

Iffat Siddiqui

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Contact Information	Third Year Undergraduate Dept. of Chemical Engineering IIT Kanpur	B205, GH Tower IIT Kanpur Uttar Pradesh - 208016
Education	Indian Institute of Technology, Kanpur Bachelor of Technology Chemical Engineering	2011 - present
	St. Marys Convent Inter College, Allahabad <i>Indian School Certificate Examination, conducted by CISCE</i> <i>Indian Certificate of Secondary Education Examination, conducted by CISCE</i>	2010 2008
Research Interests	Process Systems Engineering, Mathematical Modelling, Biomolecular Engineering	
Scholastic Achievements	<ul style="list-style-type: none">• Honored by the Uttar Pradesh government for securing 100% Marks in Mathematics in ISC'10• Among top 0.01% students who qualified SCRA (Special Class Railway Apprentice) examination in 2010.	
Projects Undertaken	“Movable Water Sprinkler” Mechanical Engineering Project	2012
	<ul style="list-style-type: none">• Envisioned a project that combined a lawn mower and a water sprinkler using an efficient gear mechanism with six other team members.• Fabricated the gear mechanism using manufacturing techniques like milling, drilling, fitting, lathing etc.• Appreciated for the utility and simplicity of the project.	
	“Mathematical Modelling and Simulation of Hydrodynamic Instabilities” Project Mentor: Prof. V. Shankar, IIT Kanpur	2014 - ongoing
	<ul style="list-style-type: none">• Gained a firsthand understanding and experience of designing a model.• Developed a better understanding of stability and the onset of instability in fluid flows.• Mathematically analyzed different instabilities in fluid flow like Kelvin-Helmholtz instability, instability in jets, centrifugal instability etc.• Simulated the development of instabilities in time and space using tools like Mathematica and MATLAB.	
Positions of Responsibility	Assistant Coordinator, Institute Counselling Service (www.iitk.ac.in/counsel)	(April 2013 -March 2014)
	<i>Leadership:</i> <ul style="list-style-type: none">• Led a three-tiered team of 200 students to conduct a 6 day long Orientation Program for freshmen with a budget of INR 693,000.• Lead a team of 100 students to provide academic help to students of all batches.	

Initiatives:

- Successfully conducted an aerial photography event with **840 students** in the span of an hour.
- Designed a **vocabulary building compendium** for students struggling with the English Language.
- Introduced **3 brand new sessions** during Orientation¹² that aimed at increasing intra-batch interaction and carry forth the **vision of the Institute**.
- Conceived the **Freshmen Forum**(online doubt clearing forum) for incoming students.

Mentoring:

- Voluntarily work for the betterment of the campus and provide emotional counseling to those in need.

Coordinator, English Literary Events, Antaragni

(www.antaragni.in)

March 2013 - October 2013

- Led a three-tiered team of 10 secretaries and 35 volunteers to conduct literary events and competitions.
- Organized the first ever structured Parliamentary Debate in IIT Kanpur.
- **Major Impact:** Paved the way for a debating culture among literary enthusiasts on campus.

Senator, Students' Gymkhana, IIT Kanpur (Elected)

(www.students.iitk.ac.in/ss)

September 2011 - March 2012

- Involved in policy making decisions **governing the entire campus** (more than 6000 students), and represented my batch (UG Y11).
- **Honed leadership skills** and learnt to take criticism in a positive way.

Extracurricular and Co-curricular Activities

- **Sports:** Involved in athletics in school and continued it at IIT Kanpur.
- **Quizzing:** Ardent follower of quizzing shows and an active member of Quiz Club, IIT Kanpur.
- **Oratory, Creative Writing and Literary Activities:** Pursue writing as a hobby, avid reader of poetry and classic literature and an active member of English Literary Society, IIT Kanpur.

Relevant Courses

Biochemical Engineering Chemical Reaction Engineering* Mass Transfer and Separation Processes Chemical Process Simulation Thermodynamics	Chemical Process Calculation Heat Transfer Numerical Methods Process Dynamics and Control* Fluid Dynamics
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* - *ongoing*

Technical Skills

- **Programming Languages:** C | C++ | JAVA
- **Languages:** Hindi | English | Urdu | Arabic (Read)
- **Other Tools:** MATLAB | Mathematica | Aspen Plus
- **Operating Systems:** Linux | Windows