



**Vikas Kumar**  
**Chemistry**  
**Indian Institute of Technology, Bombay**  
**Specialization: 5 Yr Intg M.Sc Chemistry**

**09103014**  
**UG Third Year(Dual Degree )**  
**Male**  
**DOB: 15-12-90**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	5.81
Intermediate/+2	Central Board of secondary education	St Paul Higher Secondary School	2008	84.60
Matriculation	Central Board of secondary educaion	May flower Higher secondary school	2006	89.00

## OBJECTIVES

- 1) Self-Assessment
- 2) Sharpening of soft skills
- 3) Social responsibility

## ACADEMIC ACHIEVEMENTS

- 1) Got a distinction from New South Wales University, Australia in Mathematics
- 2) Qualified in Junior National Science Olympiad.
- 3) Third in Patna district in the examination Bharatiya Sanskriti Gyaan Pariksha, Hardwar
- 4) Got third place in Health Quiz conducted by Taru Mitra.

## EXTRACURRICULAR ACTIVITIES

- 1) Part of Avanti Fellows, a **student-run** social enterprise currently based out of 5 IITs, founded in March 2010. In May 2010, Avanti won the Stanford Social E-Challenge and in July 2010, was selected as a Pan IIT Alumni India initiative. Involved in the identification of talented, low income students who face several obstacles in gaining admission to and succeeding at India's best universities, due to limited access to **mentoring** and **coaching** for entrance exams. We have been trying to bridge the gap between them and the other mainstream students.
- 2) Was part of the organizing team that organized a written Talent Search Examination during the month of April 2011 for the students of class 10, across various schools in and around Mumbai. Interviewed the students who were selected after the written examination, for the final stage of the Avanti Fellows program.
- 3) First in 4x100m relay race in Patna district.
- 4) Represented school in CBSE Zonal cluster in Kho-Kho
- 5) NSO, Weightlifting selected for Inter-IIT Training Camp
- 6) Worked with Taru Mitra in spreading "Save the tiger" Campaign

## PROJECTS

- 1) Worked in a team for the CS101 project during the first semester performing the Duplication part of the Unique ID Project for the IITB campus.
- 2) **"Mercury Beating Heart"** – Was part of the team that undertook a project as part of the course curriculum, under Prof.A.Q.Contractor. The project involved concepts of oxidation-

reduction and surface tension. The change in oxidation state of mercury and hence the surface causes an effect similar to that of a beating heart.

3) **Energy Auditing (with emphasis on the Heat Recovery System)** - Was part of the team that was involved in the analysis of the energy usage of Hostel-4, IIT Bombay. The emphasis of the project was to suggest ways to reduce the consumption of energy and also to prevent wastage of energy and recycling of energy using a heat recovery pump.

### **CAMPS ATTENDED**

1) Vijyoshi Camp conducted by IISc, Bangalore during October 2009, where we got to meet Nobel Laureate Richard Ernst and other distinguished scientists such as Prof.C.N.R.Rao.

### **POSITIONS OF RESPONSIBILITY**

- 1) Organizer in TECHFEST-2010, Asia's largest Science and Technology event.
- 2) Coordinator in TECHFEST-2011, Asia's largest Science And Technology event
- 3) Coordinator in MOOD-INDIGO-2011 Asia's largest college Cultural Festival.

### **OTHERS**

1) I was an integral part of PAF (Performing Arts Festival) 2009 winning team, which is the biggest cultural event in IIT Bombay.

### **COURSES TAKEN**

**Mathematics:** Calculus, Differential equation, Linear Algebra

**Technical Courses:** Data Analysis and interpretation, Computer Programming and utilization, Modern physics, Introduction to Electronic Circuits.

**Management Courses:** Energy Management

**Other Courses:** Molecular biology, Economics, Thermodynamics, Spectroscopy, Basic organic chemistry, Retro synthesis, Co-ordination Chemistry, Environmental Science. Electro-magnetism

**Core Courses:** Co-ordination compounds and their properties, Carbonyl Chemistry, Environmental Studies,

**Lab Courses:** Experimentation and Measurements Laboratory, Electronics lab with emphasis on Circuit building, Introduction to Chemistry Lab, Introduction to Physics Lab, Salt Analysis and Quantative Analysis Lab, Introduction to Experimental Methods in Organic Chemistry.