



ANKITA ROY

CURRICULUM VITAE

MOTIVATION:

To be enthusiastic about learning to perform significant research relevant to our welfare

EDUCATION:

- June 2010, **All India Secondary School Examination (CBSE)**, (CGPA 10.00) | Kendriya Vidyalaya, IIT Kharagpur, West Bengal
- June 2012, **All India Senior School Certificate Examination (CBSE)**, (94.80%) | Rajiv Gandhi Senior Secondary School, Shahpura, Bhopal
- August 2016, Completed 4th year of **Dual degree (Bachelors and Masters)** in Basic Sciences **Majoring in Biological Sciences** and **Minoring in Earth and Environmental Sciences** (current Cumulative Performance Index (CPI) of **9.09 on a scale of 10**) | Indian Institute of Science Education and Research (IISER-Bhopal)
- August 2016, **General Graduate Record Examination (322/340)** | **Verbal (158/170)** | **Quantitative (164/170)** | **Analytical Writing (4/6)**
- September 2016, **Test of English as a Foreign Language (TOEFL)** | (111/120) | **Reading (30/30)** | **Listening (29/30)** | **Speaking (26/30)** | **Writing (26/30)**

ACHIEVEMENTS, FELLOWSHIPS AND AWARDS:

- Secured **All India Rank 15 and Regional Rank 06 in Junior Mathematics Olympiad** organised by Kendriya Vidyalaya Sangathan, New Delhi in 2009
- Invited for **NIUS Camp** (Batch IX, Chemistry) held at **Homi Bhabha Centre for Science Education (TIFR)** in December 2012.
- Got selected in the camp to pursue two year project in **Bhabha Atomic Research Centre (BARC)**.
- Got selected for **The Indian Academy of Science (IAS) Fellowship** in 2014.
- Awarded the **DAAD WISE Fellowship** to carry out summer project at **Universität Hamburg (UHH)**, Germany in the summer of 2014.
- Awarded the **INSPIRE Fellowship** from 2012 to 2017
- **Semester Topper in Biology Majors (IISER Bhopal) for four consecutive semesters** with C.P.I. of 9.24, 9.21, 9.11 and 9.09 on a scale of 10 respectively | IISER (Bhopal)

FIELDS OF INTEREST: COMPUTATIONAL BIOLOGY | SYSTEMS BIOLOGY | BIOINFORMATICS | CHEMOINFORMATICS

Work Experience:

- May to July 2014 | **Summer Project** under Dr. Mahesh Sundararajan at the Bhabha Atomic Research Centre (BARC) | **Theoretical Calculations of Inner Sphere Reorganization Energies of some Uranyl Complexes**
- May to July 2015 | **Summer Project** under Dr. Johannes Kirchmair at the University of Hamburg | **Screening for inhibitors of LMP1::TRAF2 protein protein interaction**
- May 2016 to July 2016 | **Summer Project** under Dr. Vineet Kumar Sharma at IISER Bhopal | **Development of a Toxicity Prediction Software using Machine Learning techniques**

POSTER PRESENTATIONS:

- “Thermo responsive Polymers and their use as Drug Delivery Agents” – Secured 2nd position in Singularity 2015
- “Modelling Nuclear Waste Management System” – Secured 1st position in Singularity 2016

PUBLICATIONS:

- A paper titled “Predicting the Redox Properties of Uranyl Complexes using Electronic Structure Calculations” is submitted to the International Journal of Quantum Chemistry.

Symposiums and Workshops Attended:

- Introduction to Computer and C Programming at **Indian Institute of Technology, Kharagpur** in 2008
- Participated in the Vijyoshi Camp held at **IISc Bangalore** in 2012
- Participated in the 102nd Indian Science Congress at the **University of Mumbai** in 2015
- Participated in Annual Biology Meet at **IISER Bhopal** in 2016

Languages:

English | Hindi | Bengali

Computational Skills:

Familiar with: Basic programming in PERL | Statistical Analysis Package R and Weka | Machine learning Techniques|Familiar with operating system environments of Linux, Unix | Linux Shell Scripting |Molden| MOE| FlexX| LigandScout|Maestro

LABORATORY SKILLS :

Familiar with: Western Blotting | Northern Blotting| Southern Blotting| 2D- Gel Electrophoresis | Polymerase Chain Reaction (PCR)| Immunoprecipitation| DNA and plasmid extraction

RELEVANT COURSES :

Bioinformatics, Structural Biology, Genetic Engineering and Biotechnology, Biochemistry, Cell Biology, Developmental Biology, Epigenetics and Gene Regulation, Molecular Biology, Calculus in One Variable, Multivariable Calculus and Differential Equations, Probability and Statistics, Linear Algebra, Mathematical Methods for Chemists, Quantum Physics

Co-curricular Activities:

- Senior Diploma in Visual Arts and Painting
- Green belt holder in Karate
- Member of the Editorial board of our Institute Magazine ‘Uday’ 2014 as an apprentice and in the core committee of ‘Uday’ 2015
- Department Representative for two consecutive semesters in 2014-15
- Event Co-ordinator for Enthuzia (Annual Cultural Fest, IISERB) and Singularity (Annual Science Fest, IISERB)

Hobbies : Swimming | Sketching | Travelling | Cooking

REFERENCES:

Dr. Vineet Kumar Sharma| Assistant Professor | Department of Biological Sciences, IISER Bhopal | E-mail: vineetks@iiserb.ac.in | Phone: +91-755-2692572

Prof. Dr. Johannes Kirchmair| Professor | Center for Bioinformatics, University of Hamburg| E-mail: kirchmair@zbh.uni-hamburg.de | Phone: +49 (40) 42838 7303

Dr. Mahesh Sundararajan| Scientific Officer | Bhabha Atomic Research Centre, Mumbai| E-mail: smahesh@barc.gov.in |Phone: +91- 9930258623

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