

Yamini Krishnan Chemical Engineering Indian Institute of Technology, Bombay 09D02035

UG Third Year (B.Tech.)

Female

DOB: 26/02/1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	9.87
Intermediate/+2	AISSCE	Chinmaya Vidyalaya	2009	96.80
Matriculation	SSC	St. Ann's High School	2007	93.20

Academic Achievements:

- 1st rank in Chemical Engineering department for two consecutive years (2009-10 & 2010-11).
- Received award from IIT Bombay for standing **7th** in the **institute** for the year 2009-10.
- Stood 1st in the twin cities of Hyderabad and Secunderabad in AISSCE 2009.
- Got the **Merit Certificate** (awarded to the top 0.1% students) for Chemistry in AISSCE 2009.
- Got All India Ranks of 1216 in IITJEE 2009 and 453 in AIEEE 2009.
- Qualified with a score of 409 in BITSAT 2009.
- Got waitlisted at Caltech (California Institute of Technology) during the fall 2009 admission cycle.
- Got **AP grade** (given to a maximum of 2% of students) in Process Fluid Mechanics, Fundamentals of Heat and Mass Transfer, Thermodynamics, Solid Mechanics, Complex Analysis, Economics and Chemistry Lab.

Internships and Projects:

• Summer Internship:

(May 2011 – July 2011)

<u>Guide</u>: Dr. Deeleep Rout (Expertise Area Leader - Product Microstructure Control and Research Scientist, Unilever R&D Bangalore)

Conducted experiments to study the effect of the valence of counter ions on the head group area of an extended surfactant belonging to the Alfoterra group. Also compared the results obtained with results found in literature for similar extended surfactants. In the process, I learned to use sophisticated instruments such as the Kruss K12 Tensiometer and the Spinning Drop Tensiometer.

• URA 01 (Undergraduate research award):

(Spring 2010)

<u>Guides</u>: Prof. Sanjay Mahajani (Department of Chemical Engineering, IIT Bombay)
Prof. Anuradda Ganesh (Department of Energy Science and Engineering, IIT Bombay)
Conducted literature search on the gasification and pyrolysis of biomass. Also performed vacuum pyrolysis experiments.

• 'Molecular and Statistical Thermodynamics' Course Project:

(Spring 2010)

<u>Guide</u>: Prof. Jhumpa Adhikari (Department of Chemical Engineering, IIT Bombay)
As a member of a team of 6 students, wrote a code using the demon algorithm (a Monte Carlo method) to simulate the 1- dimensional Ising model.

• C++ Course Project:

(Autumn 2009)

<u>Guide</u>: Prof. Deepak Phatak (Department of Computer Science and Engineering, IIT Bombay) As a member of a team, wrote a C++ code to assign a unique id to each student in IIT Bombay based on his/her fingerprints.

'Introduction to Chemical Engineering' Course Project

(Spring 2009)

<u>Guide</u>: Prof. Sanjay Mahajani (Department of Chemical Engineering, IIT Bombay) Visited the Sulphuric Acid plant at RCF (Rashtriya Chemicals and Fertilizers). Did material balances on the entire plant, submitted a report and gave a PowerPoint presentation.

Selected Courses:

- Molecular and Cell Biology*, Analytical Biochemistry*, Psychology*
- Fluid Mechanics, Heat and Mass Transfer, Thermodynamics, Molecular and Statistical Thermodynamics, Chemical Reaction Engineering*
- Data Analysis and Interpretation, Introduction to Numerical Analysis

Computer Skills:

- Operating Systems: Windows, Linux.
- **Softwares:** C/C++, Scilab.
- Others: MS Word, PowerPoint, Excel.

SAT Scores:

- SAT Test (June 07, 2008): Math: 760/800, Critical Reading: 700/800, Writing: 620/800
- SAT Subject Test (Nov 01, 2008): Mathematics Level 2: 800/800, Physics: 800/800

Miscellaneous:

- As a member of the National Green Corps, worked to create environmental awareness at school level.
- Participated in the regional level of the International Brain Bee Quiz (2007) and secured 1st and 4th places in rounds 1 and 2 respectively.
- Can play the piano.
- Successfully completed a BBC online course in Spanish.
- Can read, write and speak fluently in English, Hindi, Telugu and Tamil.

^{*} represents currently running courses