


## RIE BHOPAL, Faculty Profile (Last five years from 2019-2025)

<b>Full Name:</b>	Dr Chakradhar Behera			
<b>Designation:</b>	Assistant Professor in Physics			
<b>Department:</b>	Department of Education in Science and Mathematics			
<b>Official Address:</b>	DESM, Regional Institute of Education, NCERT, Bhopal, Madhya Pradesh			
<b>Telephone:</b>		<b>Fax:</b>	---	
<b>Mobile:</b>	+91-8837304043			
<b>Email:</b>	chakradhar.b@ncert.nic.in			
<b>Education Qualification:</b>	Ph. D			
<b>Teaching Experience:</b>	9Y 3M	<b>Research Experience:</b>	12 Y 5M	
<b>Academic Identity:</b>				
(i) ORCID Id with web link: ID-0000-0001-7082-0416 Web link <a href="https://orcid.org/0000-0001-7082-0416">https://orcid.org/0000-0001-7082-0416</a>				
(ii) Scopus Author Id with web link: ID:56285695700 Web link <a href="https://www.scopus.com/authid/detail.uri?authorId=56285695700">https://www.scopus.com/authid/detail.uri?authorId=56285695700</a>				
(iii) Researcher ID with web link: ID: C-4845-2017 Web link: <a href="https://www.webofscience.com/wos/author/rid/C-4845-2017">https://www.webofscience.com/wos/author/rid/C-4845-2017</a>				
(iv) Google Scholar Id with web link: ID-kyUtT6UAAAAJ Web link: <a href="https://scholar.google.co.in/citations?user=kyUtT6UAAAAJ">https://scholar.google.co.in/citations?user=kyUtT6UAAAAJ</a>				
(v) Vidwan Id: with web link : ID-182795 Web link: <a href="https://vidwan.inflibnet.ac.in/profile/182795">https://vidwan.inflibnet.ac.in/profile/182795</a>				
(vi) Research gate Id with web link: ID-Chakradhar-Behera Web link: <a href="https://www.researchgate.net/profile/Chakradhar-Behera">https://www.researchgate.net/profile/Chakradhar-Behera</a>				
<b>Research Interest and Fields of Specialization:</b> Condensed Matter Physics (Experimental), Advanced Smart functional Nano Materials, Multifunctional Nanocomposite for devices.				
<b>Member of Academic Institutions (Board of Studies / Research Degree Committee/School Board)</b>				
<b>Present/ Past</b>				
I. Member of Doctoral Committee-NIT Agartala				
II. Member of the Departmental UG and PG Programme committee of Physics Department of NIT Agartala (2016-2023)				

### 1. Membership of different Organizations

- I. International Association of Advance Materials
- II. American Chemical Society

### 2. Research Supervision

(No. of Ph.D. Degree Awarded \_\_\_\_ 0 \_\_\_\_ and Registered \_\_\_\_ 01 \_\_\_\_)

(Number of M. Phil/M. Tech awarded in \_\_\_\_ 13 \_\_\_\_)

### 3. Research Projects (Completed and ongoing with title, type, fund allocated, duration and name of the funding agency)

- I. Development of high temperature multiferroicity in rare earth based double perovskite for devices, Funding. Agency-SERB, Govt. of India, Amount-19.2L, Duration –2 Years 2017-2019 **(Completed)**

### 4. Administrative Experience

- I. Faculty in charge of Training and Placement Department of Physics of NIT Agartala from Aug.2016 to Aug.2018
- II. Member of Anti Ragging Committee of NIT Agartala from 2016 to 2023
- III. Warden of R N T Hostel of NIT Agartala from Aug.2019 to Feb.2023

IV. Residential Warden of Kirti Niketan Hostel of RIE Bhopal from 18<sup>th</sup> Dec.2023 and contd...

## 5. Scientific Visits Abroad/ International Collaboration

### 6. Conference/Symposium/Workshop Attended during (2019-2025)

- I. TEQIP-III Sponsored Five-day work shop on “Computational Techniques in Heating and Cooling Systems” Organized by Dept. of Mechanical Engineering, NIT Agartala from 3rd June 2019 to 7th June 2019. (Participant).
- II. TEQIP-III Sponsored Five-day work shop on “Value analysis-An Ethical Vision of Engineering Education” Organized by Dept. of Mechanical Engineering, NIT Agartala from 27th -31st May 2019. (Participant).
- III. TEQIP-III Sponsored Five Days workshop on “Advanced Materials, Manufacturing and Measurements” organized by Mechanical Engineering Department, NIT Agartala from 23rd-27th Sept.2019(Participant).
- IV. “3-week workshop on Geospatial technologies” held at NIT Agartala from 29th Nov.-19th Dec.2019, Organized by NIT Agartala (Participant)
- V. One week DST-STUTI training programme on “ Contemporary Physics Research”-2023 held at NIT Agartala from 5<sup>th</sup> -11<sup>th</sup> Jan.2023(as resource person)
- VI. 5-day Orientation for the Newly Recruited Faculty members of NCERT held at IIM Nagpur from 10<sup>th</sup>-14<sup>th</sup> Feb.2025(Participant)
- VII. 21 days online orientation programme for the newly recruited faculty members of NCERT, organized by NCERT, New Delhi from 03<sup>rd</sup>-28<sup>th</sup> March 2025(Participant)

### 7. A) Research Papers Published in Journals last six years (2019-2025)

**Total Citation -677, H-index-16, i10 Index-19**

- I. C. Behera\*, Saroj K. Parida, R N P Choudhary, Lanthanum modified BFO–BT solid solutions: a structural, electrical and magnetic study, *Journal of Materials Science: Materials in Electronics*, Electronic ISSN1573-482X, Print ISSN 0957-4522, Volume 30, pages 4069–4078, (2019) Publisher-Springer US, <https://doi.org/10.1007/s10854-019-00694-6> Impact Factor-2.8(Q2) Indexed in: Scopus and Web of Science.
- II. C Behera\*, AK Pattanaik, Structural, dielectric and ferroelectric properties of lead free Gd-modified BiFeO 3–BaTiO<sub>3</sub> solid solution, *Journal of Materials Science: Materials in Electronics*, Electronic ISSN1573-482X, Print ISSN 0957-4522, Vol.30(6), PP. 5470–5477 <https://doi.org/10.1007/s10854-019-00840-0> (2019), Publisher-Springer US, Impact Factor-2.8(Q2) Indexed in: Scopus and Web of Science.
- III. Studies of structural, dielectric and electrical characteristics of nickel-modified barium titanate for device applications, C. Behera\*, P. Patel, N. Pradhan, R N P Choudhary, *Journal of Materials Science: Materials in Electronics*, 33, pages1657–1669 (2022) <https://doi.org/10.1007/s10854-022- 07709-9> Publisher-Springer Nature US, Impact Factor-2.8(Q2) Indexed in: Scopus and Web of Science.
- IV. C. Behera\*, N. Pradhan, P. R Das, R N P Choudhary, Development of self-standing, lightweight and flexible polymer-cobalt ferrite nanocomposites for field sensor, *Journal of Polymer Research* Electronic ISSN 1572-8935 Print ISSN1022-9760 volume 29, Article number: 65 (2022), <https://doi.org/10.1007/s10965-022-02916-8> Publisher-Springer Nature US, Impact Factor 3.061(Q2) Indexed in: Scopus and Web of Science.
- V. S.B. Bhoobash, N.Pradhan, C.Behera\*, Tuning Electrical properties of BaTiO<sub>3</sub> with iron modification, *Ceramics International*, Print ISSN: 0272-8842 Online ISSN: 1873-3956, Volume 49, Issue 18, Pages 30076-30089, <https://doi.org/10.1016/j.ceramint.2023.06.264> (2023), Publisher –Elsevier, Impact Factor -5.532(Q1) Indexed in: Scopus and Web of Science.
- VI. SB Bhoobash, MS Kalyan, SS Hota, RNP Choudhary, C Behera\*, An investigation of the structure property relation of Na<sub>2</sub>MnWO<sub>6</sub> for device application, *Inorganic Chemistry Communications*, Print ISSN: 1387-7003Online ISSN: 1879-0259 113048 (2024) doi: <https://doi.org/10.1016/j.inoche.2024.113048> Published by Elsevier, Netherland, Impact Factor-4.4(Q1) Indexed in: Scopus and Web of Science.
- VII. S B Bhoobash, C. Behera\* , Exploring the unique structural, dielectric, and electrical properties of

Na<sub>2</sub>TiMoO<sub>6</sub> ceramic: A pioneering step towards advancing device applications, Ceramics International, Print ISSN: 0272-8842 Online ISSN: 1873-3956, Volume 51 Issue 6, pages 7790–780 (2025) <https://doi.org/10.1016/j.ceramint.2024.12.216>, Published by Elsevier, Netherland, Impact Factor:-5.1(Q1) Indexed in: Scopus and Web of Science.

- VIII. S B Bhoobash, C. Behera\* , Tuning of  $\beta$ -Phase in PVDF via nickel ferrite incorporation Journal of Materials Science: Materials in Electronics, Electronic ISSN 1573-482X, Print ISSN 0957-4522, 36(6), 396, (2025) <https://doi.org/10.1007/s10854-025-14368-z> Published by Springer Nature, USA, Impact Factor-2.8(Q2) Indexed in: Scopus and Web of Science.

## **B) ARTICLES PUBLISHED IN THE EDITED BOOK**

- I. C. Behera\*, N. Pradhan, S.K Parida, 6-Conventional Approach to synthesis and deposition of perovskite metal oxides, Perovskite Metal Oxide, (Chapter-6), pp.143-174,(2023) <https://doi.org/10.1016/B978-0-323-99529-0.00027-8> Publisher- Elsevier, Indexed in: Scopus and Web of Science.
- II. S B Bhoobash, N. Pradhan, C. Behera\* Chapter-10, Carbon Nanotube-Fluoropolymer Nanocomposites for Dielectric Applications by Book: Carbon Nanotube-Polymer Nanocomposites, [https://doi.org/10.1007/978-981-97-6329-0\\_10](https://doi.org/10.1007/978-981-97-6329-0_10) Publisher-Springer Nature (2024) Indexed in: Scopus

\*- Corresponding Author

## **C) PAPER PUBLISHED (IN CONFERENCE PROCEEDING with ISSN Number)**

## **D) PUBLICATION OF BOOKS (Both as Authored and Edited)**

- I. C. Behera, N. Pradhan, A.K Pattanaik, Understanding Multiferroics for Devices, (Application of Multiferroics Materials), ISBN-978-620-4- 72576, (Book) LAP Lambert Academic Publisher, Germany (2021)

## **E) PREPARATION OF STUDY MATERIAL**

## **F) EDITORSHIP OF RESEARCH JOURNAL**

1. Editorial Board Member: -Electronics Science Technology and Application [ISSN:2424-8460 (Online) 2251-2608 (Print)], Universe Scientific Publishing Pte, Singapore [2018-2020]

## **G) MOOCs**

## **8) ORGANIZATION of SEMINAR/WORKSHOP/FDP/TRAINING PROGRAM**

- Organized a National Conference on “Recent Advances in Interdisciplinary Science” from 7-9<sup>th</sup> Feb.2025 at Regional Institute of Education, NCERT, Bhopal as Principal Coordinator under PAC-23.43 of Sanctioned Value- 19.76 Lakhs
- Organized a Training of KRPs on the Use of Physics Kit of Western Region from 7-10<sup>th</sup> Oct.2024 at Regional Institute of Education, NCERT, Bhopal as Co- Coordinator under PAC-23.24

## **9) Other Information if any:**

**Honors and Awards:** 2001-National Scholarship By MHRD, Govt. of India

2012- Junior Research Fellowship By DRDO, Govt. of India  
2014-Senior Research Fellowship By DRDO, Govt. of India  
2015-International Travel Support by DST, Govt. of India  
2016-Biography Published in MARQUIS Who's Who in the World-2016 (33<sup>rd</sup> Edn.)  
2016-National Post-Doctoral Fellowship awarded by SERB, Govt. of India  
2017-Outstanding reviewer award by Elsevier for the Journal of Alloys and  
Compound and Material Science and Engineering B

**Reviewer of Journals-** Material Science and Engineering–B (Elsevier)  
Journal of Applied Polymer Sciences (Wiley)  
Engineering Science and Technology (Elsevier)  
Journal of Alloys and Compounds (Elsevier)  
Materials Letter (Elsevier)  
Materials Chemistry and Physics (Elsevier)  
Journal of Electronic Materials (Springer Nature)  
Journal of Materials Science (Springer Nature),  
Nanoscale (RSC),  
Material Chemistry A(RSC)  
Advanced Materials Interfaces (Wiley)  
Ceramics International (Elsevier)  
Journal of Applied Physics (AIP)  
ACS Omega (ACS)  
Nano Letter (ACS)  
Journal of Advanced Ceramics (Springer Nature)  
Journal of Material Science and Materials in Electronics (Springer Nature)  
Transaction on Electrical and Electronic Materials (Springer Nature)  
Combinatorial Chemistry & High Throughput Screening(Bentham Science  
Publishers)

# A total of more than **150 research papers** of the above journals are reviewed by me. Details can be found in the web of science. <https://www.webofscience.com/wos/author/record/249841>

**External Grant Reviewer:-** External Reviewer of the Proposals of National Fund for Scientific And Technological Development (**FONDECYT**) of the Chilean National Commission for Scientific and Technological Research (**CONICYT**) for **FONDECYT** Regular Competition. (**2 Proposals**)

Sd/-

Dr. Chakradhar Behera

