

# "RESUME"

## Dr.BiswadeepChaudhuri

**Contact Address:** 45/2 NewSantoshpurMainRoad,  
Kolkata700075,WestBengal,India



### **Current Position: Assistant Professor**

School of Life Science & Biotechnology,  
Adamas University Kolkata

**Phone:** 8777243068

**Email:** chaudhuri.biswadeep@gmail.com

**DateofBirth:** 08-11-1985      **Category:** General      **Sex:** Male      **Religion:** Hinduism

### **EducationalQualifications:**

Degree	Subject/Research Area	%marks/grade	Year	College& University
Ph.D.	Biomedical Engineering	84	2016	National Institute of Technology (NIT)-Rourkela
M.S.	Industrial Biotechnology	60	2009	Newcastle University,UK
B.Tech.	Biotechnology	74	2008	WestBengal Universityof Technology, Kolkata

### **Area of Interest:**

- Tissue Engineering & Animal cell culture
- Wound Healing
- Stem Cells & Regenerative Therapy
- Biomaterials(Scaffolds/Implants)
- Biopolymer Engineering (Electrospinning)
- Nano-Biotechnology

**Research Experience: 10 Years +**

**Teaching Experience: 7 Years+ (PostPh.D.)**

**Professional Skills:**

- Tissue Engineering, Regenerative Medicine, Wound Healing
- Isolation, characterization and maintenance of Human Umbilical Cord Blood derived Mesenchymal Stem Cells
- Stem Cells proliferation as well as lineage specific differentiation
- *In-vitro* Stem Cells viability and proliferation assay (using MTT, WST-8)
- Electrospun fibrous scaffolds preparation using biocompatible polymer composites
- Characterizations of polymer composite scaffolds using XRD, FTIR, SEM etc.
- Microscopic analysis: Compatible with Confocal (Immunostaining) & Phase Contrast microscope
- SEM analysis, Surface modification, Cell compatibility.
- Cell signaling pathway (IGF-1) analysis using Western Blotting,

**Employment record:**

Date		Organization	Position	Functional Activities
From	To			
Oct 2023	Present	Adamas University Kolkata	Assistant Professor	Teaching & Research
May 2018	Sep 2023	University of Engineering & Management (IEM/UEM), Kolkata	Associate Professor	Teaching & Research
July 2017	April 2018	CSIR-Central Glass and Ceramic Research Institute , (CGCRI) Kolkata	CSIR-Nehru Post-Doctoral Fellow <u>(CSIR: Govt. of India Fellowship)</u>	Development of Novel Biomaterials for Wound healing and Tissue Engineering applications for clinical applications

Oct 2016	June 2017	Saha Institute of Nuclear Physics, (SINP), Kolkata	Post-Doctoral Fellow ( <u>DAE:</u> <u>Govt. of India</u> <u>Fellowship</u> )	Research Work, Laboratory setup, Helping to PhD Students in research.
Dec 2010	Mar 2016	National Institute of Technology (NIT-Rourkela)	JRF&SRF ( <u>DBT-</u> <u>ProjectGovt.o</u> <u>fIndiaFello</u> <u>wship</u> )	Paper write-up, publication,research, occasional teaching(UG).
Jul 2010	Nov 2010	Chembiotek, Kolkata	Laboratory Analyst	Lab work related to NMR,sample preparation, characterizations, datasheet Preparation etc.

## PUBLICATIONS (All International)

- [1] **Biswadeep Chaudhuri\***, Shrabani Ghosh, Bholanath Mondal, Debabrata Bhadra. Preparation and characterization of carbon fibre powder (CFP)-polyvinyl alcohol (PVA) composite films showing percolation threshold behaviour. Materials Science and Engineering: B.275,115500,2022, (**IF 3.56 / SCI indexed**) **\*Corresponding Author**
- [2] **Biswadeep Chaudhuri\***, B. K. Chaudhuri. A Physicochemical approach towards understanding the mechanism of stem cell therapy. Int. Journal of Scientific Research and Reviews (UGC Approved). 7(4), 1413-1421. (**SIJF IF 6.946 & ISI IF 1.536**). **\*Corresponding Author**
- [3] **Biswadeep Chaudhuri\***, B. Mondal, D. Bhadra, S. C. Sarkar. Biocompatibility of poly(lactic-co-glycolic acid) - graphene oxide composite using cryopreserved human stem cells. Chem. Sci. Rev. and Letts. 6(21), 88-93. 2017. (**IF 4.86, SCI expanded**). **\*Corresponding Author.**
- [4] **Biswadeep Chaudhuri\***, B. Mondal , S.K. Roy, S.C. Sarkar. A novel biocompatible conducting polyvinyl alcohol (PVA)-polyvinylpyrrolidone (PVP)-hydroxyapatite (HAP) composite scaffolds for probable biological application. **Colloids and Surfaces B: Biointerfaces.** (ELSEVIER). 143, 71-80, 2016. (**IF 5.30 / SCI indexed**). **\*Corresponding Author.**

[5] **Biswadeep Chaudhuri\***, B.Mondal, S. Kumar, S.C. Sarkar. Myoblast differentiation and protein expression in electrospun graphene oxide(GO)-poly( $\epsilon$ -caprolactone, PCL) composite meshes. *Materials Letters* (ELSEVIER). 182, 194–197. 2016 (IF 3.55 / SCI indexed).

\*Corresponding Author.

[6] **Biswadeep Chaudhuri**, D. Bhadra, L. Moroni, K. Pramanik. Myoblast differentiation of human Mesenchymal Stem Cells on graphene oxide and electrospun graphene oxide–polymer composite fibrous meshes: importance of graphene oxide conductivity and dielectric constant on their biocompatibility. *Biofabrication* (IOP SCIENCE). 1- 13; 7; 015009. 2015.

(IF 10.01 / SCI indexed).

[7] **Biswadeep Chaudhuri**, D. Bhadra, B. Mondal, K. Pramanik. Biocompatibility of electrospun graphene oxide–poly( $\epsilon$ -caprolactone) fibrous scaffolds with human cord blood Mesenchymal Stem Cells derived skeletal myoblast. *Materials Letters* (ELSEVIER). 109-112, 126, 2014. (IF 3.55 / SCI indexed).

[8] **Biswadeep Chaudhuri**, B. Mondal, D.K. Modak, K. Pramanik, B.K. Chaudhuri. Preparation and characterization of nanocrystalline hydroxyapatite from egg shell and  $K_2HPO_4$  solution. *Materials Letters* (ELSEVIER). 148-150, 97. 2013. (IF 3.55 / SCI indexed).

[9] **Biswadeep Chaudhuri**, D. Bhadra, S. Dash, G. Sarkar, K. Pramanik, B.K. Chaudhuri. Hydroxyapatite and Hydroxyapatite-Chitosan composite from crab shell. *Journal of Biomaterials and Tissue Engineering* (American Sci. Pub.). 3, 653-657, 2013. (IF 1.08 / SCI indexed).

[10] **Biswadeep Chaudhuri**, K. Pramanik. Key aspects of the Mesenchymal Stem Cells (MSCs) in tissue engineering for invitro skeletal muscle regeneration. *Biotechnology and Molecular Biology Review*. 5-15, 7. 2012. (IF 0.45 / ISI indexed).

[11] **Biswadeep Chaudhuri**, K. Pramanik. Use of Umbilical Cord Blood for the next generation Myocardial Tissue Repair. *Global Journal of Biotechnology and Biochemistry*. 6(4). 162-170, 2011. (IF 1.211).

[12] Md. J. Uddin, **Biswadeep Chaudhuri**, K. Pramanik, T. R. Middya, B.K. Chaudhuri. Black tea leaf extract derived Ag nanoparticle-PVA composite film: Structural and dielectric properties. *Materials Science and Engineering*: B. (ELSEVIER) 177, 1741-47, 2012. (IF 3.56 / SCI indexed).

[13] A. Bissoyi, D. Mahajan, **Biswadeep Chaudhuri**. Design of Multifunctional H3 Receptor Inverse Agonists with Ache Inhibitor Activity for Treatment of Alzheimer's Disease. *Global Journal of Biotechnology & Biochemistry*. 7 (4): 100-109, 2012. (IF 1.211).

[14] A. Bissoyi, C. Mahapatra, **Biswadeep Chaudhuri**, D. Mahajan. In Silico Prediction of Novel Drug Molecule for Migraine Using Blind Docking. *Global Journal of Biotechnology & Biochemistry*. 8 (1): 25-32, 2013. (IF 1.211).

[15] **BiswadeepChaudhuri**, K Pramanik. Isolation of Mononuclear Stem Cells from Human Umbilical Cord Blood and their scaffolds interaction. *Advanced Science, Engineering and Medicine* (American Scientific Publisher). 5, 427-430, 2013. (IF 0.862).

[16] **BiswadeepChaudhuri**, ChaudhuriB, ChaudhuriBK. Diseasecell-dilutedhomeopathic medicine interaction mechanism leading to the remediation of the disease, *Int. J. Homeopathic sciences*. 2019;3(3):82-87.

## Patent

1. Title: A Novel Composition of Multifunctional (antimicrobial, digestive, natural food life enhancer) Low Cost Herbal Food Additive. File No: 201931044618  
(Published & Approved: 07/05/2021). Online available. Inventer: Biswadeep Chaudhuri.
2. Title: A Novel Composition of Multipurpose (Hair and Skin) Multifunctional (antimicrobial, anti-inflammatory, antibacterial, natural) Low cost and effective Herbal Rejuvenator. (Applied 2023). Inventer: Biswadeep Chaudhuri.

## Conference Papers:(Total 04)

[1] **B. Chaudhuri**, L. Moroni and K. Pramanik., Myoblast differentiation of human cord blood mesenchymal stem cells on thing graphene oxide sheets and electrospun graphene oxide-PLGA composite scaffolds : Proc. Int. Symposium on Polymer Science and Technology, Kolkata (Jan.23-26) P-522, PB10, Page 523, PB11 (2015).

[2] **B. Chaudhuri**, G. Sardar, Md. Masud, J Uddin, B. K. Chaudhuri and K. Pramanik. Observation of enhanced conductivity and dielectric constant in polyvinyl alcohol/polyvinylpyrrolidone blend-hydroxyapatite and graphene oxide composite; Biocompatibility study using human cord blood stem cells. Proc. Int. Symposium on Polymer Science and Technology, Kolkata (Jan.23-26) P-522, PB10 (2015).

[3] **B. Chaudhuri**, L. Moroni, K. Pramanik. Myoblast differentiation of human cord blood mesenchymal stem cells on thing graphene oxide sheets and electrospun graphene oxide-PLGA composite scaffolds; As above, pp-523

[4] **B. Chaudhuri**, K. Pramanik. Umbilical Cord Blood derived Stem Cells and its applications for Biomedical applications. International Conference of Tissue Engineering and Regenerative Medicine (ICTERM), Dept. of Biotech.& Med. Eng. NIT Rourkela, 2011.

## **BookChapter/BookPublication**

S.No.	NameofBook/ Bookchapter	Year	TitleofBook	Authors	Link
1	Development of 2D biocompatible compositematrixfor tissue engineering applications with antifungalproperties	2019	Biotechnology and BiologicalSciences	Sayak Roy Chowdhury, Debasmita Deb, Soumyajit Sen, <b>Biswadeep Chaudhuri*</b> (corresponding author)*	<a href="https://www.taylorfrancis.com/chapters/edit/10.1201/9781003001614-6/development-2d-biocompatible-composite-matrix-tissue-engineering-applications-antifungal-properties-sayak-roy-chowdhury-debasmita-deb-soumyajit-sen-biswadeep-chaudhuri">https://www.taylorfrancis.com/chapters/edit/10.1201/9781003001614-6/development-2d-biocompatible-composite-matrix-tissue-engineering-applications-antifungal-properties-sayak-roy-chowdhury-debasmita-deb-soumyajit-sen-biswadeep-chaudhuri</a>
2	Myoblast Differentiation of UmbilicalCordBlood DerivedStemCellson Biocompatible Composites Scaffold Meshes	2017	Umbilical Cord Blood Banking for ClinicalApplication and Regenerative Medicine	<b>Biswadeep Chaudhuri</b> <b>(single author)</b>	<a href="https://www.intechopen.com/chapters/52225">https://www.intechopen.com/chapters/52225</a>
3	Biopolymers-graphene oxide nanoplatelets composites with enhancedconductivity and biocompatibility suitable for tissue engineering applications	2018	Fullerens, Graphenes and Nanotubes : A Pharmaceutical Approach	<b>Biswadeep Chaudhuri</b> <b>(single author)</b>	<a href="https://www.sciencedirect.com/science/article/pii/B9780128136911000129">https://www.sciencedirect.com/science/article/pii/B9780128136911000129</a>

## **MembershipofProfessionalbodies:**

- Indian Science Congress
- Indian Association for the Cultivation of Science (IACS, Kolkata)

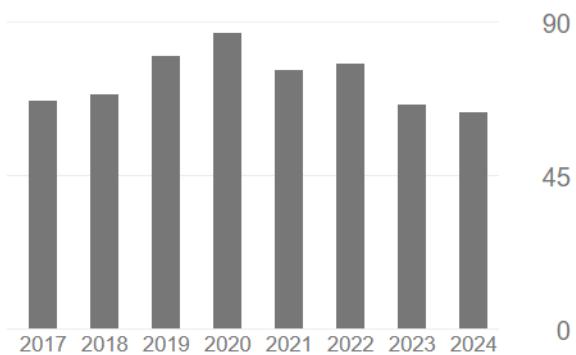
## **Awards:**

- **Best Research Scholar Award (RSW)2015**,Dept.of Biotechnology & Medical Engineering, National Institute ofTechnology, Rourkela, India
- **Best Poster Presentation Award, 2013**, International Conference on Tissue Engineering & Regenerative Medicine; Dept. of Biotechnology & Medical Engineering, National Institute of Technology, Rourkela, India.

## Google Scholar:

Link: <https://scholar.google.co.in/citations?user=g1d8q9YAAAAJ&hl=en>

	All	Since 2019
Citations	719	451
h-index	11	11
i10-index	13	11



## Post Doctoral Fellowship/Awards(Govt. of India Funded):

- **National Post-Doctoral Fellowship(N-PDF)Award2017**
- **CSIR-NEHRU SCIENCE Post-Doctoral Award2017(Accepted)**

## Declaration:-

I hereby declare that all the information furnished above is true to the best of my knowledge.

**Dr. Biswadeep Chaudhuri**

Place: Kolkata

Date:12/12/2024