

Interns and Projects

- **Project on Iso-octane reforming** (December, 2012)
Guide: Prof. Ganesh Kale, Senior Scientist, National Chemical Laboratories, Pune.
 - Analysis of iso-octane as a fuel in production of syngas.
 - Job included study of various process for iso-octane reforming, like Steam reforming, Auto-thermal reforming, Dry reforming and Dry Auto-thermal reforming, and devising the best process.
 - Deduced best operating condition for every reforming process, so that syngas yield has application in Petro-chemical industries and fuel cells.
- **Project on Dynamic Surface Tension** (Spring, 2012)
Guide: Prof. V.A. Jhuvekar, Chemical Department, IIT Bombay.
 - Studied dynamic surface tension and its properties for Cetyl trimethyl ammonium bromide surfactants using maximum bubble pressure method with sense dyne tensiometer.
 - Also presented it in UG-Symposium-2012.
- **Avanti Fellows** (December, 2011)
 - Worked as an intern in Avanti Fellows, NGO started by IIT alumni.
 - Job included addressing and encouraging students to participate in scholarship exam organized by Aavanti.
 - **Increased** the participation upto **60%** from last year.
- **Project Biosynth, IIT Bombay.**
Guides: Prof. Sanjay Mahajani and Prof. Vinjamur Madhu, Chemical Dept., IIT Bombay.
 - It is a first ever student's initiative **to setup a biodiesel production** at an institute level in India. The project is funded by IIT Bombay with an initial investment of 3.5 million rupees.
 - Worked in **Research and Development** Department, on the topic "Employing different ways to reduce acidic contents of Methanol, which is a residue after the formation of Biodiesel, and devising the best method."
 - Actively participated in **commissioning work** of the plant, and carried out the mock runs to identify flaws in the plant and conducted the actual runs of the plant.
- **Training programme and Industrial Visit: Rashtriya Chemicals and Fertilizers.** (Spring, 2011)
Guide: Prof. Sanjay Mahajani, Chemical Department, IIT Bombay.
 - Successfully completed the training program on **Sulphuric Acid Technology**
 - Studied and analyzed the whole Sulphuric acid plant and its production technology.
 - Carried out detailed mass and energy balance for Sulphuric Acid production plant.
 - Prepared a detailed report wherein presented the complete working of the Sulphuric Acid production plant.
- **"Snake Game" Project in C++** (Autumn, 2010)
Guide: Prof. Deepak Phatak, CSE Dept., IIT Bombay
 - Completely imitated the game of "Snakes" and added new features like new levels.
 - Made proficient use of **EZ-Windows** in displaying images.

Position of Responsibility:

- **Organizer in Project Biosynth** in the academic year 2010-2011.
Responsibilities include research and development in production process and troubleshooting technical problems in chemical plant.
- **Coordinator of Green Campus Department**, National Service Scheme, IIT Bombay.
- Worked as an organizer for **GRA** (Group of Rural Activities), and **PDP** Departments of NSS, IIT Bombay in the academic year 2010-2011.
- Worked as an **Coordinator in Techfest** in **Competition** Department, organized an event “Magneto” with more than 70 teams, in the academic year 2011.

Software Skills:

- C, C++, Matlab, Scilab, HSc-Chemistry, Comsol.
- Photoshop, HTML, SonyVegas.

Extra Curriculum Activities:

- Awarded a **Certificate of appreciation** for the hard work done in **GRA** (Group for Rural Activities) department, **NSS** (National Service Scheme), IIT Bombay, in the academic year 2010.
- Working for **NGOs** who works for social cause. Visited two outskirts villages of Bombay and made a presentation on the current problems, and alternatives and solutions, in the academic year 2010.
- Plays Indian **musical instrument** cymbals.
- Proficient in pencil **sketching**, water color, poster color **painting** and pot painting.