method

MODELLING OF ADSORPTION WHEEL, DUAL DEGREE DISSERTATION

(May '11 - Present)

Adsorption wheel is a rotating disc for continuous adsorption, a novel technology in developmental phase

- Currently simulating a single component continuous adsorption model
- Future work involves optimized design of an **industrial scale** prototype to get desired quality of product

BHARTI AIRTEL CORPORATE STRATEGY

(Jul '11 - Sep '11)

- Performed **SWOT** and **Porter's 5 forces** analysis of market positioning of Bharti Airtel in India and Africa
- Recommended a financially leaner organization, with due focus on structured acquisitions and upcoming technologies like 3G and EDGE, by performing an in-depth **financial analysis**

IMPACT OF MERGERS AND ACQUISITIONS (M&A)

(Aug '10 - Nov '10)

- Discussed the motives for M&A focussing on **synergy** in economies of scale and diversification
- Analyzed impacts on organization, employee attitudes and management, and suggested mitigation strategies

EXTRA CURRICULAR ACTIVITIES

COMPETITIONS

- 1st prize in Junkyard Wars, Techfest**, IIT Bombay from over 100 participating teams ('11)
- 3rd from 40 teams** in industry defined problem in **Azeotropy**, annual Chemical Engineering festival ('11)
- 2 time winner** of inter-hostel Hindi Parliamentary **Debate** General Championship ('08, '10)
- 1st rank in district** in State Talent Search Examination sponsored by Holy Faith ('05)

DRAMATICS

- Lead actor** in **2nd prize** winning entry in inter hostel dramatics competition ('09)
- Lead actor** in IITs biggest professional dramatics festival – **Theatre-Fest** ('08)
- Conceptualized and performed in **4th prize** winning inter-hostel street play ('08)

MISCELLANEOUS

- Certificate course on **Intellectual Property Rights** by School of Management, IIT Bombay ('10)
- Pursued basic **French** Communication course organized by Alliance Française (French Embassy) ('08)
- Successfully conceptualized and conducted a 2-day long competition **Survivor** (prize money INR 60,000) in **Techfest** which saw a participation of over 500 people ('09)
- 1st prize in district** level collage competition organized by Postal and Telegraph department ('05)