

Jovina Vaswani Chemical Engineering Indian Institute of Technology Bombay 160020086 UG Third Year (B.Tech.) Female DOB: 29-04-1997

# SCHOLASTIC ACHIEVEMENTS

•	Secured <b>All India Ranl</b>	1465 in JEE Advanced among 1.5 lakh candidates	(2016)
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- Received academic award for getting CGPA 10 in class  $10^{th}$  (2013)
- Achieved International rank 913 in 1st International English Olympiad (2011)

## Projects and Internships

#### Fluidisation of Drug Particles

(May'18-Present)

Guide: Prof Partha Goswami

- 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** with an aim to check the numerical accuracy of this technique.

### Polystyrene Particle Synthesis

(May'18-Present)

Guide: Prof Partha Goswami

- Selected the **optimum polymerisation process** through extensive literature survey
- **Synthesised** polystyrene microspheres by **suspension polymerisation** in order to characterise their size distribution, and explore the parameters on which it depends
- Working on achieving monodispersity of the synthesised microspheres

## **Industrial Learning Program**

(Dec'17-Jan'18)

Student Alumni Relations Cell

- 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

- 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

## Gyan Angels

(Mar'17-Present)

India's first mentorship programme

- Got selected as an advisor in Gyan Angels an educational psychology start-up
- Mentoring students by becoming a trusted friend and fostering interest in subject of choice
- Received a rating of 9/10 as a mentor

## 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

## Positions Of Responsibility

## Manager | Events AZeotropy 2019

(May'18 - Present)

Annual Chemical Engineering Symposium, IIT Bombay

- Part of a 2-tier team of 14 core members to conceptualize and execute over 20+events
- Coordinating with esteemed personalities from Chemical Industry and academia
- Organizing and executing events spanning across various genres including Lectures, Panel Discussion, Exhibitions and Fireside Chats
- Planning and executing 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  $58^{th}$  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.