

Surendra Singh Chemical Engineering Indian Institute of Technology, Bombay 100020035 UG Second Year Male

**DOB: 4 July 1991** 

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.33
Intermediate/+2	CBSE	Bal Bharati Public School, Delhi	2009	84.60
Matriculation	CBSE	Shree Krishna Pranami Public School	2007	96.40

#### **SCHOLASTIC ACHIEVEMENTS**

- Secured an **All India Rank 703** in IIT JEE 2010.
- Got **0.1% CERTIFICATE FROM CBSE** in Xth class for scoring 100% marks in Social Science
- Participated in "Bharat Ko Jano" (Junior category) quiz and got first position at school level and participated at district level.
- Got 1st position in C++ programming held at Maharaja Agrasen Model School, Delhi.
- Got 2<sup>nd</sup> position in C++ programming held at Guru Nanak Public School, Punjabi Bagh, Delhi.

# PROJECTS AND WORK VISITS

Snakes and Ladders Game

Sep 2010 - Nov 2010

Guided by – Prof. D.B. Phatak

- Was **one of the three group leaders** of 13 students. Co-ordinated with the others groups to make the project a success.
- Developed a **GUI based Snakes and Ladders game** on Linux platform (Ubuntu) using **programming in C++**.
  - > Industrial Training at Rashtriya Chemicals and Fertilizers Limited

Jan 2011

Guided by- Prof. Sanjay M. Mahajani, Prof. Madhu Vinjamur

- Successfully completed the **Training Programme** on 'Sulfuric Acid Technology with Plant Visit' conducted by Rashtriya Chemicals and Fertilizers Limited (RCF), Chembur.
- Studied and prepared a report on the **Double Conversion Double Absorption** (**DCDA**) process used for the production of sulfuric acid at RCF.

➤ Biosynth May 2011 - Present

Guide – Prof. Sanjay M. Mahajani

- **Description** Have been an **active member** of the organisers' team of **Biosynth** since the summers of 2011.
- **R & D** During this period, carried out various **lab-runs** to study the **properties of biodiesel**. Involved in **R & D work** for recovering methanol from a solution of methanol, sulphuric acid and water by **ion exchange resin method** and **neutralisation** with bases like sodium hydroxide, calcium hydroxide and potassium hydroxide. Also performed

- the **viscosity testing** of the raw material for biodiesel at various temperatures for application in the plant.
- *Plant Commissioning* Actively involved in the **commissioning** of the **Biodiesel Plant** set up in the IIT Bombay campus. Performed **hydro** and **pressure-testing** of all the equipments and pipe-lines in the plant.

## **POSITIONS OF RESPONSIBILITY**

- Coordinator, Hospitality, Mood Indigo, 2011.
- Coordinator, Hospitality, Techfest, 2011
- Organiser, Hospitality, Mood Indigo, 2010
- Organiser, Hospitality, Techfest, 2010

## **EXTRA-CURRICULAR ACTIVITIES**

- Built a remote controlled wireless car for the "Trackmania" event organised by the Technic Club of IIT Bombay.
- Successfully completed the NSO program in football.
- Was a part of PAF (Performing Arts Festival) of hostel 2 securing 1<sup>st</sup> position.
- Had completed NCC course for 'A' certificate in Air Wing under No. 1 Haryana Air Squadron NCC Hisar during 8<sup>th</sup> and 9<sup>th</sup> class.

## **PROGRAMMING AND SOFTWARE SKILLS**

- Operating Systems: Windows, Ubuntu, Mac OS
- Programming Languages known: C++, HTML

## **COURSES UNDERTAKEN**

#### Core course:

- Chemical Principles and Processes
- Solid Mechanics
- Transport Phenomena
- Chemical Engineering Thermodynamics
- Fundamentals of Heat and Mass Transfer

#### Additional course

• Economics, Computer Programming, Data Interpretation and Analysis, Differential Equations, Engineering Drawing.

#### **INTERESTS**

• Listening music, reading novels, coding and traveling.

## **DECLARATION**

I hereby declare that the information given above is true to the best of my knowledge.

-Surendra Singh.