



**Gaurav Kumar**  
**Chemical Engineering**  
**Indian Institute of Technology, Bombay**  
**Specialization: chemical engg**

**10D020049**  
**UG Third Year (B.Tech.)**  
**Male**  
**DOB: 17/07/1992**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	5.88
Intermediate/+2	CBSE	R.E.D. Sr. Sec. School	2009	83.80
Matriculation	CBSE	H.R. Green Fields Sr. Sec. School	2007	86.67

## ACADEMIC PROJECTS AND INDUSTRIAL TRAINING:

### REPORT ON CONTACT PROCESS

*Faculty Mentor: Prof. Sanjay Mahajani, Chemical Engineering Dept., IIT Bombay*

- Visited Sulphuric Acid Plant of **Rashtriya Chemical and Fertilizers Limited** sulphuric acid technology.
- Integrated and submitted a comprehensive report showing the variations of sulphuric acid in the atmosphere and ways to control the concentration of sulphuric acid to the limit prescribed by the Govt. of INDIA by using purge and purification techniques.
- Studied the effects of different parameters on mass and energy balance in sulphuric acid plant. Performed a cost-benefit analysis wherein analyzed the effects of fluctuating prices of raw materials.
- Calculated **the mass balance** of entire sulphuric acid plant.

### COMPUTER PROGRAMMING & UTILIZATION PROJECT

*Faculty Mentor: Prof. D.B. Phatak C.S.E. Department, IIT Bombay*

- Implemented a program in C++ which functions as a **software for banking system**.
- A graphic user interface coded using **EZ Windows**.
- Password lock for protection of data.
- Easy input and retrieval of data with the option of opening different types of accounts.
- Periodic interest evaluation

### INEART GASES CRYOGENICS PVT. LTD.

*Winter intern, Pithampur*

INEART CYROGENICS AND ALLIED GASES PVT LTD is a producer of oxygen and nitrogen by separating them from air. Also, it is a sole producer of argon in the whole region.

- Studied and improvised the detailed separation process of nitrogen, oxygen and argon using cryogenic separation techniques.
- Assessment of manufacturing and operating costs and thus performing a cost benefit analysis based on fluctuating costs.

### Extra-Curricular Activities :

- Coordinator, Ozone, Techfest 2012
  - Managed all the events of internationally acclaimed artists David Lai and Anand
  - Managed their stay and itinerary during the festival.
- Organizer, Competitions, Techfest 2011
  - Planned and organized the smooth running of 'Fulcrum', a competition in which students from all over India participated.
- Remote Controlled F1 car [Electronics Club, IITB]
  - Designed a radio frequency controlled F1 car and participated in the Freshiezz
  - Learnt the use of L293D IC in motor driven circuit.
- Performed in dance event in Performing Arts Festival.
- Awarded 'B' certificate in National Cadet Corps training programme.

### Software Skills:

- **Languages:** C++, Visual Basic, PL/SQL, HTML
- **Operating Systems:** Linux, Windows
- **Other Softwares:** Microsoft Office, Adobe Photoshop, Matlab

### Relevant courses:

- Transport phenomena
- Advanced transport phenomena
- Chemical engineering Thermodynamics
- Molecular and Statistical Thermodynamics
- Heat and Mass transfer
- Chemical reaction engineering
- Data analysis and Interpretation
- Numerical Analysis