Name: Dr. Prosenjit Biswas
Designation: Assistant Professor
Qualification: M.Sc., Ph.D. (Physics)
Date of Joining: 10 th December, 2019
Email: prosenbiswas1993@gmail.com
Specialization: X-ray Crystallography
Research Interest/Area(s): Material Science

Academic Qualification:

Qualification	Institution	Year
M.Sc.	Jadavpur University	2016
Ph.D.	Jadavpur University	2022

Research Experience:

Designation	Place of Work/ Institution	Duration	
		From	To
Junior Research Fellow	Jadavpur University	January 2017	December 2018
Senior Research Fellow	Jadavpur University	January 2019	November 2019

Teaching Experience:

Designation	Place of Work/Institution	Duration	
		From	To
Assistant Professor	Kalimpong College	December 2019	Continuing

Research Interest:

The synthesis of structural nanomaterials, polymer-based nanocomposites for the development of energy harvester such as piezoelectric, triboelectric, hybrid nanogenerator, electronic skin, piezo sensor and energy storage material.

Technical Skills:

Instruments expertise: FESEM, AFM, XRD, FTIR, Electrometer, DSO, Impedance analyser, Zeta sizer, optical microscopes, UV-visible spectroscopy, PL spectroscopy etc.

Achievements/Awards:

1. DST Inspire Fellow (2012-2016)
2. Secured 1st position under the category of Basic Science in "National Anveshan Student's Research Convention (2017-2018)" in national level.

Personal Link for website/youtube/facebook/etc.:

Google Scholar Link: **https://scholar.google.com/citations?hl=en&user=Rz5Mta8AAAAJ**

Research Gate Link: **https://www.researchgate.net/profile/Prosenjit-Biswas-2**

Publications:

International Journal					
Sl. No.	**Title of the article with page No.**	**Name of the Journal**	**ISSN**	**Vol. & Issue No**	**Year of Publication**
1.	Er^{3+}/Fe^{3+} Stimulated Electroactive, Visible Light Emitting, and High Dielectric Flexible PVDF Film Based Piezoelectric Nanogenerators: A Simple and Superior Self-Powered Energy Harvester with Remarkable Power Density https://doi.org/10.1021/acsami.7b08008	ACS applied materials & interfaces	1944-8244 (print) 1944-8252 (web)	9(27)	2017
2.	Superior Performances of in Situ Synthesized ZnO/PVDF Thin Film Based Self-poled Piezoelectric Nanogenerator and Self-charged Photo-power Bank with High Durability https://doi.org/10.1016/j.nanoen.2017.11.065	Nano Energy	2211-2855	44	2018
3.	In situ Synthesized Electroactive and Large Dielectric BaF2/PVDF Nanocomposite Film for Superior and Highly Durable Self-Charged Hybrid Photo-power Cell https://doi.org/10.1016/j.enconman.2018.06.050	Energy conversion and management	0196-8904	171	2018
4.	Bio-Waste Crab Shell extracted Chitin Nanofiber Based Superior Piezoelectric Nanogenerator https://doi.org/10.1039/C8TA04074E	J. Mater. Chem. A	2050-7496	6	2018
5.	In Situ Synthesized SrF2/polyvinylidene Fluoride Nanocomposite Film Based Photopower Cell with Imperious Performance and Stability https://doi.org/10.1016/j.electacta.2018.06.054	Electrochimica Acta	0013-4686	282	2018
6.	Antimicrobial and Biocompatible Fluorescent Hydroxyapatite-chitosan NanocompositeFilms for Biomedical Applications https://doi.org/10.1016/j.colsurfb.2018.07.028	Colloids and Surfaces B: Biointerfaces	0927-7765	171	2018
7.	Portable Self-Powered Piezoelectric Nanogenerator and Self-Charging Photo-Power PackUsing In-Situ Formed Multifunctional Calcium Phosphate Nano-	Langmuir	0743-7463	35	2019

	rod-Doped PVDF Films https://doi.org/10.1021/acs.langmuir.9b03264				
8.	Highly Efficient and Durable Piezoelectric Nanogenerator and Photo-Power Cell Based on CTAB- Modified-Montmorillonite Incorporated PVDF Film https://doi.org/10.1021/acssuschemeng.8b05080	ACS Sustainable Chem. Eng.	2168-0485	7 (5)	2019
9.	Self-charging Photo-power Cell Based on a Novel Polymer Nanocomposite Film with High Energy Density and Durability https://doi.org/10.1038/s41428-019-0230-3	Polymer Journal (Nature)	0032-3896	51	2019
10.	Photo-Rechargeable Organic–Inorganic Dye-Integrated Polymeric Power Cell with Superior Performance and Durability https://doi.org/10.1021/acs.langmuir.9b00622	Langmuir	0743-7463	35	2019
11.	Essential Oil Impregnated Luminescent Hydroxyapatite: Antibacterial and Cytotoxicity Studies https://doi.org/10.1016/j.msec.2020.111190	Materials Science & Engineering C	1873-0191	116	2020
12.	Sustainable and Superior Polymeric Piezoelectric Nanogenerator for Sensing Human Body Vibration, Air Flow and Water Wave https://doi.org/10.1063/5.0034879	Applied Physics Letters	1077-3118	118	2021
13.	Development of a Sustainable and Biodegradable Sonchus asper Cotton Pappus Based Piezoelectric Nanogenerator for Instrument Vibration and Human Body Motion Sensing with Mechanical Energy Harvesting Applications https://doi.org/10.1021/acsomega.1c03374	ACS omega	2470-1343	6(43)	2021
14.	Self-Polarized ZrO2/Poly (vinylidene fluoride co hexafluoropropylene) Nanocomposite Based Piezoelectric Nanogenerator and Single Electrode Triboelectric Nanogenerator for Sustainable Energy Harvesting	Physica status solidi (a)	1862-6300	218(9)	2021

	from Human Movements https://doi.org/10.1002/pssa.202000695				
15.	Piezoelectric activity assessment of size-dependent naturally acquired mud volcano clay nanoparticles assisted highly pressure sensitive nanogenerator for green mechanical energy harvesting and body motion sensing https://doi.org/10.1016/j.nanoen.2022.107628	Nano Energy	2211-2855	102	2022
16.	High β-crystallinity comprising nitrogenous carbon dot/PVDF nanocomposite decorated self-powered and flexible piezoelectric nanogenerator for harvesting human movement mediated energy and sensing weights https://doi.org/10.1016/j.ceramint.2022.10.070	Ceramics International	1873-3956	49 (3)	2023