



Jovina Vaswani
Chemical Engineering
Indian Institute of Technology Bombay

160020086
UG Third Year (B.Tech.)
Female
DOB: 29-04-1997

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2019	6.14
Intermediate/+2	Bonnie Foi co-ed school	Bonnie Foi co-ed school	2015	86.80
Matriculation	Little World School	Little World School	2013	95.00

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 1465** in JEE Advanced among **1.5 lakh** candidates (2016)
- Received **academic award** for getting **CGPA 10** in class 10th (2013)
- Achieved **International rank 913** in **1st International English Olympiad** (2011)

PROJECTS AND INTERNSHIPS

Shear and Compression of complex liquid-liquid interfaces (June'19-July'19)

Guide: Prof Gerald Fuller/Stanford University

- Worked on the **Interfacial shear rheometer** to figure out how **interfacial rheology** affects the tendency of **spontaneous emulsification** of water droplets in asphaltene solution.
- Worked on the **Langmuir trough** to quantify the adsorption and desorption of proteins at the **oil-water interface**.

Fluidisation of Drug Particles (May'18-Present)

Guide: Prof Partha Goswami/IIT Bombay

- Working on the **design of dry powder inhaler** in order to optimise drug particle **fluidisation**
- Characterising the **flow field** of powder particles through **image analysis**
- Modelling dose fluidisation through **Discrete Element Analysis** to check its numerical accuracy

Polystyrene Particle Synthesis (May'18-Present)

Guide: Prof Partha Goswami/IIT Bombay

- Selected the **optimum polymerisation process** through extensive literature survey
- **Synthesised** polystyrene microspheres by **suspension polymerisation**
- Working on **achieving monodispersity** of the synthesised microspheres

Industrial Learning Program (Dec'17-Jan'18)

Prof. Nitin Padhiyar/ IIT Gandhinagar

- Scrutinized the esterification reaction on **reactive distillation** unit under **IIT alumnus**
- Performed **simulations** and **graphical analysis** on **DWSIM** for the esterification reaction.

Summer of Science (May'17-Jul'17)

Maths And Physics club/IIT Bombay

- Performed **qualitative graphical analysis** of the dynamics of **non linear systems**
- Analysed the **stability** and learnt to **quantitatively** measure the rate of decay to fixed points

KEY COURSES UNDERTAKEN

Core Courses: Chemical Engineering Thermodynamics, Introduction to Transport Phenomenon, Heat Transfer, Fluid Mechanics, Mass Transfer*, Solid Mechanics*, Chemical Reaction Engineering*
Mathematics: Calculus, Linear Algebra, Differential Equations

**to be completed by November 2018*

POSITIONS OF RESPONSIBILITY

Manager | Events AZeotropy 2019

(May'18 - Mar'19)

Annual Chemical Engineering Symposium, IIT Bombay

- Part of a 2-tier team of **14 core members** to conceptualize and execute over **20+** events
- Coordinated with **esteemed personalities** from Chemical Industry and academia
- Organized and executed events spanning across various genres including **Lectures, Panel Discussion, Exhibitions and Fireside Chats**
- Planned and carried out **workshops** on simulation softwares like **ASPEN Plus** and **ANSYS**

Activity Associate | Vikas, NSS

(Apr'17-Apr'18)

National Service Scheme, IIT Bombay

- Worked as a part of **8 member team** to plan and execute several **public welfare activities**
- **Ideated** and **organized** several events with the volunteers, to promote **sustainable practices**
- **Mentored 60+ volunteers** in their two semester long NSS courses, **NOCS01** and **NOCS02**
- **Editor** and **Content Creator** for Invisible Humans of IIT Bombay section of NSS Facebook page

Editor | The Monthly Prophet

(Aug'17-Sept'17)

Monthly newsletter published by Mood Indigo, IIT Bombay

- **Authored articles** on topics integrated to **youth culture**, escalating readership to over **30k**
- **Ideated** on the **overall layout** of the newsletter and **brainstormed** upon the relevant articles

DUEL tutor

(May'17-Jul'17)

Department Undergraduate English Learning

- Worked in a team of four to ensure **smooth functioning** of classes, imparting quality English education and helping in better conceptualization
- Volunteered as **teaching assistant** for Department English Learning Program to aid students with **non-English speaking background** cope with difficulties in academics

Volunteer

(Apr'17-Apr'18)

Maths and physics club, IIT Bombay

- A part of the **Maths and Physics Club**, a community with an aim of fostering interest in the fundamental sciences
- Helped organize **Bazinga**, an **institute-wide quiz** in applied Maths and Physics

EXTRACURRICULAR ACTIVITIES

Social

- Conducted a visit to **Aarambh**, an old age home as a part of **NSS friendship day celebration**
- Completed **80 hours** of **community service** under National Service Scheme, IIT Bombay

Sports

- **Represented Madhya Pradesh** in **58th National School Skating Championship** organized by **School Games Federation Of India**
- Won a **silver** and **bronze** medal in **State Level Roller Skating tournament** organized by **School Games Federation Of India**
- Bagged a **silver** medal in **Kho-Kho general championship, IIT Bombay**
- Completed a beginner level **Hockey camp** organized by **Prarambh, IIT Bombay**

Culturals

- Contributed to a **blog article** for the **official blog of Mood Indigo** with a reach of over **30,000**
- Led a panel with **six freshmen** to work on NOCS article for the **Freshmen Newsletter**
- **Shortlisted** for the BITS Pilani's **Purple Prose - The Slam Poetry Elims**
- Achieved the **3rd position** in **street play** in freshers' cultural competition
- Successfully completed diploma in **Kathak**, a classical dance form.