



Sangeeta Mahala
Chemical Engineering
Indian Institute of Technology, Bombay

09002017
UG Third Year (B.Tech.)
Female
DOB: 21/07/1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.85
Intermediate/+2	Board of Secondary Education, Rajasthan	R. K. Maru Girls Govt. Sr. Sec. School	2008	87.85
Matriculation	Board of Secondary Education, Rajasthan	S.B.N. Sr. Sec. School	2006	94.00

Scholastic Achievements

- Secured an **All India Rank of 2481 in IIT-JEE** (Joint Entrance Examination) among 4, 00, 000 students from all over India.
- Ranked **11th rank in Rajasthan** at class X conducted by **BSER** (Board of Secondary Education, Rajasthan).
- Awarded **Silver Medal** for excellent performance in Class X by State Board of Secondary Education.
- Won **1st prize** in Quiz competition in **Science Fare, 2005-06** at District level and participated at State level.
- Awarded Certificate of Merit for Securing **100% marks in Mathematics** in Class X by the State Board of Secondary Education.
- Attended **CISR Program** on Youth for leadership in Science organized by **Central Electronics Engineering Research Institute, Pilani** for the meritorious students of Secondary School Examinations, 2006.

Academic Projects

- **Heat Exchanger Design for Supercritical Fluid Extraction Plant** [May-July'11]
Guide: Prof. Sandip Roy, Dept. of Chemical Engg, IIT Bombay
 - Developed a program in **Scilab** for **helical coil cooler cum condenser** and **double pipe heater** which dealt with phase change for a **bench scale plant**.
 - Designed a **shell and tube pre-cooler and condenser** for a **commercial scale plant**.
 - Programmed a commercial scale **shell and tube heater** which involved a **phase change** of CO₂ from **subcooled liquid state to supercritical state**.
- **Application of Fingerprint Technology** [October-November'09]
Guide: Prof. Deepak Phatak, Dept. of Computer Science and Engg, IIT Bombay
 - Applied the Fingerprint Technology using **Biometric sensor device**. This was a 1500 line code in **C++ (g++ compiler)**.
 - Have applications in the institute like 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.
 - **At present** being used in the institute for **attendance** of students in **classrooms**.
- **Sulphuric Acid Plant Visit** [March'10]
 - Designed a presentation based on the large scale production of Sulphuric Acid in **Rashtriya Chemical Fertilizers Ltd. Mumbai**.
 - Presented a report analyzing the production of Sulphuric Acid.
- **Remote Controlled Car** [August'09]
 - Built a **Remote Controlled Car** in the 1st year which completed challenge successfully in F-1 Car Racing Technical Event organized by **Technic-Technical Club** of IIT-Bombay.
 - Designed RF integrated circuit and infrastructure and planned to overcome the challenges in the F1 car race.

Technical Skills

- **Programming languages:** C++, C
- **Operating systems:** Windows, Linux
- **Software proficiency:** Microsoft Office, Matlab, Scilab

Major Courses Undertaken

- Chemical Reaction Engineering
- Material Science
- Mass Transfer Operations
- Fundamentals of Heat and Mass Transfer
- Introduction to Numerical Analysis
- Process Fluid Mechanics
- Thermodynamics
- Introduction to Transport Phenomena
- Solid Mechanics
- Data Analysis and Interpretation
- Introduction to Renewable Energy Technologies
- Energy Resource, Environment and Economics

Position of Responsibility

- **Secretary of Mess Affairs, Hostel 10** [March'10-March'11]
 - Supervised Hostel's Valedictory Function; Responsible for organizing catering service (budget: **INR 2.0 lakh**) for over 1500 people.
 - Managed smooth functioning of the mess by ensuring cleanliness and hygiene, revising the menu periodically and introducing healthy items.
- **Coordinator, Techfest, 2011**
 - Executed flawlessly the event Lift-Off in the Techfest, with three other coordinators.
 - Managed around 160 teams with over 500 participants over 40 colleges across India.
- **Coordinator, Mood-Indigo, 2010**
 - Handled the event **Pronites** with other Coordinator.
 - Successfully managed the events witnessing more than 2000 people over 4 days.

Extra Curricular Activities

- **Social Services**
 - Worked with **NSS (National Service Scheme)** for a year at IIT Bombay.
 - Visited some villages in Maharashtra to help the poor people living there and examine the educational status of the village.
 - Worked with **UNNATI**, an NGO, helping people for their necessary needs.
- **Miscellaneous**
 - Won 1st prize in "**Freshizza**" (platform for all 1st year students to exhibit their talent in extracurricular activities) movie making competition.
 - Helped in developing infrastructure and in fine arts works in "**PAF, 2010**" (Performing Art Festival), IIT Bombay. The only festival of its kind in India.
 - Participated in Drawing and sketching competitions at school.