Personal Profile

Name (in full)	Dr. Surajit Guin
Father's Name	Mr. Ruplal Guin
Address	Vill+PO-Talibpur, PS-Salar Dist-Murshidabad, PIN-742402 State–West Bengal
Date of Birth	30th August, 1990
Sex	Male
Marital Status	Married
Caste	OBC-B
Nationality	Indian
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Academic Profile

• Doctor of Philosophy (**Ph.D.**) in Physics from University of Calcutta, Kolkata, West Bengal, India (2018 -2023) under Ph.D. Superviser: Dr. Atish Dipankar Jana. Thesis Title: Quantum electronic structural exploration of metal nanoclusters and their possible use as nano-scale functional materials.

• Bachalor of Education (**B.Ed.**) in Physical Science, Adyapeath Annada B.Ed. College (under WBSU), Daksineswar, West Bengal, India. (2014-15)

• Master of Science (**M.Sc.**) in Physics, APC College (under WBSU), New Barrackpore, West Bengal, India. (2011-13)

• Bachelor of Science (Physics Honors, **B.Sc.**) from Dumdum Motijheel College (under WBSU), Kolkata, West Bengal, India. (2008-11)

• Higher Secondary (**XI-XII**) from Katwa Bharatibhaban (under WBCHSE), Katwa, India. (2006-08)

• Secondary (**IX-X**) from Talibpur High School (under WBBSE), Talibpur, West Bengal, India. (2006-08)

Achievements

• Qualified in National Eligibility Test (**NET**) from CSIR-UGC, India in 2018.
• Qualified in Research Eligibility Test (**RET**) from Calcutta University, West Bengal, India in 2018.
• Qualified in Graduate Aptitude Test in Engineering (**GATE**) from IIT-Roorkee, Odisha, India in 2017.
• Qualified in Teacher Eligibility Test (**TET**) Test from West Bengal Central School Service Commission, India in 2011 and 2015.
• Qualified in **BOSE TEST** from SN BOSE National Centre for Basic Science, West Bengal, India in 2013

Award and fellowship

• Junior Research Fellowship (**JRF**) from CSIR-UGC, India in 2018.

Teaching Profile

• Work as State Aided College Teacher (SACT) in Department of Physics, AKPC Mahavidyalaya, Bengai, Hooghly, from January 01, 2020 to till now.

• Worked as Guest Lecturer in Department of Physics, AKPC Mahavidyalaya, Bengai, Hooghly, from September 12, 2013 to December 31, 2019.

• Worked as temporary school teacher in Baranagar Vidyamandir Department of Physics, AKPC Mahavidyalaya, Bengai, Hooghly, from January 12, 2015 to February 09, 2015.

Research Profile

Seminar/Conference organized

- Coordinator of National Webinar on "Specialized Topics in Physics", organized by Physics Department, AKPC Mahavidyalaya on 27th July, 2020.
- Coordinator of International Webinar on "Rendezvous with Quantum Physics", organized by Physics Department, AKPC Mahavidyalaya on 12-13 June, 2021.
- Coordinator of International Seminar on "Tools in Sciences", organized by Physics Department, AKPC Mahavidyalaya on 25th June, 2022
- Coordinator of International conference on Frontiers in Physics, organized by Physics Department, AKPC Mahavidyalaya on 27th September, 2024

Seminar/Conference participated

- Participated 4th National Conference on Frontiers of Modern Physics One-day conference on Condensed Matter Physics held at Dept of Physics, Adamas University, Barasat, North 24 Pgs, on 23nd and 24th February 2024,Talk title: "Fluxionality of Aluminium Nanoclusters".

- Participated One-day seminar on Popular lectures in Condensed Matter Physics held at Dept of Physics, Netaji Mahavidyalaya, Arambagh, Hooghly, on 9th August 2023, Talk title: "Fundamentals of nanomaterials: Stability, size dependent property and applications".

- Participated One-day conference on Condensed Matter Physics held at Dept of Physics, Ramakrishna Mission Vidyamandira, Belur Math, Howrah, on 22nd February 2019,Talk title: "Quantum Chemical Structure & Plasmonic properties of a series of Planar and quasi planar Al_{13}^{+} clusters".

- Participated UGC sponsored conference on Energy Frontiers in Material Science (EFMS) held at Dept of Physics, Behala College, Behala, Kolkata on 17th and 18th February 2021,Poster title: "Transition Structure with connecting planar Al_{13}^{+} cluster to the Corresponding Quasi-planar minimum energy structure".

- Participated Recent Trends in Functional materials in relation to Nano-materials and Nano-technology (RTFMNN) held at Department of Chemistry St. Paul's Cathedrals Mission College, Kolkata on 4th and 5th February 2016, Poster title: "Al doped Nanoscale Wankel – A Computational analysis.

Seminar/Conference attended

- Attended UGC sponsored national seminar entitled String Theory: the present and the future held at Department of Physics Ramkrishna Mission Vidyamadira- Belur, Howrah, India on 16th and 17th September 2016.

- Attended UGC sponsored national seminar entitled The biggest Challenge of Green Chemistry: To use its rule in practice held at Department of Chemistry, AKPC Mahavidyalaya, Hooghly, India on 8th and 9th October 2015.

- Attended national seminar entitled Contemporary Issues In Education held at Department of Education, Adyapeath Annada B.Ed. College, Kolkata, India on 1st May 2015.

- Attended national seminar entitled Glimpse of Advanced Physics held at Department of Physics, Bhairab Ganguly College, Kolkata, India on 18th September 2012.

- Attended UGC sponsored national seminar entitled The recent advancement in Nanotechnology and its applications in daily life held at Department of Physics, DumDum Motijheel College, Kolkata, India on 10th December 2011.

Publications

- **S. Guin**, S. C. Halder, S. Manna, A. D. Jana, Quantifying plasmonic characteristics of pure and alkali doped aluminum clusters, J. Mol. Graph. Model 127 (2024) 108690 (1-10). DOI: 10.1016/j.jmgm.2023.108690

- **S. Guin**, S.C. Halder, S.R. Ghosh, A.D. Jana, Electric field-driven up-and-down motion of the flexible tail of Al_{13}^+ cluster system—a nano-scale flipper, J Mol Model 29 (2023) 383 (1-13). DOI: 10.1007/s00894-023-05781-4

- **S. Guin**, A.D. Jana, "Effect of alkali atom doping on the electronic structure and aromatic character of planar and quasi-planar Al_{13}^+ clusters", J. Mol. Model, 27 (2021) 235. DOI: 10.1007/s00894-021-04845-7

- **S. Guin**, S.R. Ghosh, A.D. Jana, "Planarity does not always mean higher aromaticity - intriguing metalloaromaticity of three Al_{13}^+ isomers", J. Mol. Graph. Model. 97 (2020) 107544. DOI: 10.1016/j.jmgm.2020.107544

- F. Ahmed, S.R. Ghosh, S. Halder, **S. Guin** et al., "Metal-ligand ring aromaticity in a 2D polymer used as a photosensitive electronic device", New J. Chem., 43, 2710-2717 (2019) https://doi.org/10.1039/C8NJ05526B.

- **S. Guin**, S.R. Ghosh, A.D. Jana, "First report of a planar and a quasi-planar Al_{13}^{+} cluster having localized antiaromatic deltas within an aromatic sea: NICS, ELF, AIM, and AdNDP bonding analysis", J. Mol. Model. 24(2018) 1-14. DOI:10.1007/s00894-018-3875-5

Book Chapter

- **S. Guin**, A.D. Jana, Quantum-chemical structure and plasmonic properties of a pair of Al_{13}^{+} clusters, Proceedings of conference on Condensed Matter Physics, Department of Physics Ramakrishna Mission Vidyamandira Belur Math, Howrah (2019), ISBN : 978-81-940096-3-4.

Computer Knowledge & Computational Skill

- Six months' certificate course in Information Technology (CITA) from National Youth computer training centre.
- **Operating Systems:** Working experience in Windows and Linux environments.
- **Software tools:** Working experience with MS Office, Paint, Gnuplot, GAMESS, Molekel, Gaussian, Quantum Espresso, Chemissian , ORTEP, and Matlab
- **Programming Language:** Working experience in programming with C-language

References

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I hereby state and acknowledge that the information provided is true and complete to the best of my knowledge.