CURRICULUM VITAE



SAMIRON KUMAR SAHA

Professor,
Department of Physics,
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Career Objective:

I aim to involve myself in teaching and research activities and help the students better understand science and technology through a better understanding of basic and advanced physics.

Professional Experience:

1. 2nd April 2012 – 1st October 2014
   Lecturer, Department of Physics
   Pabna University of Science and Technology, Pabna-6600, Bangladesh
2. 2nd October 2014 to 21st December, 2020
   Assistant Professor, Department of Physics
   Pabna University of Science and Technology, Pabna-6600, Bangladesh
3. 22nd December 2020 to 21st December 2024
   Associate Professor, Department of Physics
   Pabna University of Science and Technology, Pabna-6600, Bangladesh
4. 22nd December 2024 to Present
   Professor, Department of Physics
   Pabna University of Science and Technology, Pabna-6600, Bangladesh
5. July 2018 to September 2020
   PhD Fellow (Abroad), Bangabandhu Science and Technology Fellowship Trust
6. October 2017 to September 2020
   Research Assistant, Graduate School of Science and Technology, Department of Bioscience, Shizuoka University, Japan

Administrative Experience:

1. Director, Student Advisor Office,
   Pabna University of Science and Technology, Pabna, Bangladesh
   From 10.02.2021 to 09.02.2023.

Last Degree Awarded:

Doctor of Philosophy (PhD) in Bioscience, Obtained in September 2020, Shizuoka University, Japan.

Professional Awarded:

1. Best Oral Presentation Award at the 10th Conference of Bangladesh Crystallographic Association, 2025, arranged by the Bangladesh Crystallographic Association (BCA) and the Department of Physics, BUET, December 11-12, 2025, Paper ID BPP 01.

Research Work:

i. M.S. Thesis entitled **"3D Phantom Studies for Measuring Liquid Volume in Stomach Using 6-Electrode Focused Impedance Method"** under the supervision of Professor Golam Dastegir Al-Quaderi, Department of Physics, and the co-supervision of Professor Dr. K Siddique-e-Rabbani, Department of Biomedical Physics and Technology, University of Dhaka.

ii. PhD Thesis entitled **"Membrane Tension in Negatively Charged Lipid Bilayers under Osmotic Pressure and its Effects on their Membrane Dynamics"** under the supervision of Professor Dr. Masahito Yamazaki, Integrated Bioscience Section, Graduate School of Science and Technology, Nanomaterials Research Division, Research Institute of Electronics, and Department of Physics, Faculty of Science, Shizuoka University, Shizuoka 422-8529, Japan.

iii. I served as a Research Assistant at Professor Dr. Yamazaki's Lab in the Department of Bioscience, Graduate School of Science and Technology, Shizuoka University, Japan, from October 2017 to September 2020.

Research Grants Received:

Sl.	Organization Offering the Grant	Project title	Period
1.	Pabna University of Science and Technology, Pabna- 6600, Bangladesh	Adsorption of Miglitol Anti-diabetic Drug on the Surface of $X_{12}Y_{12}$ (X= B, Al; Y= N, P) Nanocages: A DFT Study	2022-2023 Fiscal Year
2.	Pabna University of Science and Technology, Pabna- 6600, Bangladesh	The Effect of Adsorption of Miglitol Anti-diabetic Drug on the $B_{12}N_{12}$ and $XB_{11}N_{12}$ (where X= Al, Ga, In) Nanocages: A Comparative DFT Study with COSMO Insights	2023-2024 Fiscal Year
3.	Pabna University of Science and Technology, Pabna- 6600, Bangladesh	Investigation of the Adsorption Properties of Hydroxyurea Anti-cancer Drug with Transition Metal Doped Boron Nitride Fullerenes as a Drug-delivery Carrier: a DFT study and COSMO Insights.	2024-2025 Fiscal Year
4.	Pabna University of Science and Technology, Pabna- 6600, Bangladesh	Comparative investigation of Graphene and Aluminum Nitride Fullerene Interactions with Anti-Cancer Drugs: A DFT Approach	2025-2026 Fiscal Year

Supervision of Completed Project at Undergraduate Level:

Sl.	Level (B.Sc.)	Project Tile	Year
1.	01	The Isotopic Bone Scan Using a Gamma Camera	2014
2.	01	Monitor Unit Calculation for Photon and Electron Beam	2014
3.	01	Glomerular Filtration Rate: Tc-99m- DTPA Renography Method	2014
4.	01	Quality Assurance in High-Dose Rate Brachytherapy Treatment	2014
5.	01	Radiation Dose to Patients from Radiopharmaceuticals	2015
6.	01	High Dose Rate Brachytherapy in The Treatment of Cervical Cancer Using an Iridium Source	2015
7.	01	High Dose Rate Brachytherapy in The Treatment of Cervical Cancer with Cobalt 60	2015
8.	01	Brachytherapy Treatment Planning for Cervical Cancer	2015

Supervision of Completed Graduate Research Work:

Sl.	Level (Master's)	Project Title	Year
1.	01	Review of Measurement of Liquid Volume in the Stomach Using 6-Electrode Focused Impedance Method	2016

Sl.	Level (Master's)	Thesis Title	Year
1.	01	Adaptive Radiotherapy for Head and Neck Cancer of an Institutional Study with Limitations Source	2022

Member/Fellowship:

- Bangladesh Physical Society (BPS), Bangladesh, Life Member no.:
- Japanese Universities Alumni Association in Bangladesh (JUAAB), Life Member no.: JUAAB LM-1279
- Biophysical Society of Japan, Japan, Member no.: 8411
- Bangladesh Medical Physics Association (BMPA), Dhaka, Bangladesh.
- PhD (Abroad) Fellow, 2017-2018 (2nd Phase), Bangabandhu Science and Technology Fellowship Trust, Government of the People's Republic of Bangladesh

Attending Conferences:

- International conference on recent advances in physics, RAP 2010, March 27-29, 2010, Dhaka University, Bangladesh.
- National Conference on Development of Physics, BUET, 2011, Dhaka, Bangladesh.
- Regional conference on medical physics, 18 February 2011, Dhaka, Bangladesh.

Oral Presentations:

1. **Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Md. Abul Hasnat, Al-Amin, "A Comparative Study of Anti-Diabetic Drug Adsorption on $B_{12}N_{12}$ and $XB_{11}N_{12}$ (X = Ga, Al, In) Nanocages Using DFT and COSMO", the 6th Global Conference on Advanced Nanotechnology and Nanomaterials (NanoX 2026), Amsterdam, Netherlands, Organized by Global Nanotechnology Network, Canada, October 26-27, 2026.
2. **Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Al-Amin, Md. Abul Hasnat, "Comparative DFT and COSMO Study of Miglitol Adsorption on $B_{12}N_{12}$ and X doped $B_{11}N_{12}$ (where X= Ga, Al, In) Nanocages", the International Conference on Emerging Frontiers in Advanced Sciences and Technologies 2026 (EFAST 2026), Organized by Faculty of Science, and Life and Earth Science, Pabna University of Science and Technology (PUST), Bangladesh and Centre of Excellence for Advanced Computing, Universiti Malaysia Perlis (UniMAP), Malaysia, June 27-28, 2026, Paper ID 36.
3. **Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Al-Amin, Md. Abul Hasnat, "Comparative DFT and COSMO Study of Miglitol Adsorption on $B_{12}N_{12}$ and X doped $B_{11}N_{12}$ (where X= Ga, Al, In) Nanocages", the International Conference on Physics 2026, Exploring the Realm of Physics: Fundamentals to Frontiers, Bangladesh Physical Society (BPS2026) and Department of Physics, University of Dhaka, April 9-11, 2026, Presentation number IVB-MH01.
4. **Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Md. Abul Hasnat, Al-Amin, "The Adsorption Effect of an Anti-diabetic Drug on the Surface of $B_{12}N_{12}$ and $XB_{11}N_{12}$ (where X= Ga, Al, In) Nanocages: A Comparative DFT Study with COSMO Insights", the 10th Conference of the Bangladesh Crystallographic Association, arranged by the Bangladesh Crystallographic Association (BCA) and the Department of Physics, BUET, December 11-12, 2025, Paper ID BPP 01.
5. **Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Md. Abul Hasnat, Al-Amin, "The Adsorption Effect of an Anti-diabetic Drug on the Surface of $B_{12}N_{12}$ and $XB_{11}N_{12}$ (where X= Ga, Al, In) Nanocages: A Comparative DFT Study with COSMO Insights", 2nd International Conference on Recent Advances in Science and Technology (ICRAST 2025), Faculty of Science, University of Rajshahi, Bangladesh, November 14-15, 2025, Paper ID 32.
6. **Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Md. Abul Hasnat, "Adsorption of Miglitol Anti-diabetic Drug on the Surface of $X_{12}Y_{12}$ (X= B, Al; Y= N, P) Nanocages: A DFT and COSMO Insights", 1st International Conference on Science and Humanities for Sustainable Development (ICSHSD- 2025), Faculty of Science, Dhaka University of Engineering & Technology, Gazipur, October 23-24, 2025, ID 008.
7. **Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Md. Abul Hasnat, Al-Amin, "The Adsorption Effect of an Anti-diabetic Drug on the Surface of $B_{12}N_{12}$ and $XB_{11}N_{12}$ (where X= Ga, Al, In) Nanocages: A Comparative DFT Study with COSMO Insights", 12th International Conference on Physics in Medicine (ICPM-2025), Bangladesh Medical Physics Association (BMPA), Department of Biomedical Physics and Technology, University of Dhaka, October 16-17, 2025, Presentation number CP17.
8. Al-Amin, Samiul Alim, Priyanka Poddar, Abul Hasnat, Pretam K. Das, **Samiron Kumar Saha**, Abdul Mannan, M Rafiqul Islam, "Impact of Adaptive Radiotherapy on Dose Delivery in Head and Neck Cancer: Findings from A Limited-Resource Institution", 12th International Conference on Physics in Medicine (ICPM-2025), Bangladesh Medical Physics Association (BMPA), Department of Biomedical Physics and Technology, University of Dhaka), October 16-17, 2025, Presentation number CP22.
9. Al-Amin, Priyanka Poddar, Abdul Mannan, Abul Hasnat, Samiul Alim, Pretam K. Das, M Rafiqul Islam, **Samiron Kumar Saha**, "Adaptive Radiotherapy in Three-Dimensional Conformal Radiation Therapy for Head and Neck Cancer: A Single-Institute Experience and Implications for Clinical Practice", Seminar on Medical Physics, Institute of Nuclear Medical Physics (INMP), Bangladesh Atomic Energy Commission (BAEC), Savar, Dhaka, Bangladesh, June 24, 2025.
10. **Samiron Kumar Saha**, Rayhan Mostofa, Rituparna Ghosh, Faruak Ahmad, Abul Hasnat, Mahbubur Rahman Bhuiyan, Md. Rakib Hossain, Maliha Nishat, "Adsorption of Miglitol Anti-diabetic Drug on the Surface of $X_{12}Y_{12}$ (X= B, Al; Y= N, P) Nanocages: A DFT and COSMO Insights", National Conference on Physics-2025 Physics: Enigma and Beauty, Bangladesh Physical Society (BPS2025), February 6-7, 2025, Presentation number IVC-CP03

11. Al-Amin, Priyanka Poddar, Abdul Mannan, Abul Hasnat, Samiul Alim, Pretam K. Das, M Rafiqul Islam, **Samiron Kumar Saha**, "Adaptive Radiotherapy for Head and Neck Cancer of an Institutional Study with 3DCRT" National Conference on Physics-2025 Physics: Enigma and Beauty, Bangladesh Physical Society (BPS2025), February 6-7, 2025, Presentation number IIC-CP01

Poster Presentations:

1. **Antor Saha**, Md. Atikur Rahman, Samiron Kumar Saha, Shoriful Islam, "Pressure-induced tuning of optoelectronic properties in lead-free halide double perovskites Rb_2AB_6 (A=Te, Zr; B=Cl, Br): an ab initio investigation", the International Conference on Physics 2026, Exploring the Realm of Physics: Fundamentals to Frontiers, Bangladesh Physical Society (BPS2026) and Department of Physics, University of Dhaka, April 9-11, 2026, Abstract ID: pp-249.

2. **Samiron Kumar Saha**, Maliha Nishat, Rayhan Mostofa, Al-Amin, Abul Hasnat, "The Adsorption Effect of an Anti-diabetic Drug on the Surface of $B_{12}N_{12}$ and $XB_{11}N_{12}$ (where X= Ga, Al, In) Nanocages: A Comparative DFT Study with COSMO Insights", A National Conference on Physics for The Future: Exploring Matter, Energy, Life, and Cosmos, Department of Physics, Jashore University of Science and Technology, June 29, 2025, Presentation number pp- 07.

3. Al-Amin, Priyanka Poddar, Abdul Mannan, Abul Hasnat, Samiul Alim, Pretam K. Das, M Rafiqul Islam, **Samiron Kumar Saha**, "Adaptive Radiotherapy for Head and Neck Cancer of an Institutional Study", 4th International Conference on Medical Physics in Radiation Oncology (ICMPROI), Bangladesh Medical Physical Society (BMPS), BRAC University, SMPCR, February 13-15, 2025, Presentation number PP-21.

4. Md. Masum Billah, **Samiron Kumar Saha** and Masahito Yamazaki, "Effect of Osmotic Pressure on Antimicrobial Peptide Magainin 2- Induced Pore Formation and its Evolution", The 7th International Symposium on Biomedical Engineering (ISBE2022), November 25, 2022, Poster number 2-10-1600.

5. Md. Masum Billah, **Samiron Kumar Saha**, Md. Mamum Or Rashid, Farzana Hossain and Masahito Yamazaki, "Effect of osmotic pressure (Π) on antimicrobial peptide magainin 2 (Mag)-induced pore formations in giant unilamellar vesicles (GUVs)", The 59th Annual Meeting of the Biophysical Society of Japan (BSJ2021), November 25-27, 2021, Online Conference, Poster number 2-10-1600.

6. **Samiron Kumar Saha** and Masahito Yamazaki, "The Effect of Osmotic Pressure on the Transbilayer Movement (Flip-Flop) of Lipid Molecules", The 58th Annual Meeting of the Biophysical Society of Japan (BSJ2020), September 16-18, 2020, Online Conference.

7. **Samiron Kumar Saha**, Sayed Ul Alam Shibly and Masahito Yamazaki, "Estimation of Membrane Tension of DOPG/DOPC-GUVs Induced by Osmotic Pressure", The 6th International Symposium toward the Future of Advanced Research in Shizuoka University, March 5, 2020, Japan, PS-35.

8. Md. Mizanur Rahman Moghal, Md. Zahidul Islam, Farzana Hossain, **Samiron Kumar Saha,** and Masahito Yamazaki, "Effects of Membrane Potential on Interaction of Cell-Penetrating Peptides Transportan 10 with Single Vesicles", The 64th Annual Meeting of the Biophysical Society (BPS), February 15-19, 2020, San Diego, California, USA.

9. **Samiron Kumar Saha**, Sayed Ul Alam Shibly, and Masahito Yamazaki, "Estimation of Membrane Tension of DOPG/DOPC-GUVs Induced by Osmotic Pressure", The 4th International Symposium on Biomedical Engineering (ISBE2019), November 14-15, 2019, Act City Hamamatsu Congress Center, Hamamatsu, Japan, P1-08.

10. **Samiron Kumar Saha**, Sayed Ul Alam Shibly and Masahito Yamazaki, "Estimation of Membrane Tension of DOPG/DOPC-GUVs Induced by Osmotic Pressure" The 57th Annual Meeting of the Biophysical Society of Japan (BSJ2019), September 24-26, 2019, Miyazaki, Japan, 2Pos180.

11. Md. Mizanur Rahman Moghal, Md. Zahidul Islam, **Samiron Kumar Saha** and Masahito Yamazaki, "Effects of Membrane Potential on Interaction of Cell-Penetrating Peptides Transportan 10 with Single Vesicles", The 57th Annual Meeting of the Biophysical Society of Japan (BSJ2019), September 24-26, 2019, Miyazaki, Japan, 2Pos171*.

12. Md. Mizanur Rahman Moghal, Md. Zahidul Islam, **Samiron Kumar Saha** and Masahito Yamazaki, "Effects of Membrane Potential on Interaction of Cell-Penetrating Peptides Transportan 10 with Single Vesicles", The Annual Meeting of Cooperative Research at Research Center of Biomedical Engineering, Tokyo Medical and Dental College, March 8, 2019, Japan.

13. Moynul Hasan, **Samiron Kumar Saha**, and Masahito Yamazaki, "Effect of Membrane Tension on Transbilayer Movement of Lipids", The 5th International Symposium toward the Future of Advanced Researches in Shizuoka University, March 6, 2019, Japan, Ps-G13.
14. Moynul Hasan, **Samiron Kumar Saha**, Rajib Ahmed, and Masahito Yamazaki, "Effect of Membrane Tension on Transbilayer Movement of Lipids", The 20th Takayanagi Kenjiro Memorial Symposium and the 4th International Conference on Nano Electronics Research and Education (ICNERE2018), November 27-29, 2018, Shizuoka University, Hamamatsu, Japan, PS-24, pp.135-136.
15. Moynul Hasan, **Samiron Kumar Saha**, and Masahito Yamazaki, "Effect of Membrane Tension on Transbilayer Movement of Lipids" The 56th Annual Meeting of the Biophysical Society of Japan (BSJ2018), September 15-17, 2018, Okayama, Japan, 1Pos087, pp. S136.

List of Publications:

1. **"Adaptive 3D-CRT with CCRT for Head and Neck Cancer: Resource Limited Single Center Experience in Bangladesh",** Al-Amin, Pretam Kumar Das, **Samiron Kumar Saha**, Abdul Mannan, Afroja Begum Tania, Samiul Alim, Priyanka Poddar, Abul Hasnat, and Rafiqul Islam, Radiological Physics and Technology (Springer Nature), Volume 19, Issue 3, pp 1241 – 1254, 2026, Online ISSN: 1865-0341, Print ISSN: 1865-0333, impact factor 1.6, https://doi.org/10.1007/s12194-026-01105-2
2. **"Pressure-Induced Tuning of Band Gap and Physical Properties in Lead-Free Perovskites Rb_2AB_6 (A = Te, Zr; B = Cl, Br) for Optoelectronic Applications",** Antor Saha, Md. Atikur Rahman, Asma Khatun, Afia Sadaf, Md. Hafijur Rahman. Shoriful Islam, Umme Salma, **Samiron Kumar Saha**, Ahmad Irfan, Optical and Quantum Electronics (Springer Nature), Volume 58, Article Number 422, pp 1 – 42, 2026, Online ISSN: 1572-817X, Print ISSN: 0306-8919, impact factor 3.3, https://doi.org/10.1007/s11082-026-09001-0.
3. **"Investigation of the adsorption nature of the hydroxyurea anti-cancer drug with pristine and transition metal (Co, Fe, Ni)-doped boron nitride fullerenes as a potential drug-delivery vehicle: a DFT study and COSMO analysis", Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Md. Abul Hasnat, Md. Atikur Rahman, Md. Hafijur Rahman, Materials Advances, Published by Royal Society of Chemistry, Volume 7, 2026, Page: 3362-3372, Issue 6, ISSN: 2633-5409, impact factor 4.7, https://doi.org/10.1039/D5MA01286D.
4. **"Simulation of intracellular delivery through permeabilized multivesicular vesicles"**, Shah Sajnin Anna, Shahariar Emon, Md Asaduzzaman, Shovon Saha, Md Atikur Rahman, Mohammad Abu Sayem Karal, Md Lokman Hossen, Samiron Kumar Saha, Hiromitsu Takaba, Md Akhtaruzzaman, Md Khorshed Alam, European Biophysics Journal (Springer Nature Link), Volume 55, Issue 1, pp. 89-99, 2026, Print ISSN: 0175-7571, Online ISSN: 1432-1017, Impact factor 2.4, doi: 10.1007/s00249-026-01819-6.
5. **"Effect of hydrostatic pressure for tuning the band gap of lead-free perovskites $A_2TlGaCl_6$ (A=Cs, Rb) aimed at optoelectronic device applications",** Antor Saha, Md. Atikur Rahman, Ahmad Irfan, Mst. Asma Khatun, Samiron Kumar Saha, Dayal Chandra Roy, Md. Ferdous Rahman, Optical Materials Express (Optica publishing group), Volume 15, Issue 11, pp. 2948-2974, 2025, ISSN: 2159-3930, impact factor 3.1, https://doi.org/10.1364/OME.576579.
6. **"The Adsorption Effect of an Anti-diabetic Drug on the Surface of $B_{12}N_{12}$ and $XB_{11}N_{12}$ (where X= Ga, Al, In) Nanocages: A Comparative DFT Study with COSMO Insights", Samiron Kumar Saha**, Maliha Nishat, Md. Rayhan Mostofa, Md. Abul Hasnat, Al-Amin, Chemical Physics Letters, Copyright &copy, Elsevier B.V. All rights reserved, Article Number 142332, Volume 878, 2025, Print ISSN: 0009-2614, Online ISSN: 1873-4448, impact factor 3.1, https://doi.org/10.1016/j.cplett.2025.142332.
7. **"Ab-initio technique to examine the mechanical, electronic, optical and thermal features of direct band-gap semiconductors APtSn (A= Ti, Zr, Hf, Th): An extended review",** Dayal Chandra Roy, Norah Algethami, **Samiron Kumar Saha**, Mst. Asma Khatun, Md. Zahid Hasan, Mufrat Montasir, Nazmul Islam Nahid, Md. Ferdous Rahman, Md. Atikur Rahman, Optical and Quantum Electronics (Springer Nature), Volume 57, Article Number 393, pp 1 – 35, 2025, Online ISSN: 1572-817X, Print ISSN: 0306-8919, impact factor 3.3, https://doi.org/10.1007/s11082-025-08303-z.
8. **"Ab-initio Simulation on Structural, Mechanical, Electronic, Optical and Thermodynamic Properties of Disilicide materials ThX_2Si_2 (X = Ru, Rh, Ir, Pt)"**, Md. Atikur Rahman, Rukaia Khatun, Mst. Asma Khatun, **Samiron Kumar Saha**, Md. Zahid Hasan, Ahmad Irfan, Md. Mukter Hossain, Aslam Hossain, Md. Hasan Mia, Sarah Chaba Mouna, Optical and Quantum Electronics (Springer Nature), Volume 57, article number 330, pp 1 – 39, 2025, Online ISSN: 1572-817X, Print ISSN: 0306-8919, impact factor 3.3, https://doi.org/10.1007/s11082-

025-08199-9.

9. **"Pressure Effects on Physical Properties of Binary Rare Earth Mono-Pnictide *YBi* for Optoelectronic Applications"**, Md. Lokman Ali, Zahid Hasan, Shanzida Naznin Mim, **Samiron Kumar Saha**, Advanced Theory and Simulations (Wiley), Volume 8, Issue 4, pp 1 – 21, April 2025. Online ISSN: 2513-0390, impact factor 3.5, DOI: 10.1002/adts.202401066.
10. **"Investigation of the Adsorption of Miglitol Anti-diabetic Drug on the Surface of $X_{12}Y_{12}$ (X= B, Al; Y= N, P) Nanocages: A DFT and COSMO Insights", Samiron Kumar Saha**, Md. Rayhan Mostofa, Rituparna Ghosh, Md. Faruak Ahmad, Md. Abul Hasnat, Md. Mahbubur Rahman Bhuiyan, Md. Rakib Hossain, Maliha Nishat, Computational and Theoretical Chemistry, volume 1241, 2024, 114873, Online ISSN: 2210-2728. Print ISSN: 2210-271X, Copyright © 2024 Elsevier B.V. All rights reserved.; 2024, DOI: 10.1016/j.comptc.2024.114873, impact factor 3.0.
11. **"Enhanced physical properties of stable lead-free oxide double perovskite Ba_2TbBiO_6 for photovoltaics: Effects of Sb doping"**, **Samiron Kumar Saha**, Mithun Khan, Zahid Hasan, Dayal Chandra Roy, Md. Lokman Ali, AIP Advances (AIP Publishing), Volume 14, Issue 3, 035013 (2024), pp. 01-12, ISSN: 2158-3226 (web), DOI: 10.1063/5.0197633, impact factor 1.4.
12. **"First-Principles Study of the Physical Properties of CuV_2S_4 under Pressure"**, Md. Atikur Rahman, Jannatul Ferdose Lubna, Sushmita Sarker, Rukaia Khatun, Md. Zahidur Rahaman, Khandaker Monower Hossain, **Samiron Kumur Saha**, Md. Rasheduzzaman, Md. Zahid Hasa, 2022, Physics of the Solid State (Springer), Volume 64, Issue 8, pp. 929–941, ISSN: 1063-7834 (print); 1090-6460 (web), DOI:10.21883/PSS.2022.08.54607.003, impact factor 0.9.
13. **"Effect of Osmotic Pressure on Pore Formation in Lipid bilayers by the Antimicrobial Peptide Magainin 2"** Md. Masum Billah, **Samiron Kumar Saha**, Md. Mamum Or Rashid, Farzana Hossain and Masahito Yamazaki, 2022, Physical Chemistry Chemical Physics (Royal Society of Chemistry), Volume 24, Issue 11, pp. 6716–6731 ISSN: 1463-9076 (print); 1463-9084 (web), DOI: 10.1039/D1CP05764B, impact factor 3.3.
14. **"Membrane Tension in Negatively Charged Lipid Bilayers in a Buffer under Osmotic Pressure" Samiron Kumar Saha**, Sayed Ul Alam Shibly, and Masahito Yamazaki, 2020, The Journal of Physical Chemistry B (ACS), Volume 124, Issue 27, pp. 5588–5599, ISSN: 1520-6106 (print) 1520-5207 (web), DOI: 10.1021/acs.jpcb.0c03681, impact factor 2.99.
15. **"Role of Membrane Potential on Entry of Cell-Penetrating Peptides Transportan 10 into Single Vesicles"** Md. Mizanur Rahman Moghal, Md. Zahidul Islam, Farzana Hossain, **Samiron Kumar Saha** and Masahito Yamazaki, Biophysical Journal, 2020, Volume 118, Issue 1, pp. 57-69, ISSN: 0006-3495 (print), 1542-0086 (online), DOI: 10.1016/j.bpj.2019.11.012, impact factor 3.85.
16. **"The Role of Membrane Tension on the Action of Antimicrobial Peptides and Cell-Penetrating Peptides in Biomembranes"** Moynul Hasan, Md. Mizanur Rahman Moghal, **Samiron Kumar Saha,** Masahito Yamazaki, Biophysical Reviews (Springer), 2019; 11 (3), pp. 431–448, ISSN: 1867-2450 (Print) 1867-2469 (Online), DOI: 10.1007/s12551-019-00542-1, impact factor 4.9 (2023).
17. **"Effects of Transmembrane Asymmetric Distribution of Lipids and Peptides on Lipid Bilayers"** Victor Livadnyy, Moynul Hasan, **Samiron Kumar Saha**, Masahito Yamazaki, The Journal of Physical Chemistry B (ACS), 2019, 123, ISSN: 1520-6106 (print) 1520-5207 (web), pp. 4645−4652, DOI: 10.1021/acs.jpcb.9b01562, impact factor 2.86.
18. **"Effects of Membrane Tension on Transbilayer Movement of Lipids"** Moynul Hasan, **Samiron Kumar Saha,** Masahito Yamazaki, The Journal of Chemical Physics (American Institute of Physics), 148, 24, pp. 245101 (2018), ISSN: 1727-6179 (Print); 2408-8358 (Online), DOI: 10.1063/1.5035148, impact factor 2.97.
19. **"3D Sensitivity of 8-Electrode FIM through Experimental Study in a Phantom" Samiron Kumar Saha,** Golam Dastegir Al-Quaderi, K Siddique-e-Rabbani, Bangladesh Journal of Medical Physics Volume 6, No.1,56-65 (2013), ISSN: 1727-6179 (Print); 2408-8358 (Online), DOI: 10.3329/bjmp.v6i1.19759, impact factor 0.32

Educational Qualifications:

Degree	Subject Or Group	Year	Institution	Result	Mark (%)
Doctor of Philosophy (PhD)	Bioscience	2020	Shizuoka University, Japan	Awarded	

M.S. (Thesis)	Physics	2008 (Held in 2010)	University of Dhaka	First Class (5^{th} position)	71.33
B.Sc. (Honors)	Physics	2007 (Held in 2009)	University of Dhaka	First Class (8^{th} position)	61.90
H.S.C.	Science	2002	Notre Dame College, Dhaka	First Division	77.8
S.S.C.	Science	2000	Dhoba Khola Coronation (Natiabari) High School, Pabna	First Division	82.7

Core Courses:

PhD: Japanese Language, Molecular Life Science, Practical Use Technology, English Conversation II, Biomaterial, Environmental Measurement.

M.S.: Computational Physics, Non-Equilibrium Statistical Mechanics, Nuclear Physics-I: Nuclear Reaction Theory and Structure, Advanced Laser Physics-I.

B.Sc.: Mechanic, Oscillations and Properties of Matter, Thermal Physics, Electricity and Magnetism, Calculus-I, Linear Algebra-I, Fundamentals of Chemistry, Chemistry Laboratory, Basic Statistics, Waves and Optics, Electronics, Mathematical Physics, Atomic and Molecular Physics, Advanced Language Skills, Calculus-II, Ordinary Differential Equation, Numerical Analysis, Principles of Statistics, Classical Mechanics and Special Theory of Relativity, Classical Electrodynamics, Quantum Mechanics, Nuclear Physics, Solid State Physics-I, Programming and Scientific Computing, Quantum Mechanics II, Electronics and Computer, Solid State Physics-II, Statistical Mechanics, Nuclear Physics-II, Methods of Experimental Physics, Laboratory experiments during the four years.

Language Proficiency:

Considerably good both in written and spoken English and Bengali. The medium of instruction was English at the Bachelor of Science (Honors), Master of Science levels, and the PhD program. I am taking my classes in English at my university.

Computer Skills:

Operating Systems	:	Windows 2000, Windows XP, Windows Vista, Windows 7, and 10, and Linux
Application Software	:	MS Office, Origin (6.1,18, 20), Adobe Photoshop, Adobe Illustrator, Materials Studio 2023, Gauss View 6.0, Gaussian 09W
Programming Language	:	C, C^{++}, FORTRAN 98

Practical Skills:

- Research capability in the laboratory.
- Report writing ability.
- Interact with people of different jobs and tastes.

Core Strengths:

- Able to work in any challenging environment.
- Commitment to teamwork.
- Ability to work under pressure and be punctual to any deadline.
- Willingness to share information and ideas.
- Commitment to continuous learning, skill development.
- Research and analysis.
- Excellent intercommunication skills.
- Dynamic, amicable, smart.
- Sincere, punctual, disciplined.

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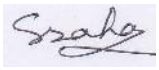
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Certification:

I certify that all information stated in the curriculum vitae is true and complete to the best of my knowledge. I authorize you to verify the information provided in the curriculum vitae.



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