CURRICULUM VITAE

DR. SHILPA MAITY

Phone No: 9749868971 / 9874735078 Email: shilpamaity29@gmail.com



OBJECTIVE

Devoting myself to the benefit of science & human society and quest to learn new developments & work in real challenging environment that enables me to be the part of the latest developments.

ACADEMICS

> PhD.

University : Jadavpur University Kolkata.

Specialization: Condensed Matter Physics/Material Science

Research Area: Study of the nanostructured thermoelectric materials (both inorganic and

organic), Nanocomposites, Structural and Electrical parameters.

Thesis Title: Thermoelectric Characterization of Functionalized Poly (3,4)

ethylenedioxythiophene) and its Nanocomposites for Device Applications.

Year of completion: 2024

M.Sc. M.Sc.

University : Techno India University, W.B., India.

Specialization: Material Science

Result : 9.26(CGPA) Year of passing: 2015

B.Sc. (Hons. in Physics)

Institution : Midnapore College, Midnapore W.B., India. University : Vidyasagar University Midnapore W.B., India.

Results : 64.25% Year of passing: 2013

School level examinations results:

NAME OF THE EXAMINATION	NAME OF THE INSTITUTION	YEAR OF PASSING	BOARD/UNIV ERSITY	TOTAL	PERCENTAGE	DIVISION
M.P	MAHISHADAL GAYESWARY GIRLS' HIGH SCHOOL	2008	W.B.B.S. E	710	88.75	1 ST
H. S	MAHISHADAL RAJ HIGH	2010	W.B.C.H. E	393	78.6	1ST

WORK EXPERIENCE

- ➤ Attached to Jogamaya Devi College, Kolkata, WB, as visiting faculty in the Department of Physics from August 2016 to June 2017.
- ➤ Attached to Meghnad Saha Institute of Technology, Kolkata, WB, as visiting faculty in the department of Basic Science and Humanities (Physics) from August 2017 to December 2019.
- Attached to Meghnad Saha Institute of Technology, Kolkata, WB, as visiting faculty in the department of Basic Science and Humanities (Physics) from August 2023 to February 2024.
- Act as an examiner for copy checking conducted by Maulana Abul Kalam Azad University of Technology, WB (MAKAUT), 2023.
- Act as an External Examiner for Practical examination conducted by Maulana Abul Kalam Azad University of Technology, WB (MAKAUT), 2024.
- Attached to Swami Vivekananda University, Barrackpore, WB, as Assistant Professor in the Department of Basic Science (Physics) from June 2024 to till date.

RESEARCH EXPERIENCE

- A post M.Sc. project work on "Enhancement of Thermoelectric Properties of Polyaniline" has been done under the guidance of Dr. Krishanu Chatterjee, Department of Physics, Techno India University from August 2015 to June 2016.
- ➤ Project investigator from year 2020 under "DST Women Scientist Scheme A".

 Title of the project "Development of high efficient cost effective eco-friendly organic thermoelectric generators by using polymer-nanoparticle composites." (Completed)

RESEARCH INTEREST

- > Synthesis of Conducting Polymers and its Nanocomposites.
- Thermoelectric performance of the Conducting polymers and its Nanocomposites

PROFESSIONAL

Computer Knowledge:

- 1. Basic knowledge in computer.
- 2. Completed a Course of CITA from YOUTH COMPUTER CENTRE with A+ grade
- 3. Enrolled in the **Data Base Management System course** conducted by AICTE approved FDP program.

> Workshop attended:

- **1.** Two Day Workshop on Materials Characterization Techniques, Jadavpur University, Kolkata, October 4-5, 2016.
- **2.** *One Day National Symposium on Nanotechnology*, Birla Industrial and Technological Museum, Kolkata, 25th March, 2017.

> Conferences attended:

1. 22nd West Bengal State Science and Technology Congress, North Bengal University,

West Bengal, 28th February – 1st March, 2015.

- 2. 103rd Indian Science Congress, University of Mysore, Mysore, January 3-7, 2016
- 3. 7thVidyasagar Satyendra Nath Bose National Workshop 2016 on Theory and Application of Advanced Materials (TAAM 2016), Vidyasagar University, March 15-17, 2016.
- **4.** Recent Trend in Composite Material 2016, Jadavpur University, Kolkata, 18th August, 2016.
- 5. Frontiers in Modern Physics, Jogamaya Devi College, Kolkata, November 21-22, 2016.
- **6.** 61st DAE Solid State Physics Symposium, KIIT University, Bhubaneswar, December 26-30, 2016.
- 7. International Conference on Emerging Trends in Chemical Sciences, Department of Chemistry, Dibrugarh University, February 26 28, 2018.

> Awards:

- **1.** Silver Medal for securing the second position in Master of Science (Physics) from Techno India University. (9.26/10)
- **2.** 1st position in the eastern zone research convention, **ANVESHAN- 2018**, organized by the Association of Indian Universities (AIU) held on 18-19 Feb 2019, Central University of Jharkhand, Ranchi.
- **3.** 2nd position in National research convention, **ANVESHAN- 2018**, organized by the Association of Indian Universities (AIU) held on 12-14 March 2019, Ganpat University, Gujarat.

PUBLICATIONS

- **1. Shilpa Maity**, Subhra Rakshit, Sukhen Das, Krishanu Chatterjee*, *Enhanced thermoelectric performance of template based nanostructured polyaniline*, <u>AIP Conference Proceedings 1832, 110053 (2017)</u>
- **2. Shilpa Maity**, Nayim Sepay, Chiranjit Kulsi, Arpan Kool, Sukhen Das, Dipali Banerjee, Krishanu Chatterjee*, *Enhancement of Thermoelectric Performance in Oligomeric PEDOT-SWCNT Nanocomposite via Band Gap Tuning*, Chemistry Select, 3,2018, 8992-8997
- **3.** Shubham Roy, Kunal Pal, Souravi Bardhan, **Shilpa Maity**, Dipak Kr. Chanda, Saheli Ghosh, Parimal Karmakar, and Sukhen Das*, *Gd(III)-Doped Boehmite Nanoparticle: An Emergent Material for the Fluorescent Sensing of Cr(VI) in Wastewater and Live Cells*, Inorganic Chemistry, 58, 2019, 13, 8369-8378.
- **4. Shilpa Maity**, Chiranjit Kulsi, Shiladitya Banerjee, Sukhen Das, Krishanu Chatterjee*, Dependence of thermoelectric power and electrical conductivity on structural order of PEDOT-Tos-graphene nanocomposite via charge carrier mobility, Material Research Express 6, 2019, 105095.
- **5. Shilpa Maity**, Salini Datta, Megha Mishra, Shiladitya Banerjee, Sukhen Das, Krishanu Chatterjee*, *Poly (3,4 ethylenedioxythiophene)-tosylate—Its synthesis, properties and various applications*, Polymer for Advanced Technologies. 2020, 1–19.

- **6. Shilpa Maity**, Umme Karnij Salma Parvin, Sukhen Das, Krishanu Chatterjee*, *Polymer chalcogenides—new smart materials for thermoelectric applications*, <u>Smart Mater. Struct.</u> 31, 2022, 073001 (20pp).
- 7. Shilpa Maity, Aniket Mondal, Sukhen Das, Krishanu Chatterjee*, "Improved thermoelectric properties of selenium functionalized pedot." ChemNanoMat. 10, 2024, e202400015(1-9)

Book Chapters

- MD Alif Bakas, Krishanu Chatterjee, Shilpa Maity*, "Dye Sentisized Solar Cell Based On PEDOT-TOS Counter Electrode" ISBN No.- 978-93-6135-429-8, 2024, https://doi.org/10.22271/ed.book.2938
- 2. Sudip Sarkar, Krishanu Chatterjee, **Shilpa Maity***, "An Extensive Study of Photo thermoelectric materials For Device Applications", **ISBN No.-** 978-93-6135-429-8, 2024, https://doi.org/10.22271/ed.book.2938
- 3. Swagata Majumder, Krishanu Chatterjee, **Shilpa Maity***, Synthesis and Thermoelectric Characterization of Pedot-Tos/Tin Selenide Nanocomposite*, **ISBN No.-** 978-93-6135-429-8, 2024, https://doi.org/10.22271/ed.book.2938
- **4.** Subhra Raksit, Krishanu Chatterjee, **Shilpa Maity***, Enhanced Thermoelectric Properties of pTSA doped PEDOT/Bismuth Nanocomposite", **ISBN No.-** 978-93-6135-429-8, 2024, https://doi.org/10.22271/ed.book.2938
- 5. Shilpa Maity, Krishanu Chatterjee*, Thermoelectric Propertise of Zinc-Incorporated Reduced Graphene Oxide-Polyaniline Composite", ISBN No.- 978-93-6135-429-8, 2024, https://doi.org/10.22271/ed.book.2938

High-end equipment's handled

- ➤ UV-Vis
- ➤ LCR meter
- > Thermoelectric set up
- Data Acquisition System
- Centrifuge

> Languages Known:

- 1. Bengali Can read write and speak
- 2. English Can read write and speak
- 3. Hindi Can speak

EXTRA CURRICULUM ACTIVITY

➤ Attended NCC

PERSONAL STRENGTHS

- Positive Attitude
- Dedication & Determination
- ➤ Willingness to Learn
- > Adaptability

HOBBY

- > Traveling
- ➤ Listening Music
- Cooking

REFERENCES

1. Prof. Sukhen Das

Professor,

Department of Physics, Jadavpur University, Kolkata.

Ph: 9433091337

2. Prof. Papiya Nandi

Former Professor, Scientist Jadavpur University, Kolkata

Ph: 9830021785

3. Dr. Krishanu Chatterjee

Associate Professor and Head, Department of Physics, Techno India University, W.B. Kolkata.

Ph: 9051227187

4. Dr. Sumit Som

Associate Professor and Head, Basic Science and Humanities, Meghnad Saha institute of Technology, Kolkata, WB

Ph: 7003212922

PERSONAL DETAILS

NAME : SHILPA MAITY

FATHER'S NAME : SUSANTA KUMAR MAITY MOTHER'S NAME : SUKLA PANDA MAITY

ADDRESS : F-15, SEC-A, PATULI, NATUNPARA,

KOLKATA-700084

NATIONALITY : INDIAN MARITAL STATUS : MARRIED DATE OF BIRTH : MAY 29, 1992

I hereby declare that the above statements are true to the best of my knowledge and belief.

Place: Kolkata	
Date:	
	(Signature)