Himanshu Malhotra   09D02029

Chemical Engineering   **UG Third Year(Dual Degree)**

Indian Institute of Technology, Bombay   **Male**

Specialization: Chemical Engineering   **DOB: 07-07-1990**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.84
Intermediate/+2	CBSE	Zinc Smelter Sr. Sec. School	2008	89.20

PROJECTS

Academic project related to simulation: **[March 2011]**

-Prof. Jhumpa Adhikari

- Developed an algorithm to simulate the three dimensional square well system in the canonical ensemble for the calculation of potential energy of the system with the given boundary conditions
- Employed Metropolis Monte Carlo method in Scilab and found the average and variance of the potential energy of the system using the concept of periodic boundary conditions and fcc as the initial lattice

Industrial production of K.A Oil   **[November 2011]**

-Prof. Sanjay M. Mahajani

- Explored various mechanisms of production of mixture of cyclohexanol and cyclohexanone (KA oil).
- Modelled reaction kinetics based on the possible mechanisms, performed energy and mole balances and came up with an efficient reactor type and reaction conditions so as to achieve the desired composition of the mixture

Life cycle analysis of Bio-Diesel   **[December 2010]**

-Prof. Sanjay M. Mahajani

- Presented, in a team of four, a **life cycle analysis of Bio-Diesel** production in India based on the study of the mini bio-diesel production plant at IIT Bombay
- Created the energy balance data sheet, evaluated the emissions of harmful gases at each stage of Bio-diesel production, suggested ways to reduce the emissions and performed a comparative study with the emissions involved in the Diesel production

Sulphuric Acid plant analysis: **[March 2010]**

-Prof. Sanjay M. Mahajani

- Studied practical aspects involved in manufacture of sulphuric acid on an industrial scale.
- Reported mass and energy balance and ways to improve efficiency

Mini National UID for IIT Campus: **[October 2009]**

-Prof. Deepak Phatak

- Worked in a team of 21 people for writing a C++ code for applying the Fingerprint Technology using Biometric sensor device
- The code could handle registration of new students, automatic generation of their email ids, verification of their personal details and opening their accounts in the Central Library of IIT Bombay

TECHNICAL SKILLS

- Programming language: **C++**
- Software proficiency: **Matlab, Scilab, Adobe Photoshop, Adobe After Effects, Sony Vegas and Sony Sound Forge**
- Have a comprehensive knowledge of animation in **Adobe Flash**. Awarded a certificate of A grade in Flash by NACTS (National Advanced Computing Training School)
- Platforms: Windows, Linux
- Productivity tools: MS Office

INTERNSHIPS

Ekjaa organization, Mumbai   **[December '11-till date]**
- Identified the NGOs working in the field of de-addiction and compared the methods and the working models employed by them
- Performed a comparative study of the social impact created by these methods, developed new/improved potential ideas and finally pitched these ideas to the concerned NGOs

Citibank N.A, Mumbai   **[May'11-July'11]**
- Worked at the Citi@work branch on a project to reduce the **customer traffic** in the Service Centres
- Upon prima facie study of requests and complaints redressal system of Citibank, went to Bangalore and Pune to study the in depth pattern of requests and complaints
- Suggested modifications in the existing compliance mechanism and alternate platforms to address and resolve customer queries so as to increase the level of customer satisfaction

POSITIONS OF RESPONSIBILITY

Department Alumni and Seminar Secretary   **[April' 11-till date]**
- Organized industrial perspective lectures from alumni of IITB having immense industrial experience
- Member of the team involved in the structuring and execution of Networking Sessions in the Student Alumni Meet 2011. These sessions were conducted for the current batch sitting for placements wherein alumni from various sectors shared their views and answered the queries
- Organized Resume Making, Group Discussion and Personal Interview sessions benefitting around 200 students
- Updated the Alumni database as a member of SARC (Student Alumni Relations Cell), IIT Bombay

Class Representative, II year, Chemical Engineering Department   **[April' 10-to April'11]**
- Maintained rapport between the faculty and students and co-ordinated the class activities

Co-ordinator, TECHFEST 2011 (IIT Bombay's technical festival)   **[July'10-January'11]**
- Executed the event Lift Off in TECHFEST, 2011 with 2 other co-ordinators
- Managed around 160 teams with over 500 participants from 40 colleges across India

Co-ordinator, MOOD INDIGO 2010 (IIT Bombay's cultural festival)   **[July' 10- Dec' 10]**
- Handled a series of stage performances including art demonstrations by artists from foreign countries and a college fashion show with 7 other co-ordinators

OTHER ACCOLADES

- **Topper** in Andhra Pradesh in the exam on Electrostatics and Wave Mechanics conducted by Narayana Educational Institutions on an all Andhra Pradesh level   **[2008]**
- Honoured as the Best Student by the school for two consecutive years
- Headed a team of 15 students for creating awareness on importance of tree plantation and the hazards of global warming under **Manav Uthhan Manch**, an NGO working for the improvement of environmental conditions

EXTRA CURRICULAR ACTIVITIES

- One of the few selected by Hungama TV channel in the Hungama TV Captain Hunt contest
- Secured 7th position in Nashik District in the Cadbury Bournvita Quiz Contest
- Among the **8 mentors** to supervise and guide the first year students in hostel cultural events
- Among the 10 first year students selected in the **dramatics team of PAF 2010** (Performing Arts Festival), IIT Bombay
- Coordinated between the faculty and students and represented the school at various levels as the Head Boy of the school

INTERESTS

- Enthusiastic about video editing, creating short animated movies using Flash
- Enjoy travelling to new places, sports, listening music and working for social causes
- Languages known: **English, Hindi, Marathi, Telugu (basic) and Punjabi (basic)**