

# AYANTIKA SETT

[ayantika12@gmail.com](mailto:ayantika12@gmail.com)

[ay\\_antika@yahoo.co.in](mailto:ay_antika@yahoo.co.in)

## Present Address:

Room no 215,  
Ashutosh Mukherjee hall of residence,  
IIT Kharagpur,  
PIN: 721302  
West Bengal, India  
Phone No :+913222281466

## Permanent Address

45/4, Hem Chakraborty Lane,  
Howrah  
PIN: 711101  
West Bengal, India  
Phone No: +9432889642



## OBJECTIVE:

Seeking a position to utilize my skills and abilities in the field of Chemical Engineering that offers professional growth while being resourceful, innovative and flexible.

## Academic Background

Examinations passed	Year	Institution/University	% of marks obtained/CGPA
M. Tech (Chemical Engineering)	2011-2013	Indian Institute of Technology, Kharagpur, West Bengal.	<b>9.63/10.0</b>
B. Tech (Chemical Engineering)	2007-2010	University of Calcutta	<b>9/10.0</b> (Topper of the University)
B.Sc (Chemistry)	2004-2007	St. Xaviers' College, Kolkata/ University of Calcutta	<b>70%</b>
10+2	2004	Tarasundari Balika Vidyabhaban /West Bengal council of Higher Secondary Education	<b>85.8%</b>
10	2002	R.K.S.M. Sister Nivedita Girls School /West Bengal Board of Secondary Education	<b>83.8%</b>

## Scholastic Achievements

- Institute **Gold Medal** from **St. Xaviers' College, Kolkata** for Securing **1<sup>st</sup> Position** B.Sc from college, 2007,

## Computer Skills

Programming Languages : C Programming Language, Visual Basic, SQL+, UNIX  
Software : Matlab, Aspen, AutoCAD, Fluent and COMSOL

## Projects/ Trainings

- **Ongoing Research:**
  - Department of Chemical Engineering, Indian Institute of Technology Kharagpur, India**  
**Research topic:** Droplet based screening of Amyloid  $\beta$  peptide Aggregation  
**Description:** Developing a microfluidic system for studying the aggregation kinetics of  $\beta$ -amyloid peptide in presence of various chemical molecules and metal ions. Environmental conditions by parallel multiplexing and screening of the reaction kinetics of the peptide. The final target is the development of a microfluidic diagnostic device for Alzheimer's Disease.
  - Department of Chemical Engineering, Indian Institute of Technology Kharagpur, India**  
**Research topic:** Simulation and Modeling of droplet Generation in A T-Channel  
**Description:** The main objective of the project is to develop a model and simulate the droplet movement in a T-channel.
- **Graduate Research :**  
**Department of Chemical Engineering, Indian Institute of Technology Kharagpur, India**  
**Title:** Fabrication of microchannel network platform to study protein aggregation

**Duration:** 1 Year

**Description:** We have designed a “Multi – inlet tapered” microchannel, with the main channel dimension being the same as that of the T-channel used earlier and with multiple turns to provide more residence time to the generated plug. . These plugs are subsequently used to study biological reactions in micro-confinements.

➤ **Under Graduate Research:**

**Department of Chemical Engineering, University of Calcutta, Kolkata, West Bengal, India**

**Research topic:** Treatment of Phenol contaminated waste water using Fenton’s Reagent

**Duration:** 1 Year

**Description:** To measure degradation of phenol in waste water when different thermo physical properties (i.e. Temperature, reagent concentration, feed concentration, pH etc.) were varied and finding the optimum reagent required for maximum toxic waste degradation.

➤ **Summer Project:**

**Development Consultant PVT LTD, Kolkata, West Bengal, India**

**Duration:** 1.5 month.

**Description:** Gathering the knowledge of Industrial designs especially different types of heat exchangers.

## Work Experiences

1. **Company** : **AkzoNobel Coatings India Pvt Ltd. Bangalore, Karnataka**  
**Duration** : 1 year (July 2010 – June 2011)  
**Designation** : Technical Executive (Trainee)

**Job Description:**

- Development of shades of Paints on Different plastics according to customer demand.
- Improvement of paint properties on plastics.
- Quality Control and testing of properties of production batch.

## Conference

Sukanya Sasmal, **Ayantika Sett** and Sunando DasGupta, “CFD Analysis of Droplet Formation In T-Shaped Microchannels”, presented at **International conference, CHEMCON 2012** in NIT Jalandhar.

## References

**Prof. Sunando Dasgupta**

Dept of Chemical Engineering.

IIT Kharagpur, Kharagpur, India.

E mail ID: [sunando@che.iitkgp.ernet.in](mailto:sunando@che.iitkgp.ernet.in)

## Personal Details

**Father’s Name** : Anil Kumar Sett  
**Gender** : Female  
**Date of Birth** : 24<sup>th</sup> March, 1986  
**Nationality** : Indian  
**Languages Known** : English, Bengali, Hindi

**Declaration**

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

---

**Ayantika Sett**