



Dr. IPSITA CHINYA

EXPERIENCE

June 2022 - Current

Assistant Professor and Head | Department of Chemical Engineering | Dr. V. R. Godhania College of Engineering & Technology | Porbandar, Gujrat, India|

April 2021 - April 2022

Post-doctoral Fellow | School of Minerals, Metallurgical and Materials Engineering | Indian Institute of Technology-Bhubaneswar | Argul, Jatni, Odisha, India|

Supervisor: Dr. Amritendu Roy

Topic: *Development of flexible hybrid piezoelectric nanogenerator for self-powered devices and bio-sensors applications*

Teaching assistant (Autumn Semester, 2021)

Helping as assistant to the supervisor for: BTP and MTP

July 2019 - April 2021

Postdoctoral Research Fellow | Department of Metallurgical Engineering and Materials Science | Indian Institute of Technology Bombay | Mumbai, India|

Supervisor: Prof. Arup Ranjan Bhattacharyya

Topic: *Design and fabrication of conducting material decorated PVDF based piezocomposite nanogenerator for flexible self-powered electronics and sensor application*

Teaching assistant (Polymer science and engineering lab, M.Tech and B.Tech.) Helping as assistant to the supervisor for BTP and MTP.

June 2019 – July 2019

Research Associate | Department of Chemical Engineering | Indian Institute of Technology Madras | Chennai, India|

Supervisor: Dr. Arvind K Chandiran

Topic: *Ferroelectric Photoelectrochemical Water-splitting.*

May 2012-July 2012

Industrial Training | In Plant Training in Haldia Petrochemicals Limited | Haldia, West Bengal, India

Industrial Project on 'An overview on HDPE plant (Slurry, Clean and Excellent (HPCX) Process by Mitsui Japan, using Zeigler-Natta catalyst) and study the characterization & testing in QA laboratory'.

EDUCATION

2019 |Ph.D| Engineering Sciences|

Academy of Scientific and Innovative Research, Ghaziabad, UP, India| 8.00 CGPA|

2015| M.Tech.| Glass and Ceramic Engineering|

Academy of Scientific and Innovative Research, Ghaziabad, UP, India|8.51 CGPA|

2013| Post B.Sc. B.Tech | Polymer Science and Technology|

University of Calcutta| Kolkata, India|CGPA: 8.41

2010|B. Sc | Chemistry (Hons.) |

Scottish Church College, University of Calcutta| Kolkata, India| 60.13%

2006| Higher Secondary| Pure Science|

Deulpara B. N. Vidyanketan|WBCHSE| West Bengal, India|86.9%

2004| Secondary| General|

Deulpara B. N. Vidyanketan|WBBSE| West Bengal, India|90%

Assistant Professor and HOD |
Material Researcher | Technical
Writer |

📍 Porbandar, India

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RESEARCH RELATED INFORMATION

ORCID ID: 0000-0001-9554-3056

Research Gate:

www.researchgate.net/scientific-contributions/2092602086_Ipsita_Chinya

Google Scholar ID:

nK7VZowAAAAJ, h-index-7,
i-10 index-7, total citation-180

Scopus Author ID:

56626061500

Web of Science Researcher

ID: N-6788-2019

Linkedin: [linkedin.com/in/dr-ipsita-chinya-0597b467](https://www.linkedin.com/in/dr-ipsita-chinya-0597b467)

PROFESSIONAL SUMMARY

Highly analytical and process-oriented researcher and department leadership experience. Extensive background of research in material Science especially polymeric materials accomplished with academic advisement and synchronize with new technology. Seeking a position in an organization where one can utilize the knowledge and contribute in organization's success and growth while being resourceful, innovative and flexible.

KEY SKILL

- Polymer and their Blends.
- Polymer-ceramic multiferroics.
- Nano-composite, fabrication of Polymer optical fiber, fiber optic device and components.
- Wearable electronics.
- Recycle of waste material for newer application.
- Ferroelectric and semiconductor
- Design and implementation of a research project, planning and modeling, primary and secondary data handling.
- Chemical properties understanding

STRENGTH

- Excellent analytical and critical thinking skills.
- Industry engineering standards.
- Working ability as a team

WEEKNESS

- Too detail-oriented
- Self-critic
- Perfectionism

LANGUAGE

- Bengali (mother tongue)
- English (Professional)
- Hindi (Professional)

ADDITIONAL INFORMATIONS

INSTRUMENTAL HANDLING EXPERIENCES:

- Spectroscopic (FTIR, UV-VIS, Bentham, XPS, PL, EDX, XRD etc.).
- Thermal (TGA, DSC, DTA), Morphological (FESEM, TEM, AFM).
- Mechanical (UTM, Hardness, Softening Point, Flexural, Puncture Resistance Tester etc.).
- Optical (OM, POM).
- Electrical (Impedance analyzer, LCR, Ferroelectric test bench (P-E loop), Oscilloscope).

SOFTWARE HANDELLING EXPERIENCE:

Origin 2019, Bentham, COMSOL Multiphysics, Image J, Microsoft, FullProf, Adobe Photoshop

ACOMPALISHMENT

• AWARDS AND FELLOWSHIP:

1. **National Post-doctoral Fellowship** (SERB, DST, Govt of India, 2022)
2. **Institute Post-doctoral fellowship**, IIT-Bombay (2019), IIT-Bhubaneswar (2021)
3. Qualified **Graduate Aptitude Test Examination** (GATE 2013 and 2014).
4. **Junior Research Fellowship**, CSIR-GATE-JRF (2013) and Senior Research Fellowship, CSIR-GATE-SRF (2015).
5. **Swami Vivekananda scholarship** (2010-2013): Government of West Bengal State Govt.
6. Scottish Church College Student Assistantship - (2006-2010)
7. **National Merit Scholarship** (2004-2006): Government of India (For ranking in between top 100 within the board).

REVIEWER OF THE FOLLOWING JOURNALS:

- Journal of Alloys and Compounds, Polymer Testing (Elsevier)
- RSC Adv. (RSC)
- Journal of Applied Polymer Science (Wiley)

PARTICIPATION IN CSIR-800 PROJECT

“Feasibility Study Report of Lock and Key Cluster: Identification of Technological Gaps and Sustainable Solutions”.

PERSONAL INFORMATION

Citizenship: Indian

Sex: Female

Category: GEN

Date of Birth: 2nd September 1988

Marital Status: Married

Permanent Postal Address: Vill. + P.O.-Deulpara, Dist. – Hooghly, Pin - 712414

Passport Number: L6406740 (Republic of India)

SUMMARY OF PUBLICATIONS:

Total Journal Papers
14

International
Conferences:10

National
Conferences: 05

Invited Talk:02

PUBLICATION DETAILS

1. A. Adaval, I. China, B. Bhatt, S. Kumar, D. Gupta, I. Samajdar, M. Aslam, T. Turney, G. Simon, A. Bhattacharyya, "Poly (vinylidene fluoride)/Graphene Oxide Nanocomposites for Piezoelectric Applications: Processing, Structure and Electrical Properties", *Nano struct. Nano obj.*, 2022, 31, 100899-917 (DOI:10.1016/j.nanoso.2022.100899) (I.F. -5.454) (Citation:01).
 2. I. China, R. Sen, A. Dhar, "Er³⁺ Incorporated Transparent Ternary Nanocomposite as Active Core Material in Polymer Optical Preform with Improved Photo-emission Performance", *Curr. Appl. Polym. Sci.*, 2021, 04 (3), 227 – 234. (DOI: 10.2174/2452271604666211130123241). (I.F. -NO) (Citation:0)
 3. I. China, A. Sasmal, S. Sen, "Conducting Polyaniline decorated in-situ Poled Ferrite nanorod-PVDF based nanocomposite as piezoelectric energy harvester", *J. Alloys Compd.*, 2020, 815, 152312-152319, (DOI: 10.1016/j.jallcom.2019.152312)(I.F. -6.371) (Citation:13)
 4. I. China, A. Pal, S. Sen, "Flexible, hybrid nanogenerator based on Zinc Ferrite nanorods incorporated Poly (vinylidene fluoride-co-hexafluoropropylene) nanocomposite for versatile mechanical energy harvesting", *Mater. Res. Bull.*, 2019, 118, 110515- 110525 (DOI: 10.1016/j.materresbull.2019.110515) (I.F.-5.6) (Citation:15)
 5. I. China, A. Sasmal, A. Pal, S. Sen, "Flexible piezoelectric energy harvesters using different architectures of ferrite-based nanocomposites", *Crys. Eng. Comm.*, 2019, 21, 3478-3488 (DOI: 10.1039/c9ce00406h) (I.F. -3.756) (Citation:15)
 6. I. China, S. Sen, "Influence of nanoparticle size on nucleation of electroactive phase and energy storage behavior of Zinc Ferrite/ Poly(vinylidene fluoride) nanocomposite", *J. Mater. Sci. Mater. Electron.*, 2019, 30, 5137-5148 (DOI:10.1007/s10854-019-00812-4) (I.F. -2.779). (Citation:4)
 7. I. China, S. Sen, "Improved dielectric and touch sensing performance of surface-modified Zinc Ferrite (ZF)/ Polyvinylidene Fluoride (PVDF) composite", *Sens. Actuator A: Physical*, 2017, 267, 301-309 (DOI: 10.1016/j.sna.2017.10.031) (I.F. -4.291). (Citation:14)
 8. I. China, A. Pal, S. Sen, "Polyglycolated Zinc Ferrite incorporated Poly(vinylidene fluoride) (PVDF) composites with enhanced piezoelectric response", *J. Alloy Compd.*, 2017, 722, 829-838 (DOI: 10.1016/j.jallcom.2017.06.028) (I.F. -6.371). (Citation:40)
 9. I. China, R. Sen, A. Dhar, "Synthesis and characterization of transparent Erbium–Ytterbium co-doped polymer nanocomposites for fabrication of polymer optical preform", *Phys. Status Solidi A*, 2017, 214, 1600685-1600691 (DOI: 10.1002/pssa.201600685) (I.F. -2.17). (Citation:5)
 10. M. Saha, I. China, C. Khatua, M. Sreemany, C. Guha, R. Sen, "Physicochemical study of rare earth β -Diketonate precursor for optimizing MCVD-vapor phase doping technique", *ECS J. Solid State Sci. Technol.*, 2017, 7, 517-520. (DOI: 10.1149/2.0141708jss) (I.F. -2.483) (Citation:0).
 11. B. Adak, I. China, S. Sen, "Enhanced dielectric and energy storage performance of surface-treated Gallium Ferrite/ Polyvinylidene fluoride nanocomposites", *RSC Adv.*, 2016, 6, 105137-105145. (DOI: 10.1039/C6RA22939E) (I.F. -4.036) (Citation:26).
 12. C. Khatua, I. China, D. Saha, S. Das, R. Sen, A. Dhar, "Synthesis and Characterization of Titanium Dioxide nanoparticle doped PVA composite film for humidity sensor", *Int. J. Smart Sensing Intell. Syst.*, 2015, 8 (3), 1424-1442 (DOI: 10.21307/IJSSIS-2017-813) (I.F. -1.24) (Citation:25).
- Conference Proceedings:
13. I. China, S. Sen, "Surface modified Zinc Ferrite (ZF)/Polyvinylidene fluoride (PVDF) nanocomposite: A Novel Material for Application as a Flexible Energy Harvester", *Mater. Today: Proc.*, 2018, 5, 10047-10053 (DOI: 10.1016/j.matpr.2017.10.205) (Citation:6).
 14. I. China, C. Khatua, S. Das, R. Sen, A. Dhar, "Development of Polyaniline-Poly(methylmethacrylate) blend coated optical fiber RI sensor for Ammonia detection", *Opt. Soc. Am.*, 2014, paper S5A.77, (DOI: 10.1364/PHOTONICS.2014.S5A.77)