

## CURRICULUM VITAE

	 <p><b>Ajit Biswas</b> Asst. Professor of Physics Dr. Bhupendra Nath Dutta Smriti Mahavidyalaya Kalna Road, Purba Bardhaman, West Bengal - 713407</p>
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	<p>Email: <a href="mailto:ajites2012@gmail.com">ajites2012@gmail.com</a></p> <p>Phone: <a href="tel:9836750732">9836750732</a></p> <p>Orcid ID: <a href="https://orcid.org/0000-0002-9679-4276">0000-0002-9679-4276</a></p>
<b>ACADEMIC QUALIFICATIONS:</b>	<ul style="list-style-type: none"> <li>➤ M.Sc.(2004) from The University of Calcutta, West Bengal.</li> <li>➤ B.Ed.(2006) from The University of Calcutta, West Bengal</li> </ul>
<b>AREA OF SPECIALIZATION:</b>	Plasma Physics.
<b>RESEARCH INTEREST:</b>	<ul style="list-style-type: none"> <li>➤ <b>DENSITY FUNCTIONAL THEORETICAL (DFT) STUDY OF ELECTRICAL, OPTICAL, MAGNETIC PROPERTIES OF NANOSTRUCTURES.</b></li> <li>➤ <b>APPLY THAT FOR THE DESIGN OF NANOELECTRONIC DEVICES.</b></li> </ul>
<b>PAPER PRESENTED IN NATIONAL AND INTERNATIONAL CONFERENCE/SEMINAR:</b>	<p>Best paper in international seminar on “<b>INDUSTRY INTERACTIVE INNOVATIONS IN SCIENCE, ENGINEERING AND TECHNOLOGY- LASER AND ITS APPLICATION (I3SET 2K22)</b>” organized by JIS college of Engineering; December-21,2022.</p> <p>Title of the presented paper:” <b>Evidence of photocatalytic action in two-dimensional nano sheet</b>”</p>
<b>PUBLICATIONS: RESEARCH ARTICLE/PAPERS PUBLISHED IN NATIONAL/INTERNATIONAL JOURNAL.</b>	<p><b>1. <math>\pi</math>-Stacked (C<sub>n</sub>-C<sub>6</sub>H<sub>6</sub>-Fe-C<sub>6</sub>H<sub>6</sub>-C<sub>13-n</sub>) n=2: A spin operated thermoelectric nanodevice</b></p> <p><b>Shankar Prasad Mitra, Rinki Bhowmick, Ajit Biswas, Mausumi Chattopadhyaya, Sayantanu Koley, Sabyasachi Sen,</b></p> <p><b><i>Journal of Physics and Chemistry of Solids</i>, vol. 170, page 110900, year 2022.</b></p> <p><b>JIF 3.995</b></p> <p><b>DOI: <a href="https://doi.org/10.1016/j.jpcs.2022.110900">https://doi.org/10.1016/j.jpcs.2022.110900</a></b></p> <p><b>2. Spintronic action of C<sub>n</sub>-C<sub>6</sub>H<sub>6</sub>-Fe-C<sub>6</sub>H<sub>6</sub>-C<sub>13-n</sub>; n = 6: How crucial are d electrons?</b></p>

**Ajit Biswas, Shankar Prasad Mitra, Rinki Bhowmick, Dipankar Adak, Mausumi Chattopadhyaya, Sabyasachi Sen,**

**Journal of Molecular Structure, vol. 1277, page 134836, year 2023, JIF 3.841**

**DOI: <https://doi.org/10.1016/j.molstruc.2022.134836>**

**3. Role of d-orbital electrons in tuning multifunctional spintronic action in pi-stacked C<sub>n</sub>-C<sub>6</sub>H<sub>6</sub>-Fe-C<sub>6</sub>H<sub>6</sub>-C<sub>13</sub>-n**

**Rinki Bhowmick, Mausumi Chattopadhyaya, Shankar Prasad Mitra, Ajit Biswas, Sabyasachi Sen,**

**Chemical Physics. Vol. 558, Page 111507, Year - 2022, JIF**

**DOI: <https://doi.org/10.1016/j.chemphys.2022.111507>**

**4. Evidence of half metal to insulator transition and subsequent photocatalytic action in g-C<sub>4</sub>N<sub>3</sub>@Lin =1 to 4: A systematic theoretical analysis**

**Ajit Biswas, Shankar Prasad Mitra, Rinki Bhowmick, Dipankar Adak, Mausumi Chattopadhyaya, Sabyasachi Sen.**

**Solid State Communications. Vol.- 389, Page – 115585, Year- 2024. JIF 2**

**DOI: <https://doi.org/10.1016/j.ssc.2024.115585>**

**5. Role of dopants in tuning spintronic features of lithium doped g-C<sub>4</sub>N<sub>3</sub>@Lin =1 to 4**

**Shankar Prasad Mitra, Ajit Biswas, Souradip Dey, Utsab Roy, Rinki**

**Bhowmick, Mausumi Chattopadhyaya, Tanmoy Dutta, Jit Chakraborty and Sabyasachi Sen,**

**Journal of Physics: Conference Series, vol. 2286, page 012008, year 2022, JIF 0.547**

**<http://doi:10.1088/1742-6596/2286/1/012008>**

	<p><b>6. Even Odd Oscillation in Tunnelling Magneto Resistance of Transition metal doped Metallo Porphyrin systems</b></p> <p><b>Rinki Bhowmick, Jit Chakraborty, Shankar Prasad Mitra, Ajit Biswas, Swarnendu Maiti, Tanmoy Dutta, Sayantanu Koley, Mausumi Chattopadhyaya and Sabyasachi Sen,</b></p> <p><b>Journal of Physics: Conference Series, vol. 2286, page 012007, year 2022, JIF 0.547</b></p> <p><a href="http://doi:10.1088/1742-6596/2286/1/012007">http://doi:10.1088/1742-6596/2286/1/012007</a></p>
<p><b>PROFESSIONAL DEVELOPMENT PROGRAMME:</b></p>	<p><b>1.FACULTY INDUCTION PROGRAMME (FIP2-9)</b> organized by UGC-HRDC OSMANIA UNIVERSITY, Hyderabad, Telengana, India from 01.12.2021 to 31.12.2021</p> <p><b>2.REFRESHER COURSE</b> organized by UGC-HRDC KUMAUN UNIVERSITY, Nainital, Uttarakhand, India, from 18/09/2023 to 03/10/2023.</p> <p>3.8 weeks online short-term course on “Qualitative Research Methods”,from University of Amsterdam, Department of Sociology by Dr. Gerben Moerman Faculty of Social and Behavioural Sciences organized through Coursera.</p> <p>4. 4 weeks online short-term course on “Physics 102 - Electric Potential and DC Circuits”,from University of Rice, Department of Physics by Professor Jason H. Hafner, Faculty of Physics &amp; Astronomy organized through Coursera.</p> <p>5. 3 weeks online short-term course on “Physics 102 - AC Circuits and Maxwell's Equations”,from University of Rice, Department of Physics by Professor Jason H. Hafner, Faculty of Physics &amp; Astronomy organized through Coursera.</p>

	<p>6. 3 weeks online short-term course on “Physics 102 - Electric Charges and Fields”, from University of Rice, Department of Physics by Professor Jason H. Hafner, Faculty of Physics &amp; Astronomy organized through Coursera.</p> <p>7. 12 weeks online short-term course on “Solid State Physics”, from IIT KHARAGPUR, Department of Physics by Professor Debjani Chakraborty coordinator NPTEL, IIT Kharagpur organized through NPTEL(JAN-APR 2023).</p> <p>8. 12 weeks online short-term course on “Electronic theory of Solids”, from IIT KHARAGPUR, Department of Physics by Professor Debjani Chakraborty coordinator NPTEL, IIT Kharagpur organized through NPTEL(JUL-OCT 2022).</p> <p>9. 12 weeks online short-term course on “Bonds &amp; Bands in Solids”, from IISc BANGALORE, Department of Physics by Professor L. Umanad coordinator NPTEL, IISc BANGALORE organized through NPTEL(JUL-OCT 2022).</p>
<p><b>TEACHING EXPERIENCE:</b> [UG-7 Yrs, HS-11 Yrs]</p>	<ul style="list-style-type: none"> <li>➤ Assistant Professor, Dr B.N.D.S. Mahavidyalaya, since 23.12.2017 to till now.</li> <li>➤ Assistant Teacher, Baramuragacha. S. N. Vidyamandir, from 22.06.2006 to 22.12.2017.</li> </ul>
<p><b>ADMINISTRATIVE EXPERIENCE:</b></p>	<ul style="list-style-type: none"> <li>➤ Governing Body Member, of Dr. B.N. Dutta Smiti Mahavidyalaya, since January 2023 to till now.</li> </ul>
<p><b>SEMINARS, CONFERENCES ATTENDED:</b></p>	<p>1. International Webinar on “COVID-19 SAGA: A GLOBAL THREAT”, organized by Sidhu-Kanu-Birsha University, Purulia, India, during June 26-27, 2020.</p> <p>2. International Webinar on “RECENT TRENDS IN APPLIED PHYSICS” ,organized by Department of Physics, Pingla Thana Mahavidyalaya, Paschim Medinipur, West Bengal, on 26<sup>th</sup> September’2020.</p>

3.National Webinar on “Scientific Approaches Towards Covid-19 Pandemic”, organized by IQAC & Science Department of Chandidas Mahavidyalaya, Khujitpara, Birbhum, West Bengal, on 2<sup>nd</sup> August,2020.

4. International Webinar on “ASTRONOMY IN RADIO WAVE LENGTHS”, organized by Midnapur City College, Paschim Midnapur, West Bengal, India, on 29<sup>th</sup> August’2020.

5. International Webinar on “PHYSICS AND BEYOND-2020”, organized by Bankura University, Bankura, West Bengal, India, on 29<sup>th</sup> August’2020.

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience. I am available to undertake any assignment in case of an award. I understand that any misstatement, qualification, or misrepresentation described herein may lead to my disqualification or dismissal by the client.

**Ajit Biswas**

**Assistant Professor of Physics**

Dr. Bhupendra Nath Dutta Smriti Mahavidyalaya