Aditya Bikram Bhandari

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ACADEMIC DETAILS			
INSTITUTE	YEAR	DEGREE	PERFORMANCE
IIT Kharagpur	2015	B. Tech (Hons.) Chemical	9.23 (CGPA at the end of 7 th semester)
		Engineering	
St. James' School,	2011	I.S.C.	95.25%
Kolkata			
St. James' School,	2009	I.C.S.E.	94.8%
Kolkata			

SCHOLASTIC ACHIEVEMENTS

- Secured an All India Rank of 1916 at a percentile of 99.60 in **IITJEE 2011**.
- Obtained an All India Rank of 710 at a percentile of 99.94 and a State Rank of 16 in **AIEEE 2011**.
- Featured in both the Engineering and Medical merit lists of **WBJEE 2011** with ranks of 43 and 23 respectively.
- Qualified for the second level of both the National Science Olympiad and International Mathematics
 Olympiad in 2010 and 2011 with a school rank of 1.

AREAS OF INTEREST

- Transport Processes
- Microfluidics
- Fluid Mechanics
- Experimental fluid mechanics

COURSES COMPLETED

- Fluid Mechanics*, Transport Phenomena, Computer Aided Process Engineering*, Chemical Process Technology, Heat Transfer*, Mass Transfer and Separation Processes, Petroleum Refinery Engineering, Biochemical Engineering, Phase Equilibrium Thermodynamics and Property Estimation, Fuel and Energy*, Mechanical Operations*, Reaction Engineering, Instrumentation and Chemical Process Control
- Laplace and Fourier Transforms, Introductory Complex variable Calculus, **Numerical methods** including solution of ODEs and PDEs.
- Electrical Technology*, Programming and Data Structures*, Basic Electronics*, Engineering Drawing*, Introduction to Manufacturing Processes*, Quantum Mechanics, Photonic Materials and Applications.

COURSES EXPECTED TO BE COMPLETED BEFORE NEXT SUMMER (April 2015)

• Instability and patterning in thin polymer film, Novel separation processes, Transport Processes in Physiological Systems

^{*-}Course also has a lab component

RESEARCH EXPERIENCE

- Currently working on a project based on microfluidics under the guidance of Prof. Sunando Dasgupta, Department of Chemical Engineering, IIT Kharagpur, in which crack formation in a drying colloidal microdroplet is being studied
- Was selected for the prestigious **Summer Research Fellowship Programme** offered by the **Indian Academy of Sciences** for the summer of 2013.

Worked on two projects in the Department of Mechanical Engineering, Indian Institute of Science, Bangalore during May-June 2013.

- Factors affecting formation and size of Calcium Carbonate precipitate with special emphasis on interface mixing.
- Study of wide gap Taylor-Couette flow

INDUSTRIAL EXPERIENCE

• Underwent vocational training at **Haldia Petrochemicals Ltd. (HPL)** during May-June, 2014 Was assigned to the compressor section of the **Naphtha Cracker Unit** (NCU) and made studies of material balance, compressor and turbine efficiencies.

PUBLICATIONS/CONFERENCE PRESENTATIONS

- Ghosh, U. U.; Chakraborty, M.; **Bhandari, A. B.**; Chakraborty, S.DasGupta, Wettability Induced Crack Dynamics and Morphology, to be Communicated to Langmuir (arXiv:1412.1234v1).
- Ghosh, U. U.; **Bhandari, A. B.**; Chakraborty, M.; DasGupta, S. Effect of Surface Wettability On Crack Formation, Chemical Engineering Congress 2014, Chandigarh, India. (Paper Presenter)

TECHNICAL SKILLS

- Softwares- MATLAB, Aspen Plus, MS Excel, LaTeX, Eclipse and Solidworks.
- **Programming Languages-** HTML, CSS, Java, C, C++, PHP, MySQL, Android Application Development, Javascript.

EXTRA-CURRICULAR ACTIVITIES

• CHESS

Active chess player with an **International FIDE rating** of 1595. Played and received prizes in several chess tournaments at school, state and national levels. **Captain** of the MMM Hall of Residence and the LLR Hall of Residence inter-hall teams.

• CHEMICAL INNOVATION

Was a part of the **gold winning** inter-hall chemical innovation team of LLR Hall of Residence in 2013 wherein a problem statement was given by Coal India Ltd. to which we proposed a solution to improve the efficiency of the detarrer unit of Dankuni Coal Complex from 70 to 94.69%.

• CENTRAL TEAM MEMBER, NATIONAL SERVICE SCHEME, IIT KHARAGPUR

Coordinated the activities of all the 15 units comprising over 800 volunteers in their various activities including teaching, organizing blood donation camps, cloth donation camps and rallies in the campus as well as in villages, etc.

Was part of the editorial, design and web teams.

• SENIOR EDITOR, TECHNOLOGY LITERARY SOCIETY, IIT KHARAGPUR

Wrote articles for and published the annual magazine of IIT Kharagpur, Alankaar, the official magazine for Kshitij 2013, Kspeak, the bimonthly newsletter, KGP Pulse and the wall magazine, Hang On.