

Curriculum vitae

Nandi, Samit Kumar

ERA COMMONS USER NAME
Samitnandi

Professor and Former Head of the Department,
Veterinary Surgery & Radiology, West Bengal
University of Animal and Fishery Sciences,
Kolkata, India

&
Ex. Adjunct Faculty, School of Mechanical and
Materials Engineering, Washington State
University, USA

EDUCATION

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Bidhan Chandra Krishi Vishwavidyalaya, India	B. V. Sc & A.H	1991	Veterinary Science and Animal Husbandry
Bidhan Chandra Krishi Vishwavidyalaya, India	M. V. Sc	1993	Veterinary Surgery & Radiology
West Bengal University of Animal and Fishery Sciences, India	Ph. D	2006	Veterinary Surgery & Radiology

Name: Dr. Samit Kumar Nandi

4. Mailing address (must indicate Telephone, Fax and e-mail address)

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Department of Veterinary Surgery & Radiology
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&
Former Adjunct Faculty,
School of Mechanical & Materials Engineering,
Washington State University, Pullman, WA, USA

5. Date of birth: 02-01-1967

A. Positions and Honors

Positions and Employment

September 1994-July 1995	Veterinary Surgeon, Govt. of West Bengal, India
August 1995- June 1997	CAS GR- I (Vet), Cabinet Secretariat, Govt. of India
July 1997 – April 2000:	Veterinary Surgeon, Govt. of West Bengal, India
April 2000-April 2006:	Lecturer, Deptt. of Veterinary Surgery & Radiology, West Bengal University of Animal and Fishery Sciences, India
April 2006-April 2009:	Lecturer (Senior Scale), Deptt. of Veterinary Surgery & Radiology West Bengal University of Animal and Fishery Sciences, India
April 2009- 2012:	Reader, Department of Veterinary Surgery & Radiology, West Bengal University of Animal and Fishery Sciences, India
November 2012- 31.10.2012	Associate Professor, Department of Veterinary Surgery & Radiology, WBUAFS
1 st November, 2016 to till date	Professor, Department of Veterinary Surgery & Radiology, WBUAFS
June 2011- August 4 th 2013	Head, Department of Veterinary Surgery & Radiology, WBUAFS
July, 2018 to 4.3.2021	Head, Department of Veterinary Surgery & Radiology, WBUAFS
7 th August to till date	ICAR National Professor

Other Experience and Professional Memberships

1993-	Life Member, Indian Society of Veterinary Surgery
2000-	Life Member, Indian Science Congress
2000	Member, Animal Biotechnology Unit, WBUAFS
2007	Member, Institutional Animal Ethics Committee, WBUAFS.
2010-	Member of National Academy of Sciences, India (NASI)
2010-	Member, Scientific and Technical Committee & Editorial Review Board on Biological and Life Sciences, World Academy of Science, Engineering and Technology
2012 (March-July) -	Adjunct Faculty, School of Mechanical and Materials Engineering, Washington State University, Pullman, USA & Visiting Professor, Department of Veterinary Clinical Sciences, College of Veterinary Medicine, Washington State University, Pullman, USA.
2018	Fellow. National Academy of Agricultural Sciences, New Delhi
2019	Fellow, Indian Society for Advancement of Veterinary Research
2017	Fellow, Indian Society for Veterinary Surgery
2012	Fellow, Society of Applied Biotechnology, India
2021	Fellow, Royal Society of Chemistry
2022	Fellow, National Academy of Veterinary Sciences

Training/Refresher course attended [From 2000 onwards]

- Laparoscopy in Veterinary practice at TANUVAS, Chennai from 11.12.2000 to 15.12.2000.
- Advanced Training program in “Trends in small and large animal Orthopedic Surgery” at P.A.U., Ludhiana from 03.10.2001 to 23.10.2001.

- Training program in “Recent trends in Orthopedic Techniques and Radiographic imaging in Farm and Pet animals” at TANUVAS, Chennai from 12.09.2002 to 11.10.2003.
- Advanced Refresher Training course on “Imaging techniques for veterinary patients with special reference to ultrasonography” at GADVASU, Ludhiana w.e.f 1.2.2008 to 21.2.2008.
- UGC sponsored refresher course on “Recent perspective of Nanoscience and Technology” at UGC-Academic staff college, Jadavpur University from 4.12.2009- 26.12.2009.
- NAIP Strengthening Statistical Computing for NARS Training Program on “Data Analysis using SAS” at CIFRI, Barrackpore w. e. f. 14-19 February 2011

Awards & Honors

Sl. No	Agency/Organization	Purpose	Nature of award
1.	Indian Council of Agricultural Research, Government of India, New Delhi		ICAR National Professor
2.	Indian Council of Agricultural Research, Government of India, New Delhi	For outstanding research in Agricultural sciences.	Rafi Ahmed Kidwai Award for Outstanding Research in Agricultural Sciences, 2021
3.	Department of Biotechnology, Ministry of Science & Technology, Government of India, New Delhi	To recognize and reward scientists with an outstanding track record in biological sciences to find innovative solutions to major problems in healthcare, agriculture, and other areas related to life sciences and biotechnology.	Tata Innovation Fellowship 2018-19
4.	Department of Biotechnology, Ministry of Science & Technology, Government of India, New Delhi	For Biotech Product and process development	Biotech Product and process development and commercialization award 2013
5.	Indian Council of Agricultural Research, Government of India, New Delhi	For Post-Graduate Agricultural Research (Ph.D.) 2007	Jawaharlal Nehru Award. National Award for Contribution to Agricultural Science
6.	Department of Biotechnology, Ministry of Science & Technology, Government of India, New Delhi	For Scientific contribution in the field of Biological Sciences	National Bioscience Award for Career Development in the field of Biological Sciences, 2008

7.	Council of Scientific and Industrial Research, Government of India, New Delhi	Technology Award for Physical Sciences including Engineering for Developing manufacturing Technology of Bioceramic Implants for Medical applications <i>as a part of award-winning team</i>	CSIR Technology Award-2010 <i>as a part of an award-winning team</i>
8.	Society of Applied Biotechnology, India	For innovative research at the frontiers of Biotechnology, and for exceptional potential to shape the future through intellectual and inspired leadership in animal biotechnology	SAB Award for “Excellence in Animal Biotechnology, 2012”
9.	Central Glass and Ceramic Research Institute, Kolkata (An Institute under CSIR)	Best paper Award on Material Science during April 2010-2011	CSIR-CGCRI Diamond Jubilee Award for Best paper
10.	The 15 th Congress of the Federation of Asian Veterinary Association and OIE Symposium, Bangkok, Thailand	Presentation of research paper at International Conference	Letter of Appreciation at the International level 2008
11.	XXXV Annual Congress of Indian Society for Veterinary Surgery and International Symposium on Nanobiomaterials in Biomedical Research: their application in Veterinary Surgery	Appreciation Award in Orthopaedic Surgery Session for paper presentation	Appreciation Award 2013
12.	INDO-US SCIENCE & TECHNOLOGY FORUM, New Delhi	IUSSTF Travel support for Visiting Scientists/Scholar in the USA	IUSSTF Travel Support Award 2011
13.	Department of Ceramic Engineering, NIT, Rourkela during January 21-22, 2010. (“”. B. Kundu, S.K. Nandi, D. Basu, T.K. Mandal, R.N. Bhattacharya”	Presentation of the paper “A new localized and sustained drug delivery system based on ceftriaxone-sulbactam composite drug impregnated porous β -tri calcium phosphates: A systematic approach” in National Conference on Ceramics in Biomedical Applications (CBMA-2010)	Best Oral paper 2010
14.	2 nd Pharma Tech IAPST International Conference organized by the Department of Pharmaceutical Technology, Jadavpur University, Indian	Presentation of paper “Development of silicon doped 3D printed scaffold.....)” in 2 nd Pharma Tech IAPST	Oral presentation Award

	Association of Pharmaceutical Scientists & Technologists, and NSHM knowledge campus	International Conference on New insights into diseases and recent therapeutic approaches (17-19 th January 2014)	
15.	The Editors of Acta Biomaterialia, Elsevier, Amsterdam, The Netherlands	In recognition of reviewing made for the journal of Acta Biomaterialia	Elsevier Reviewer Recognition ‘Certificate of Reviewing Award’
16.	Foundation for Science and Environment, Kolkata, West Bengal	In recognition of outstanding contribution in the areas of scientific research and teaching	Science Excellence Award 2015
17.	International Benevolent Research Foundation	In recognition of teaching excellence	National Teaching Excellence Award 2016
18.	Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola	For outstanding research work in the disciplines of Agriculture including Animal Sciences, Fisheries, and Agricultural Engineering during the year 2015-16.	Late Dr. P. S. Khankhoje Gold Medal
19.	West Bengal University of Animal and Fishery Sciences	In recognition of the teaching excellence of the Faculty of Veterinary & Animal Sciences, West Bengal University of Animal and Fishery Sciences	Best Teacher Award 2016 (Above 45 years Category) at Faculty of Veterinary & Animal Sciences, West Bengal University of Animal and Fishery Sciences
20.	West Bengal University of Animal and Fishery Sciences	In recognition of the teaching excellence of the Faculty of Veterinary & Animal Sciences, West Bengal University of Animal and Fishery Sciences	Best Teacher Award 2017 at University Level
21.	ACS Publications by American Chemical Society	For valued contribution to ACS publication	Certificate of Recognition
22.	TePP Outreach cum Cluster Innovation Centre (TOCIC), DSIR, Government of India	For presentation in the scientific session on Workshop “Innovation & Entrepreneurship” on 13 th August 2019	Awarded second prize in Scientific session
23.	SKOCH Group	For the presentation on “Development of Affordable Biomaterial-based Strategies for Triggering Wound, Bone	Semi-Finals of SKOCH Award 2021

		and Cartilage Regeneration”	
24.	Indian National Science Academy, New Delhi	Partial financial assistance to attend International Conference in Kuopio, Finland	Travel Grant award
25.	Council of Scientific and Industrial Research, New Delhi	Partial financial assistance to attend International Conference in Bangkok, Thailand	Travel Grant award
26.	Department of Science and Technology, New Delhi	Partial financial assistance to attend International Conference in Dalian, China	Travel Grant award
27.	Indian Council of Medical Research, New Delhi	For partial financial assistance to attend International Conference in Nanyang Technological University, Singapore	Travel Grant award

Honors

- **Adjunct Faculty**, School of Mechanical and Materials Engineering, Washington State University, Pullman, USA w. e. f. 2012 (March-July)
- **Visiting Professor**, Department of Veterinary Clinical Sciences, College of Veterinary Medicine, Washington State University, Pullman, USA.
- **Life Member**, Association of Indian Zoo and Wildlife Veterinarians
- Scientific and Technical Committee & Editorial Review Board on Biological and Life Sciences, World Academy of Science, Engineering, and Technology
- **Expert member, Selection Committee** of SRF, JRF of Central Glass and Ceramic Research Institute, Kolkata.
- **Expert Member, Selection Committee** for the post of Assistant Professors for the Nano Science & Technology, University of Kalyani.
- **Expert Member, Selection Committee** for the post of Professor for the Central Agricultural University, Imphal
- **External Examiner** of UG, PG & Ph.D. studies of College of Veterinary Sciences, Orissa University of Agriculture and Technology, Bhubaneswar, Central Agricultural University, Aizawl and Jabalpur; Indian Veterinary Research Institute, Assam Agricultural University, Khanapara, Ranchi Veterinary College, BAU, Sri Venkateswara Veterinary University, Tirupati, College of Veterinary Sciences, Anjora, Durg and Jadavpur University, Kolkata.
- **Felicitation** by the OMICS Publishing Group, USA during the Conference in “World Congress on Biotechnology”, Hyderabad, India.
- **Session Chair**, on Analytical Strategies, Bioequivalence Assessment and BCS & IVIVC Based Biowaivers at the “3rd International Conference and Exhibition on Biowaivers, Biologics & Biosimilars” in International Convention Centre, Hyderabad w.e.f 27-29th October 2014 by OMICS Publishing Group, USA and the Editors of Journal of Bioanalysis

& Biomedicine, Journal of Bioequivalence & Bioavailability and journal of Pharmaceutical Sciences & Emerging drugs applaud.

- **Expert Reviewer** of project proposal of Department of Science and Technology, Government of West Bengal, Kolkata
- **Expert Reviewer** for project proposal on “**Research Training Fellowship for Clinicians**, The Wellcome Trust/DBT India Alliance (India Alliance)
- **Reviewer** of Peer reviewed journals like the Indian Journal of Animal Health, Acta. Biomaterialia (Elsevier), The Veterinary Journal (Elsevier), Regenerative Medicine, Journal of Medical Laboratory and Diagnosis, The Journal of American Ceramic Society, Histology and Histopathology (Elsevier), Current Drug Delivery, Ceramic International (Elsevier), Biomedical and Environmental Sciences, International Journal of Biomaterials, Drug Delivery, African Journal of Pharmacy and Pharmacology, etc.
- **Associate Editor**, Indian Journal of Animal Health
- **Reviewer** of evaluation of Intramural Research Project of Central Agricultural University, Manipur
- “**Certificate of Recognition**” by OMICS International, USA for an invited speaker at the “6th World Congress on Biotechnology” held on October 05-07, 2015 in New Delhi, India
- **Technical Committee Member of the** “2nd Global Conference on Materials Science and Engineering (CMSE 2013)” held in Xianning, China, on Nov. 20-22, 2013.
- **Member of International Conference Committee** of the International Conference on Orthopedics, Sports Medicine and Arthroscopic Surgery held in Montreal, Canada 2013.
- **Member of the International Conference Committee** of the International Conference on Surgery, Anaesthesiology, and Trauma held in Bangkok, Thailand 2013.
- **Member as university representative** to attend the second National Workshop of ICAR-BSMA Committee for syllabus modification for Veterinary Clinical Subjects
- **Member** of the IPR Cell in the University.
- **Member**, Summer/Winter training course of the university, WBUAFS
- **Member of the** Summer Training Committee, West Bengal University of Animal & Fishery Sciences.
- **Felicitations** by the Society of Veterinary Biochemists and Biotechnologists of India (SVBBI) during the Annual Convention and National Symposium, Bhubaneswar March 11-12, 2016.
- **Examiner** in Animal Husbandry and Veterinary Sciences for Paper evaluation of West Bengal Civil Service Examination (Executive) etc. Main, Public Service Commission, Government of West Bengal.
- **Question Setter**, Madhya Pradesh Public Service Commission
- **Editorial Board member** for Elyns Journal of Material Science and Techniques
- **Editorial Board Member** for Indian Journal of Veterinary Surgery

Publications

International publications

1. **Nandi, SK.**, Ghosh, SK., Kundu, B., De, DK, Basu, D. Evaluation of new porous β -tricalcium phosphate ceramic as bone substitute in goat model. *Small Ruminant Research*. 2008; **75**: 144-153. **(Impact Factor-1.8)**
2. Ghosh, SK., **Nandi, SK.**, Kundu, B., Dutta, S., De, D.K., Roy, SK., Basu, D. In vivo response of porous hydroxyapatite and β -tricalcium phosphate prepared by aqueous solution combustion method and comparison with bioglass scaffolds, *Journal of Biomedical Materials Research Part B: Applied Biomaterials* 2008; **86B**: 217-227. **(Impact Factor – 3.4)**
3. **Nandi, S.K.**, Kundu, B., Ghosh, SK, De, DK., Basu, D. Efficacy of nano-hydroxyapatite, prepared by an aqueous solution combustion technique in healing bone defects of goat. *Journal of Veterinary Science* 2008; **9**(2): 183-191. **(Impact Factor – 1.8)**
4. Hazra, S., De, D. K., Roy, B., Bose, A., **Nandi, S. K.** and Konar, A. Use of Ketamine, Xylazine and diazepam anesthesia with retrobulbar block for phacoemulsification in dogs. *Veterinary Ophthalmology* 2008; **11**(4): 255-259 **(Impact Factor – 1.6)**
5. **Nandi, S. K**, Roy, S., Mukherjee P., Goswami, A. and Majumder, D. Epidemiology of lameness in dairy cattle of hilly region of west Bengal: the influence of pain on performance. *Livestock Research and Rural Development*. 2008; **20**(1): 211.215**(Impact Factor - 0.50)**
6. **Nandi, S.K.**, Kundu, B., Datta, S., De, D.K. and Basu D. The Repair of segmental bone defects with porous bioglass: An experimental study in goat. *Research in Veterinary Science* 2009; **86**: 162-173. **(Impact Factor – 2.4)**
7. **Nandi, S. K.**, Kundu, B., Mandal, T. K., De, D. K. and Basu, D. Cefuroxime-Impregnated calcium Phosphates as an Implantable Delivery System in Experimental Osteomyelitis. *Ceramics International*. 2009; **35**(4): 1367-1376. **(Impact Factor – 5.2)**
8. **Nandi, S. K.**, Kundu, B., Mukherjee, P., Mandal, T. K., Datta, S., De, D. K. and Basu, D. In vitro and In vivo release of cefuroxime axetil from bioactive glass as an implantable delivery system in experimental osteomyelitis. *Ceramics International* 2009; **35**: 3207-3216. **(Impact Factor - 5.2)**
9. **Nandi, S. K.**, Mukherjee, P., Roy, S., Kundu, B., De, D. K. and Basu, D. Local antibiotic delivery systems for the treatment of osteomyelitis- a review. *Material Science and Engineering C* 2009; **29**: 2478-2485. **(Impact Factor – 7.9)**
10. **Nandi S. K.**, Roy Subhasish, Mukherjee, Prasenjit, Goswami, Arunasis and Mazumdar, Debasis. Evaluation of lameness in dairy cows and observations on associated pain perception and production potential. *Livestock Research for Rural Development*. 2009; **21** (7). <http://www.lrrd.org/lrrd21/7/nand21104.htm> **(Impact Factor - 0.50)**
11. **Nandi, S. K.**, Roy, S., Mukherjee, P., Goswami, A. and Mazumdar, D. 2009. Evaluation of lameness in dairy herds in India- Observation on associated pathogenesis and pain perception. *The International Journal of Veterinary Medicine*. <http://www.priory.com/vet.htm>
12. Kundu, B., Soundrapandian, C., **Nandi, S. K.**, Mukherjee, P., Dandapat, N., Roy, S., Datta, B. K., Mandal, T. K., Basu, D. and Bhattacharya, R. N. Development of new localized drug delivery system based on ceftriaxone-sulbactam composite drug impregnated porous

- hydroxyapatite: A systematic approach for in vitro and in vivo animal trial. *Pharmaceutical Research* 2010; **27**: 1659-1676. (**Impact Factor – 3.7**)
13. **Nandi, S. K.**, Roy, S., Mukherjee, P., Kundu, B., De, D. K. and Basu, D. Orthopaedic applications of bone graft and graft substitutes-a review. *Indian Journal of Medical Research* 2010; **132**: 15-30 (**Impact Factor – 4.2**)
 14. Dey, Arjun, **Nandi, S. K.**, Kundu, B., Kumar, C., Mukherjee, P., Roy, S., Mukhopadhyay, A. K., Sinha, M. K. and Basu, D. Evaluation of hydroxyapatite and β -tri calcium phosphate microplasma spray coated pin intra-medullary for bone repair in a rabbit model. *Ceramics International* 2011; **37** (4): 1377-1391 (**Impact Factor – 5.2**)
 15. Kundu, B., **Nandi, S. K.**, Mukherjee, P., Roy, S., Dandapat, N., Singh, A., Mandal, T. K., Datta, S., Das, P. and Basu D, “Macro-to-micro porous special bioactive glass and ceftriaxone-sulbactam composite drug delivery system for treatment of osteomyelitis: A systematic approach for in vitro and in vivo animal trial. *Journal of Materials Science: Materials in Medicine* 2011; **22**:705–720 (**Impact Factor – 3.7**)
 16. Chakraborty, A., Kundu, B., Basu, D., Paul, T. K. and **Nandi, S. K.** 2011. “In vivo bone response and interfacial properties of titanium-alloy implant with different designs in rabbit model with time” *Indian Journal of Dental Research* **22**(2): 277-284 (**Impact Factor – 2.34**)
 17. Akela A., **Nandi, S. K.**, Banerjee, D., Das, P., Roy, S., Joarder, S. N., Mandal, M., Das, P. K. and Pradhan, N. R. 2012. Evaluation of autologous bone marrow in wound healing in animal model: a possible application of autologous stem cells. *International Wound Journal*. **9** (5), 505-516 (**Impact Factor – 3.1**)
 18. Kundu, B., **Nandi S. K.**, Roy, S., Dandapat, N., Soundrapandian, C., Datta, S., Mukherjee, P., Mandal, T. K., Dasgupta, S. and Basu, D. 2012. Systematic approach to treat chronic osteomyelitis through ceftriaxone-sulbactam impregnated porous β -tri calcium phosphates localized delivery system. *Ceramics International* **38**: 1533-1548 (**Impact Factor – 5.2**)
 19. Chettri, B., **Nandi, S. K.**, Chanda, A. and Begam, H. Bone Ingrowth to Insulin like Growth Factor-1 Loaded Zinc Doped Hydroxyapatite Implants: an In Vivo Study. *Open Access Scientific Reports*. 2012; **1** (4): 2-9.
 20. Akela, A., **Nandi, S. K.**, Das, P., Banerjee, D., Roy, S., Joarder, S. N., and Datta, U. 2013. Autologous bone marrow-derived cells with placental extract for healing excisional cutaneous wounds in animal model. *International Wound Journal*. **10**: 167-176 (**Impact Factor - 3.1**)
 21. **Nandi, S. K.**, Kundu, B. and Basu, D. 2013. Protein growth factors loaded highly porous chitosan scaffold: A comparison of bone healing properties. *Material Science and Engineering C* **33**: 1267–1275 (**Impact Factor – 7.9**)
 22. Bhattacharya, R., Kundu, B., **Nandi, S. K.**, and Basu, D. 2013. Systematic approach to treat chronic osteomyelitis through localized delivery system: Bench to bed side. *Material Science and Engineering C*, **33**(7):3986-93 (**Impact Factor – 7.9**).
 23. Bhattacharjee, P., Begam, H., Chanda, A. and **Nandi, S. K.** 2014. Animal trial on zinc doped hydroxyapatite: A case study. *Journal of Asian Ceramic Societies*. **2**(1): 44–51. **Cited by-4 (Impact Factor –2.3)**
 24. Begam, H., Mandal, S., Chanda, A., Mukherjee, J. and **Nandi, S. K.** 2014. Effect of zinc doping on the biological properties of biphasic calcium phosphate ceramics in orthopedic animal model. *Transactions of the Indian Ceramic Society* **73**(4): 1-9. (**Impact Factor – 1.2**).

25. Begam, H., Sinha, S., **Nandi, S. K.**, and Chanda, A. 2014. Effect of Temperature on the Rheological Behavior, Slip Effect of Temperature on the Rheological Behaviour, Slip Casting Rate and Densification of Calcium Hydroxyapatite Slurry. *Transactions of the Indian Ceramic Society* **73**(4):1-6. (**Impact Factor – 1.2**).
26. **Nandi, S. K.**, Kundu, B., Mahato, A., Thakur, N. L., Joardar, S. N. and Mandal, B. B. 2015. *In vitro* and *in vivo* evaluation of marine sponge skeleton as a bone mimicking biomaterial. *Integrative Biology*. **7**, 250--262 (**Impact Factor -2.5**).
27. **Nandi, S. K.**, Kundu, B., Mukherjee, J., Datta, S. and Balla, V. K. 2015. Converted coralline hydroxyapatite implants with growth factors: In vivo bone regeneration. *Materials Science and Engineering C* **49**: 816-823 (**Impact Factor – 7.9**).
28. Vahabzadeh, S., Bandyopadhyay, A., Bose, S., Mandal, R. and **Nandi, S. K.**, 2015. IGF-Loaded Silicon and Zinc Doped Brushite Cement: Physico-Mechanical Characterization and In Vivo Osteogenesis Evaluation. *Integrative Biology*. **7**: 1561 - 1573 (**Impact Factor – 2.5**).
29. Mukherjee, S., **Nandi, S. K.**, Kundu, B., Chanda, A., Sen, S. and Das, P. K. 2016. Enhanced bone regeneration with carbon nanotube reinforced hydroxyapatite in animal model. *Journal of the Mechanical Behavior of Biomedical Materials* **60**:243-255 (**Impact Factor- 3.9**).
30. Bhattacharjee, P., Naskar, D., Maiti, T. K., Bhattacharya, D., Das, P., **Nandi, S. K.**, and Kundu, S. C. 2016. Potential of non-mulberry silk protein fibroin blended and grafted poly (ε-caprolactone) nanofibrous matrices for in vivo bone regeneration. *Colloids and Surfaces B: Biointerfaces*. **143**:431-439. (**Impact Factor- 5.8**).
31. Gupta, P., Kumar, M., Bhardwaj, N., Kumar, J. P., Krishnamurthy, C.S, **Nandi, S. K.**, and Mandal, B. B. 2016. Mimicking form and function of native small diameter vascular conduits using mulberry and non-mulberry patterned silk films. *ACS Applied Materials & Interfaces*. **8**(25):15874-88[**Impact Factor-9.5**]
32. Kumar, M., Jain, D., Bhardwaj, N., Gupta, P., **Nandi, S. K.**, and Mandal, B. B. 2016. Native honeybee silk membrane: A potential matrix for tissue engineering and regenerative medicine. *RSC Advances* **6**, 54394–54403 [**Impact Factor-3.9**]
33. Gupta, P., Kumar, M., Bhardwaj, N., Kumar, J. P, Krishnamurthy, C. S, **Nandi, S. K.**, Mandal, B. B. 2016. Bioengineered silk vascular grafts for coronary artery bypass surgery. *European Cells & Materials* **31**(Suppl. 1): P412 [**Impact Factor-3.1**]
34. Chouhan, D., **Nandi, S. K.**, and Mandal, B. B. Non-mulberry silk fibroin based smart nanofibrous wound dressing for chronic cutaneous ulcers. *European cells & materials*, 2016; 31:239. [**IF 3.1**]
35. Khan, P. K., Mahato, A., Kundu, B., **Nandi, S. K.**, Mukherjee, P., Datta, S., Sarkar, S., Mukherjee, J., Nath, S., Balla, V. K. and Mandal, C. 2016. Influence of single and binary doping of strontium and lithium on in vivo biological properties of bioactive glass scaffolds. *Scientific Reports* **6**, 32964 [**Impact Factor-4.6**]
36. Ray, S., Acharya, R., Saha, S., Islam, A., Dey, S., **Nandi, S. K.**, Mandal, T. K., Banerjee, G. and Chakraborty, J. 2016. Role of nitrogenous bisphosphonate (local delivery) incorporated vitreous coating (with/without polymer) on surgical grade SS316L implant material to improve fixation at the damaged tissue site. *RSC Advances* **6** (92), 89467-89483[**Impact Factor-3.9**]

37. **Nandi, S. K.**, Bandhopadhyay, S., Das, P., Samanta, I., Mukherjee, P., Roy, S. and Kundu, B. 2016. Understanding osteomyelitis and its treatment through local drug delivery system. *Biotechnology Advances* 34(8): 1305-1317. [**Impact Factor-16**]
38. Begam, H., **Nandi, S. K.**, Kundu, B. and Chanda, A. 2017. Strategies for delivering bone morphogenetic protein for bone healing". *Materials Science and Engineering C* 70(1): 856–869 [**Impact Factor – 7.9**].
39. Chouhan, D., Chakraborty, B., **Nandi, S. K.**, and Mandal, B. B. 2017. Role of nonmulberry silk fibroin in deposition and regulation of extracellular matrix towards accelerated wound healing. *Acta Biomaterialia* 48: 157-174. [**Impact Factor – 9.7**].
40. Begam, H., **Nandi, S. K.**, and Chanda, A. 2017. Effect of bone morphogenetic protein on Zn-HAp and Zn-HAp/collagen composite: A systematic *in vivo* study. *Research in Veterinary Science*. 115: 1-9 [**Impact Factor- 2.4**]
41. Bhattacharjee, P., Maiti, T. K., Bhattacharya, D. and **Nandi, S. K.** 2017. Effect of different mineralization processes on *in vitro* and *in vivo* bone regeneration and osteoblast-macrophage cross-talk in co-culture system using dual growth factor mediated non-mulberry silk fibroin grafted poly (ε -caprolactone) nanofibrous scaffold. *Colloids and Surfaces B: Biointerfaces* 156: 270-281[**Impact factor- 5.8**]
42. Naskar, D., Ghosh, A. K., Mandal, M., Das P., **Nandi, S. K.**, and Kundu, S. C. 2017. Dual growth factor loaded nonmulberry silk fibroin/carbon nanofiber composite 3D scaffolds for *in vitro* and *in vivo* bone regeneration *Biomaterials* 136: 67- 85 [**IF 14**]
43. Mahato, A., Kundu, B., Mukherjee, P. and **Nandi, S. K.**, 2017. Applications of different bioactive glass and glass-ceramic materials for osteoconductivity and osteoinductivity. *Transactions of the Indian Ceramic Society* 76(3): 149-158. [**IF- 1.2**].
44. Mehrotra, S., **Nandi, S. K.**, and Mandal, B. B. 2017. Stacked silk-cell monolayers as a biomimetic three-dimensional construct for cardiac tissue reconstruction. *Journal of Materials Chemistry B*, 5: 6325-6338 [**IF 7**].
45. Kumar, M., **Nandi, S. K.**, Kaplan, D. and Mandal, B. B. 2017. Localized Immunomodulatory Silk Macrocapsules for Islet-like Spheroid Formation and Sustained Insulin Production. *ACS Biomaterials Science & Engineering* 3 (10), pp 2443–2456. **IF 5.8**
46. Kumar, M., **Nandi, S. K.**, Kaplan, D. and Mandal, B. B. Immunomodulatory bioartificial pancreas for sustained insulin production in diabetic patients. *European Cells & Materials*, 2017; 33: Suppl. 2, 0323 **IF 3.1**
47. Begam H, Kundu B, Chanda A, **Nandi SK** 2017. MG63 osteoblast cell response on Zn doped hydroxyapatite (HAp) with various surface features. *Ceramics International* 43 (4), 3752-3760. (**Impact Factor – 5.2**)
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49. **Nandi, S. K.**, Shivaram, A., Bose, S. and Bandhopadhyay, A. 2018. Silver nanoparticles coated implants to treat osteomyelitis. *Journal of Biomedical Materials Research Part B: Applied Biomaterials*. 106(3):1073–1083 [**IF-3.4**]
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Popular article Published:

- 1) **S. K. Nandi** and A. Goswami. (1997-98). Handling of group and individual situations during training. *The Technical Bulletin, WBVA*, Vol. **15** & **16**: 13-16.
- 2) S. Halder and **S. K. Nandi**. (2001). Anaesthesia of Wild animals. *The Technical Bulletin, WBVA*, Vol. **19**(1): 12-13.

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- 8) Samit Kumar Nandi 2013. Development of Biomaterials in orthopaedic surgical challenges. *The Technical Bulletin*, 32(2): 3
- 9) Samit Kumar Nandi 2017. Development of Biomaterials in bone and Cartilage tissue Engineering. The 41st Annual Congress of Indian Society for Veterinary Surgery, 2017 at College of Veterinary Science, Tirupati during 14-16th December, 2017.

Publication of Booklets/Manuals

1. Booklet on First aid in Animals (2005) in Bengali, Published by DREF, WBUAFS
2. Folder on Vaccination schedule of Animals (2005) in Bengali Published by DREF, WBUAFS
3. Leaflet on Parasitic diseases and its control (2005) in Bengali Published by DREF, WBUAFS
4. Manual on Radiology, Regional and Clinical Surgery-I Course No VSR-422 (as per VCI Syllabus).
5. Manual on General Surgery and Anaesthesiology Course No- VSR-412 (as per VCI Syllabus).
6. Manual on Regional and Clinical Surgery II and Lameness Course No VSR-512

C. Research Support

Ongoing Research Support.

- **Science and Engineering Research Board, DST, Government of India**
Project on “Development of Polypyrrole Coated Mg alloys for Degradable Fracture Fixation Devices” File Number: CRG/2020/002818 dated 30.12.2020 Fund sanctioned- Rs. 8,14,000.00
- **Science and Engineering Research Board, DST, Government of India**
Project on “Development of doped bioactive glass coated eggshell membrane for diabetic burn wound healing” as PI in collaboration with CSIR-CGCRI, Kolkata sanction order no CRG/2021/000126 dated 11 March, 2022
- **Department of Biotechnology, Ministry of Science and Technology, Government of India**
“Injectable silk-based hydrogel system loaded with chemotherapeutic agent to treat canine mammary gland neoplasms” as PI in collaboration with IIT-Guwahati, Sanction order no. BT/PR46852/AAQ/1/961/2022 dated 12.04.2023

- **Indian Council of Agricultural Research (ICAR), Government of India** funded project on “Development of affordable technologies for burn wound management: Biological Waste to Wealth”

Completed Research Support

- **Indian Council of Agricultural Research (ICAR), Government of India**

Ad-hoc Project on Bovine lameness with special reference to pathogenesis and pain perception (F. No. 3(7)/2005-GA-II dated 23.03.2006) 29.12.05 to 28.12.08

Role: PI, Co-PI-Dr. P. Das & Dr. A. Goswami

The program is focused on evaluation of etiological factor in bovine lameness and their correction.

- **Department of Science and Technology, Ministry of Science and Technology, Government of India**

Development of Ceramic – based implantable delivery system for sustained release of the drugs for the treatment of Osteomyelitis in human patients (T.1(7)/TIFA/2006-CGCRI dated 23/01/2007) 1.3.2007-28.02.2010

Role: Co-PI, PI-Mr. B. Kundu

The major goal of this project is to establish ceramic based local delivery system for treatment of osteomyelitis in animal and human subject.

- **Department of Science and Technology, Ministry of Science and Technology, Government of India**

Development of bioactive ceramic coating on orthopedic implants (metallic) for sustained localized delivery of bisphosphonates to improve fixation (T.1 (23)/TIFA/2008-WBUAFS Date-27.12.2010-27.12.2011)

Role: Co-PI, PI-Dr. J. Chakrabarti

The major goal of this project is to develop ceramic coated orthopaedic implants for local and sustained delivery of bisphosphonates to improve fixation

- **National Bioscience Award Project, 2008 for career Development, Department of Biotechnology, Ministry of Science and Technology, Government of India**

Development of marine biomaterials alone and in combination with conventional and unconventional growth factors in bone tissue engineering (BT/HRD/34/15/2008 dated 26.05.2010) 1.6.2010 to 31.5.2013

Role: PI, Single PI proposal

The major goal of this project is to develop marine based biomaterial in bone healing

- **Department of Biotechnology, Ministry of Science and Technology, Government of India**

Project proposal on “*Development of Animal cartilage for surgical implantation in Microtia and Rhinoplasty of human patient*” from Department of Biotechnology, Government of India as **Principal Investigator** [BT/PR7292/AAQ/534/2012 dated 05.08.2013]

- **Department of Biotechnology, Ministry of Science and Technology, Government of India**

Project proposal on “*Multi-layer Customized Skin Graft for Full Thickness Wound*” in Department of Biotechnology, Government of India as **Principal Investigator** in collaboration with School of Medical Science & Technology, Indian Institute of Technology, Kharagpur, India. [BT/PR7818/MED/ 32/ 279 / 2013 dated 24.06.2014]

- **Department of Biotechnology (DBT's Twining program with North East), Ministry of Science and Technology, Government of India**
Project on “*Development of novel tissue engineered silk biomaterial based wound dressing patch for diabetic foot ulcers*” in Department of Biotechnology, Government of India as Principal Investigator in collaboration with Department of Biotechnology, Indian Institute of Technology Guwahati as **Principal Investigator** [BT/505/NE/TBP/2013 dated 24.02.2014]
- **Department of Biotechnology (DBT's Twining program with North East), Ministry of Science and Technology, Government of India**
Project on “*North East Silk Based Bio-engineered Vascular Conduits*” in Department of Biotechnology, Government of India as Principal Investigator in collaboration with Indian Institute of Technology Guwahati and R.G. Kar Medical College & Hospitals, Kolkata as Principal Investigator [BT/PR16605/NER/95/220/2015 dated 11.01.2017]
- **Department of Biotechnology, Ministry of Science and Technology, Government of India -Tata Innovation Project**
Project on “*Development of fish collagen-doped bioactive glass electrospun mats/fibers for diabetic wound healing*” [BT/HRD/35/1/01/2019 dated 27.3.2019]
- **Department of Biotechnology, Ministry of Science and Technology, Government of India**
Project on “Engineering nature inspired peptide-based nanomedicine for blood clotting and wound healing” as Co-PI in collaboration with Indian Institute of Science, Education & Research-Kolkata and R.G. Kar Medical College & Hospitals, Kolkata [BT/PR27059/NNT/28/1543/2017 dated 22.03.2019] Fund- Rs. 20.848092 Lakh

Books/Book chapters

- Amalendu Chakrabarti, **Samit Kumar Nandi** and Swapan Maity. 2007. Book on “**Restraint, First Aid and Physiotherapy in Veterinary Practice**”, *Kalyani Publishers, Ludhiana, India*
- **Samit Kumar Nandi**, Samar Halder and Mozammel Hoque. 2009 and revised on 2014 **Text Book on “Veterinary Surgery and Radiology (At per VCI Syllabus)”** *Kalyani Publishers, Ludhiana, India*
- Amalendu Chakrabarti and **Samit Kumar Nandi**. 2012. Book on “**VET SPECTRUM**” *Kalyani Publishers, Ludhiana, India*.
- **S. K. Nandi**, B. Kundu, R. N. Bhattacharya and D. Basu. 2011. **Book chapter** on “Recent advancement of ceramics in biomedical research” *Advances in Medicine and Biology, Vol. 27 pp. 1-85 by Nova Science Publishers, Inc., 400 Oser Avenue, Suite 1600, Hauppauge, NY 11788*
- **Samit Kumar Nandi**, Samiran Bandyopadhyay and Chandra Sekhar Chakrabarti. 2011. **Book chapter** on “Potentiality of autologous bone marrow derived cells in wound and orthopaedic surgical challenges” *Advances in Medicine and Biology, Vol. 21, Chapter-1, pp.1-42, by Nova Science Publishers, Inc., 400 Oser Avenue, Suite 1600, Hauppauge, NY 11788, USA*
- **Samit Kumar Nandi**, Biswanath Kundu and Someswar Datta. 2011. **Book Chapter**. “Development and Applications of Varieties of Bioactive Glass Compositions in Dental, Third Generation Tissue Engineering, Orthopaedic and as Drug Delivery System” in

Biomaterials Applications for Nanomedicine, pp. 69-116. InTech Open Access Publisher, Austria

- **Samit Kumar Nandi** and Subhasish Biswas. 2013. **Book chapter** entitled “In vivo characterization of Biomaterials” in Book *Characterization of Biomaterials*, Elsevier, UK Chapter-6, pp. 256-290
- **Samit K. Nandi**, Uttam Datta and Subhasis Biswas. **2013. Book chapter** on “Application of marine biomaterials in orthopaedic and soft tissue surgical challenges. in Book *Marine Biomaterials” (Isolation, Characterization and Application)*, CRC-Taylor & Francis publishers, Chapter-29, pp. 561-574
- **Samit Kumar Nandi**, Arnab Mahato, Biswanath Kundu and Prasensjit Mukherjee. 2016. **Book Chapter**. “Doped bioactive glass materials in bone regeneration” in *Advanced Techniques in Bone Regeneration*, InTech Open Access Publisher, Austria pp. 275-328.
- Promita Bhattacharjee, Prerak Gupta, Joseph Christakiran, **Samit Kumar Nandi** and Biman B. Mandal. 2018. Book Chapter: Silk based matrices for tissue engineering applications. In Book *Nanostructures for the Engineering of Cells, Tissues and Organs: From design to applications* Multi-Volume SET (I-XXVII) **Elsevier ISBN: 9780128136669**. The Boulevard, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom, 50 Hampshire Street, 5th Floor, Cambridge, MA 02139, United States Chapter 12; Pp 439-472.
- **Samit Kumar Nandi**, Arnab Mahato, Biswanath Kundu and Prasensjit Mukherjee. Organic-inorganic micro/nano fibre composites for biomedical applications. 2019. In Book “Materials for Biomedical Engineering: Biopolymer Fibers”. **Elsevier 4: 21-44. Editor: Dr. Valentina Grumezescu and Dr. Alexandru Mihai Grumezescu, Romania**
- Lalzawmliana V, Prasensjit Mukherjee, Biswanath Kundu and **Samit Kumar Nandi**. Clinical application of biomimetic marine-derived materials for tissue engineering. 2019. Book on “Marine-Derived Biomaterials for Tissue Engineering Applications” by Springer Nature Publishing under the “Springer Series in Biomaterials Science and Engineering” Pages 329-356. Editors: **Choi, Andy, Ben-Nissan, Besim** ISBN- 978-981-13-8854-5
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- V. Lalzawmliana, Prasensjit Mukherjee, Subhasis Roy and **Samit Kumar Nandi**. 2022. Nutraceuticals and dietary supplements endorse bone health: A rational behind the thriving triumph of clinical trials. In book *Clinical studies on nutraceuticals and dietary supplements* CRC Press, a Taylor & Francis Group. Chapter 7: 69-97 Editor: **Dr. Sreeraj Gopi, Dr. Augustine Amalraj, Ms. Akhila Nair and Ms. Chandradhara Divya** DOI: 10.1201/9780367815486-7 ISBN-978-0-367-41643-0
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of bone disorders” for the book entitled “Marine Biomaterials: Therapeutic Potential” under **Springer Nature** Singapore Pvt. Ltd., Singapore. Pp-271-306 ISBN 978-981-16-5373-5 **Editor:** Sougata Jana and Subrata Jana

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- Howa Begam, Subhasis Roy, Prasenjit Mukherjee, Abhijit Chanda, Biswanath Kundu and **Samit Kumar Nandi**. Bone Morphogenic Proteins and Bioceramic Scaffolds in Orthopedics. In Book **Innovative Bioceramics in Translational Medicine II**, by Springer Publishing under the series “**Springer Series in Biomaterials Science and Engineering, 2022 Chapter 9 Vol-18, Pp-187-208** **ISBN**978-981-16-7438-9 Editors: **Choi, Andy**. DOI : 10.1007/978-981-16-7439-6
- V. Lalzawmliana, Prasenjit Mukherjee, Subhasis Roy, Mangal Roy and **Samit K. Nandi**. 2022. Ceramic biomaterials in Advanced Biomedical Applications In Book “**Functional Biomaterials-Drug Delivery and Biomedical Applications**” Pp371-408 published by Springer Nature Singapore Pte Ltd., Singapore. ISBN 978-981-16-7151-7
- **Samit Nandi** and Sukanta Biswas. 2022. Intellectual Property Right (IPR) & Technology Management for Commercialization of Animal Husbandry. In Book *Advanced Extension & Communication Strategies for Sustainable Livelihood Through Animal Husbandry and Allied Farming System*, NIPA® GENX Electronic Resources & Solutions P. Ltd, New Delhi, Pp 407-418 **ISBN:** 978-93-94490-82-6
- Prasenjit Mukherjee, Subhasis Roy, Shubhamitra Chaudhuri, Rahul Deb Mukherjee Biswanath Kundu and **Samit Kumar Nandi**. 2023. Functionalized hydroxyapatite in bone regeneration. In book “What to know about Hydroxyapatite” *Nova Science Publishers*, USA Pp:169-192 **Editor:** Isaac Lavoie **ISBN:** 979-8-88697-523-9
- Sonali Jana, Piyali Das and Samit Kumar Nandi. Ionotropic cross-linking of biopolymers for drug delivery in wound management. In Book “Ionotropic Cross-Linking of Biopolymers: Applications in Drug Delivery” Elsevier Ltd., USA [Accepted].
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- V. Lalzawmliana, Prasenjit Mukherjee, Subhasis Roy and **Samit Kumar Nandi**. 2023. Current marine-derived ECM-based materials for tissue regeneration applications. Springer. https://doi.org/10.1007/978-3-030-92090-6_52-1 Pp: 1-25. In *Handbook of the Extracellular Matrix*
- V. Lalzawmliana, Prasenjit Mukherjee, Subhasis Roy, Shubhamitra Chaudhuri and **Samit K. Nandi**. Bioceramics system for biomedical application. In book entitled on “**Advances of Pharmaceutical Technology in Drug Delivery Systems (PTDDS)**” to be published by

Apple Academic Press, Inc. (*Exclusive co-publishing with CRC Press a Taylor and Francis Group*), 4164 Lakeshore Road, Ontario, Canada

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- Howa Begam, Sayantika Sanyal, Ananya Barui, and **Samit Kumar Nandi**. Materials from natural resources for the application of bone tissue engineering. In the book Interaction of Nanomaterials with living cells, Springer Nature. Editor: Dr. Faheem A Sheikh

Patent Granted

- Subhasis Roy, Uttam Datta, **Samit Kumar Nandi**, Partha Sarathi Dasgupta, Debaki Ghosh and Uttio Roy Chowdhury **Indian patent** on “Bioactive compound(s) from marine gastropod mollusc (*Telescopium telescopium*) as potential anticancer/ antiproliferative agents”. Vide No. 858/Kol/2007 Reference No. E-18(iii)/277/2014-Kol dated 09.04.2014 [**Patent No- 291906 Date of Grant-19.01.2018**].
- **S. K. Nandi**, S. N. Joardar, Bikash Kanti Biswas, Piyali Das, Pradip Kumar Das, Subhasis Batabyal and Rupnarayan Bhattacharya **Indian patent** on “A process for preparing animal choncal cartilage for transplantation” applied vide No. 249/kol/2015 dated 09/03/2015 [**Patent No. 397905 Date of Grant-27.05.2022**]
- **Samit Kumar Nandi**, Biswanath Kundu, Subhasis Roy, and Late Debabrata Basu **Indian patent** on “A new delivery system comprising of porous chitosan with different protein growth factors with efficient bone healing and regenerative properties” Application No. 193/KOL/2012 dated 27.2.2012 [**Patent No. 429053 Date of Grant-17.04.2023**]

Patent Applied for

- **Samit Kumar Nandi**, Biswanath Kundu, Subhasis Roy, Uttam Datta, Subhasis Biswas and Late Debabrata Basu **Indian patent** on “An osseointegrator comprising of porous chitosan and spermatheca gland extract of snail *Achatina fulica* for effective hard tissue repair” Application No. 192/KOL/2012 dated 27.2.2012 [**Provisionally published**] [**Submitted Examination report to the Patent office**]
- Snehasis Biswas, Vinod Kumar, V. Kishore, Rituparna Sinha Roy, **Samit Kumar Nandi**. 2018. Peptide based tissue sealant, Process and Application thereof” **Application no. 201831040193 24.10.2018 Indian Patent Office**
- D. Dutta Majumder, Vinod Kumar, Amit Roychoudhury, Dehi pada Mondal, Manojit Ghosh, **Samit Kumar Nandi**. A Process for preparing improved Ti Composite Foams as Bio-Implants Materials. A Process for development of Cenosphere Dispersed Ti Composite Foam with Improved Performance. Application No. 201931039872 Indian Patent dated 02.10.2019 [Applied]
- Pradip Kumar Das, Saktipada Pradhan, Prabal Ranjan Ghosh, Sritanu Maiti, Barun Roy, **Samit Kumar Nandi**, Subhasish Biswas 2020. Well Ventilating Rural Backyard Poultry House. Application No. 202031052475 Indian Patent dated 02.12.2020 [Applied]

- **Samit Kumar Nandi**, Piyali Das. 2021. Decellularized xenogenic cartilage extracellular matrix (ECM) scaffolds. Application No. 202131008783 Indian Patent dated 02.03.2021 [Applied]
- **Samit Kumar Nandi**, Biswanath Kundu, Sonali Jana, Prabal Ranjan Ghosh and Pradyot Datta. Fish collagen-doped bioactive glass electrospun mats/fibers for diabetic wound healing and the process of preparing the same. Indian Patent submitted on 19.04.2021. **Application** No. 202131017968 CBR No. 5926.
- Biswanath Kundu, **Samit Kumar Nandi**, Vamsi Krishna Balla, P. Veena, Pradyot Datta and Himanka Das. In vivo biocompatible tailor-made multi-ion doped hydroxyapatite plasma-spray coating on metallic substrates and the process of preparation thereof. **Application** No. 202131035014 CBR No. 10416 dated 03.08.2021
- **Samit Kumar Nandi**, Biswanath Kundu, Prasenjit Mukherjee, Pradyot Datta and Subhasis Roy. 2022. A new composite wound dressing system membrane made of zinc and cobalt doped bioactive glass coated eggshell membrane and its process of preparing thereof. Application No. 202231012114 CBR No. dated 07.03.2022.

Significant Foreign assignments

S No	Period of visit		Institute/ country visited	Purpose of visit
	From	To		
1	09.06.2008	13.06.2008	Kuopio, Finland	To present research paper in 15 th Symposium and the 7 th Conference on “Lameness in Ruminants”
2.	27.10.2008	30.10.2008	Bangkok, Thailand	To present research paper in the 15 th Congress of the Federation of Asian Veterinary Association and OIE Symposium
3.	08.08.2009	10.08.2009	Dalian, China	To present Invited speech in 2009 4 th China Medical Biotech Forum and International Experts Symposium
4.	2.8.2010	04.08.2010	Singapore	To present research paper in the 2 nd International Conference on Cellular and Molecular Bioengineering
5	25.3.2012	25.7.2012	School of Mechanical and Materials Engineering, Washington State University, PO BOX 642920, Pullman, WA 99164-2920, USA	Visiting Scholar (as Adjunct Faculty)

Research experience in International level

Research project on “*In vivo* evaluation of doped calcium phosphate based cements and scaffolds in bone tissue engineering” in the group of Susmita Bose, Professor & Director,

Bioengineering Research Center, and Amit Bandyopadhyay, Professor (and Outstanding Scientist –Scientist and Technologist of Indian Origin (OS-STIO), CSIR, India) at the School of Mechanical and Materials Engineering as **Adjunct Faculty** and as **Visiting Professor**, at the Department of Veterinary Clinical Sciences, College of Veterinary Medicine, Washington State University, Pullman, USA for four months under travel grant Award from Indo-US Science and Technology Forum, New Delhi

- Department of Mechanical Engineering and Materials Science, Swanson School of Engineering University of Pittsburgh, Pittsburgh, Pennsylvania 15261, United States
- Department of Biomedical Engineering, Tufts University, Medford, Massachusetts, United States
- Department of Protein Science, School of Engineering Sciences in Chemistry, Biotechnology and Health, KTH Royal Institute of Technology, AlbaNova University Center, Stockholm 106 91, Sweden
- Institute of Dentistry and Turku Clinical Biomaterials Centre - TCBC, University of Turku, Turku, Finland
- Department of Periodontics and Oral Implantology, Guru Nanak Institute of Dental Science and Research
- Experimental Medicine and Biotechnology, Postgraduate Institute of Medical Education and Research, Chandigarh, India;
- Institute of Physics, University of Silesia, Katowice 40-007, Poland

Student's Guidance

- Guidance of Ph D Thesis as **Advisor / Co- Advisor-07**
- Guidance of Ph D Thesis as a **Joint Guide** - 02 (Ongoing)
- Guidance of Ph D Thesis as Member of the committee - 04
- Guidance of Post Graduate Thesis (M. V. Sc) as **Advisor** - 12
- Guidance of Post Graduate Thesis (M. V. Sc) as Member of the Committee- 37
- Guidance of Post Graduate Thesis (Master of Engineering/Dental) as **Co-Advisor- 03**

Reviewer of Peer reviewed Journal: Indian Journal of Animal Health, Acta. Biomaterialia (Elsevier), The Veterinary Journal (Elsevier), Regenerative Medicine, Journal of Medical Laboratory and Diagnosis, The Journal of American Ceramic Society, Histology and Histopathology (Elsevier), Current Drug Delivery, Ceramic International (Elsevier), Drug Delivery (Informa Healthcare), Biomedical and Environmental Sciences, International Journal of Biomaterials, Drug Delivery, African Journal of Pharmacy and Pharmacology, Biomedical Materials, Case Reports in Dentistry (Hindwai), Exploratory Animal and Medical research, JSM Dental Surgery, PLOS ONE, EC Microbiology, Bioscience Reports, International Wound Journal, Biomedicine and Pharmacotherapy, Science and Technology of Advanced Materials, Journal of the Chemical Society of Pakistan, International Wound Journal, ACS Biomaterials Science & Engineering, Journal of Material Research, MRS Advances, Biocybernetics and Biomedical Engineering, ACS Applied Bio Materials, Journal of Materials Chemistry B, Inorganic and Nano-Metal Chemistry, Animal Feed Science and Technology, Frontiers Bioengineering, Materials Today Communications, Material Sciences Engineering C, Biomedical Materials, Materials & Design, International Journal of Biological Macromolecules, Heliyon, Journal of Science: Advanced Materials and Devices, Regenerative Biomaterials, International Journal of Nanomedicine, Drug Development and Industrial Pharmacy etc.

Invited Lecture delivered in National and International conferences/ workshop/Training/ Co-Chairman and Rapporteur etc.

Invited Lecture

- **Invited talk** delivered in 1st International conference on “Recent advances in Surgery-2009 (ICOS-2009)” held w.e.f 4.9.2009 to 6.9.2009, Kottayam, Kerala.
- **Invited speech** delivered at Track 2: Nanomedicine and Biomaterials in 2009 4th China Medical Biotech Forum, Theme- Translating Bio-Innovations into Industrialization held w.e.f August 8-10, 2009 at Dalian, China.
- **Invited lecture** delivered on “Advanced understanding of surgical conditions-better management” in refreshers’ training in Malda, West Bengal, June 2009.
- **Invited lecture** delivered on “Surgical Approach in Field Condition” in refreshers’ training in Howrah, Animal Resources Development Department, Government of West Bengal 25-26 August, 2009
- **Invited lecture** delivered on Advanced understanding of surgical conditions-better management w.e.f 15-17th February, 2010, Kolkata West Bengal Veterinary Council
- **Invited lecture** on “Recent advancement of veterinary anaesthesia and surgery in field condition” ARD Department, Govt. of West Bengal, Burdwan on 23rd December, 2010.
- **Invited Lecture** on “Biomaterials in orthopaedic surgery” in School of Bioscience and Engineering, Jadavpur University, Kolkata on 7th February, 2011.
- **Invited Lecture** on “Biomaterials for Practical Solutions to orthopaedic Surgical Challenges” in World Congress on Biotechnology, Hyderabad, India by OMICS Publishing Group, USA on 21-23th March, 2011.
- **Invited Lecture** on “Local delivery system of protein and antibiotic in orthopaedic Surgical challenges” in International Conference on Exhibition & Pharmaceutical Biotechnology, Hyderabad, India by OMICS Publishing Group, USA on 6-8 June, 2011.
- **Contributory Lecture** on “Development of porous chitosan alone and in combination with growth factors and snail extract in bone healing” in International Conference on Biomaterials and Implants; Prospects and possibilities in the New Millennium, Central Glass and Ceramic Research Institute, Kolkata w.e.f. 21-23 July, 2011.
- **Invited lecture** on “Animal Birth Control Programme” in training programme in Animal Resources Development Department, Howrah District, Government of West Bengal.
- **Award Lecture** in Second National Conference on Biotechnology, Bioinformatics and Bioengineering of Society of Applied Biotechnology, India on “Application of biomaterials in orthopaedic surgical challenges” 24-25 February, 2012 at Kolhapur, Maharashtra.
- **Lecture** on “In Vivo applications of biomaterials in orthopaedic Surgical Challenges” in School of Mechanical and Materials Engineering, Washington State University, PO BOX 642920, Pullman, WA 99164-2920, USA on 5th April, 2012.
- Delivered a **Lead paper** on “Biomaterials in orthopaedic surgical challenges” in XXXVI Annual Congress of ISVS and international Symposium on “Ruminant Surgery in Polyclinics Co-operative dairies and Shelters: Perspective 2020” held w.e.f. November 1-3, 2012.
- **Invited lecture** on “Protein Growth factors and Snail Extract loaded porous coralline hydroxyapatite scaffold” in International Conference on Design of Biomaterials, XXIII

Annual Meeting of SBAOI & VI Annual General Meeting of STERMI w.e.f. December 9-11, 2012, Indian Institute of Science, Bangalore.

- **Invited paper** delivered on “Prospects of bioceramics in canine orthopaedic surgery” in Canine Surgery Session in National Congress on canine practice and 6th Convention of Indian Society for Advancement of Canine practice and Symposium on Modern look on Canine Healthcare Management in the Global Perspective from 6-8th February, 2009.
- **Invited lecturer** in Panel discussion on the theme “Young Scientist Vision on scientific Excellence” 5th Indian Youth Science Congress, Leading Mind into Ever-Widening Thought and Action, organized by Viswa Bharati University, Shantiniketan, West Bengal and M.S. Swaminathan Research Foundation, 6-9th December, 2013.
- **Invited lecture** on “Understanding Osteomyelitis and its solution through Cost effective biomaterial based strategies” at the 3rd International Conference and Exhibition on “Biowaivers, Biologics & Biosimilars” by OMICS Publishing Group, USA and the Editors of Journal of Bioanalysis & Biomedicine, Journal of Bioequivalence & Bioavailability and journal of Pharmaceutical Sciences & Emerging drugs applaud held at International Convention Centre, Hyderabad w.e.f 27-29th October, 2014.
- **Invited lecture** on “Metallic ion doped calcium phosphate-based scaffolds, bioactive glass and cements in bone regeneration” at the 6th “World Congress on Biotechnology” by OMICS Publishing Group, USA and the Editors of Journal of Biotechnology & Biomaterials, Journal of Bioremediation & Biodegradation and Journal of Bioprocessing & Biotechniques held at on October 05-07, 2015 in New Delhi, India.
- **Lead talk** on “Engineered silk based wound dressing patch in diabetic foot ulcers” in National Conference on Natural Bioresources, Diversity and Sustainable Development held on 11-12 December, 2015 at Department of Zoology, University of North Bengal, Siliguri, India
- **Invited lecture** on “Towards application of engineered biomaterials in hard and soft tissue surgical challenges” in Annual Convention & National Symposium on “Use of Advanced Technologies of Biochemistry and Biotechnology in Livestock Health, Production and Reproduction” held during 11th - 12th March, 2016 at Department of Veterinary Biochemistry, C.V.Sc & AH, OUAT, Bhubaneswar.
- **Invited Lecture** on “Towards application of natural resources in wound and bone healing” Workshop on “Biomedical Implants for Orthopaedics: Leveraging Efficacy through Alliance Programs (BIO-LEAP 2016)” at CSIR-CGCRI, Kolkata during April 21-22, 2016.
- **Invited Speaker** on “Advances in surgical approaches in the field of veterinary sciences” on the Seminar of Veterinarians at Baharampur, in Animal Resources Development Department, Murshidabad District, Government of West Bengal.
- **Invited Lecture** on “Silk and xenocartilage based matrices for hard and soft tissue engineering applications” The Second Annual convention of Society of Veterinary Biochemists and Biotechnologists of India (SVBBI) and National Symposium on “Innovative and Emerging Biochemical and Biotechnological Tools to augment Animal Health and Production” during 2nd to 3rd June 2017 at Department of Veterinary Biochemistry, Veterinary College, Hebbal, Bengaluru.
- **Lead Paper** on “Development of Biomaterials in bone and Cartilage tissue Engineering” The 41st Annual Congress of Indian Society for Veterinary Surgery, 2017 at College of Veterinary Science, Tirupati during 14-16th December, 2017.

- **Invited lecture** on “Development of Animal models for biomedical research” at Workshop on Animal Care, Handling and Management organized by Department of Zoology, University of Kalyani, Kalyani Nadia-741235, West Bengal during 23rd March- 31st March, 2018.
- **Lead paper** on “Bridging the development of biomaterials and application in bone and soft tissue surgical challenges” delivered at 19th Indian Veterinary Congress, XXVI Annual conference of IAAVR and National Symposium on “Innovative progress in animal Health and production for safe and secure food under one health prospective” held on February 1-2, 2019 at WBUAFS, Kolkata.
- **Invited talk on** “*Towards innovation in development and application of Biomaterials in bone and soft tissue engineering: Recent Advances & future scope*” delivered on 3rd International Symposium on Genomics in Aquaculture (ISGA- III) in Bhubaneswar, Odisha, India during 21-23 January, 2020
- **Invited Lecture on** “*In vivo bone regeneration of doped bioceramic and glass*” delivered on 27.09.2020 in Webinar on “Opportunities in Bioceramic Materials in Orthopedic, Dental and Tissue Engineering Application (OBMODTEA 2020)”, Department of Ceramic Engineering National Institute of Technology Rourkela Odisha-769008, India.
- **Invited guest lecture** on “IPR & Technology management for Commercialization in AH Development” in ICAR, New Delhi Sponsored Winter School on “Advanced Extension & Communication strategies for sustainable livelihood through Animal Husbandry & Allied farming system” from February, 15th to 07th March, 2022 organized by the Dept. of Veterinary & A.H. Extension Education, F/O-Vety & Animal Sc. WBUAFSC, Kolkata.
- **Invited Lecture** on “Innovative strategies in health management through biotechnological application for bone and soft tissue challenges” Technology Advancement and Integration in Improving Animal Health, Production and Reproduction vis-à- vis Climate Change from 5th to 25 July 2022 at Department of Veterinary Physiology & Biochemistry, College of Veterinary Science & A.H., Mhow, NDVSU, Jabalpur M.P.
- **Invited talk** on “One Health -Digital Health: Sustainable Environment & Ecosystem” in ‘International Symposium on ‘Digital One Health’ at the Engineered Biomedical Materials Research and Innovation Centre’ (EnBioMatRIC) at Manipal University, Jaipur held from 12-13 December 2022.
- **Invited talk as Speaker** on “Our Awareness & Responsibilities towards Animal Welfare” in the State Level Observance of Animal Welfare Fortnight (2022-23) at West Bengal Veterinary Council on 30.01.2023.

Oral and poster presentation

- XIX Annual Convention of ISSAR and National Symposium on “Current Reproductive Technologies for improvement of Livestock Production in India” at Kolkata w.e.f 22.8.2003 to 24. 8.2003 for **oral presentation**.
- XIX Annual Convention of IAVA and National Symposium on “Recent advancement in Veterinary Anatomy and their inter-disciplinary approach in livestock production” w.e.f 16.11.2004 to 18.11.2004.
- 5th Annual Convention and People’s Technology Congress organized by Forum of Scientists, Engineers and Technologists at Kolkata as **paper presenter**.

- XXIX Annual Convention of ISVS and National Symposium on "Alternative teaching and research methods to animal experimentation in veterinary surgery" w.e.f 09.11.2005 to 11.11.2005. at Izatnagar, U.P for **oral presentation**.
- 8th Indian Veterinary Congress and XV Annual Conference of IAAVR and National Symposium on Public-private partnership (PPP) in veterinary research and education sector w. e. f. 22 to 24 February, 2008 for **oral presentation**.
- 15th Symposium and the 7th Conference on "Lameness in Ruminants" in Kupio, Finland to **present paper** held w. e. f 9-13th June, 2008.
- 15th Congress of the Federation of Asian Veterinary Association and OIE Symposium to **present paper** in Bangkok, Thailand held w. e. f 27-30th October, 2008.
- International Conference on "Tissue Engineering and Stem Cell Research using Nanomaterials (Nano Bio-2009)" Kochi, Kerela w.e.f 17-19 February, 2009 for **oral presentation**.
- 79th Annual Session of the National Academy of Sciences, India and National Symposium on "Science and Technology and the Young (Career, Creativity, Excitement)" held during December 14-16, 2009 at Calcutta University, Kolkata for **poster presentation**.
- The 2nd International Conference on Cellular and Molecular Bioengineering to **present Oral presentation** in Nanyang Technological University, Singapore held w. e. f 2- 4th August, 2010.
- **Oral presentation** in XXXV Annual Congress of the ISVS and International Symposium on "Nanobiomaterials in Biomedical Research" held at Kolkata w.e.f 11-13th November, 2011.
- **Oral presentation** in National Scientific Symposium on "Optimization of Livestock Production: Key regulator of rural economy" at Kolkata w.e.f 10-11th January, 2013.
- **Oral presentation** on "In vivo evaluation of bone regeneration of growth factor loaded marine coral implant" in National conference on challenges in Biodiversity and Resource Management w.e.f 26-27th February, 2013 at University of Kalyani, Kalyani, West Bengal, in collaboration with West Bengal Biodiversity Board.
- **Oral presentation** in The Indian Science Congress on "Autologous bone marrow in animal model" in the section of Animal, Veterinary and Fishery Sciences, January 3-7, 2013, Calcutta University.
- Participated in Workshop of Committee for the purpose of Control and Supervision of Experiments on Animals (CPCSEA) held on 19.4.2010 at Central Glass and Ceramic Research Institute, Kolkata.
- **Oral presentation** on "Development of SiO₂ and ZnO doped 3D printed β -TCP scaffolds in bone regeneration" in 2nd Pharma Technical IAPST International conference on "New insights into diseases and recent therapeutic approaches" 17-19th January, 2014 at Jadavpur university, Kolkata.
- **Oral presentation** on "In vivo evaluation of bone regeneration of growth factor loaded coral implant" in National conference on "Need for specialization and super specialization in Veterinary Surgery and imaging techniques for professional efficiency development" held at the college of veterinary & animal Sciences, Kerala Veterinary and Animal Sciences University, Thrissur, Kerala, w.e.f. 6-8th November, 2013.
- Participated in the Workshop on "Methods of Applied Livestock Research: Treatments, Design, implementation, Analysis, interpretation and publication" organized by Department of Animal Nutrition, WBUAFS in collaboration with American Institute for

Goat Research, Langston University, USA and supported by the USDA Foreign Agricultural service on May, 15, 2014.

- Participated in the Workshop on “Role of CPCSEA in Animal Welfare” held on 2/8/2014 organized by CPCSEA, Animal Ethics Society of India, Indian Pharmacological Society and West Bengal University of Animal and Fishery Sciences.
- Participated in the Seminar on “e-learning portal on agricultural Education (e - Krishi Shiksha)” held on 21st January, 2015 at West Bengal University of Animal and Fishery Sciences organized by NISAGENET CELL of DREF, WBUAFS.
- Participated in the Seminar on “National Development through Science’ held on 27th February, 2015 at West Bengal University of Animal and Fishery Sciences organized by Teachers’ Association, WBUAFS.
- **Oral presentation** on “Influence of single and binary doping of Strontium and Lithium on in vivo biological properties of bioactive glass scaffolds” in SAB International Symposium on “New perspectives on modern Biotechnology”, India held during 23-25th March, 2015 at Puducherry, India
- **Oral presentation** on “Development of xeno animal cartilage for application in human patient: research to reality” in XXX Annual convention of Indian Association of Veterinary Anatomists and National Symposium held during 16-18th December, 2015 at Kolkata, India
- **Oral Presentation** in 40th Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Biomaterial and Stem cells for tissue repair and regeneration in veterinary Surgery” at Madras Veterinary College, TANUVAS, Chennai w.e.f 2-4th December, 2016

Chairman/Co-Chairman and Rapporteur

- Acted as **Rapporteur** of poster session in Canine Surgery Session and **Co-Chairman** in Canine Biotechnology session in National Congress on canine practice and 6th Convention of Indian Society for Advancement of Canine practice and Symposium on *Modern look on Canine Healthcare Management in the global Perspective* from 6-8th February, 2009.
- Acted as **Rapporteur** in the Physiology in Extreme Condition Session in XX Annual Conference and International Symposium on “Advances in Physiologic Research for Sustainable Development of Livestock and poultry Production”.
- Acted as **Co-Organizing Secretary and Chairman, Scientific Committee** in XXXV Annual Congress of Indian Society for Veterinary Surgery and International conference on “Nanobiomaterials in Biomedical Research: their application in Veterinary Surgery” held on 11-13th November 2011 at Kolkata.
- Acted as **Expert judge** for evaluation of Awardees in XXXV Annual Congress of Indian Society for Veterinary Surgery and International conference held on 11-13th November 2011 at Kolkata.
- Acted as **Co-chairman** of “Meet the Scientists” program 17th State Science and Technology Congress, West Bengal, 4-5th March, 2010, Kolkata.
- Acted as **Session Chair**, on Analytical Strategies, Bioequivalence Assessment and BCS & IVIVC Based Biowaivers at the “3rd International Conference and Exhibition on Biowaivers, Biologics & Biosimilars” in International Convention Centre, Hyderabad w.e.f 27-29th October, 2014 by OMICS Publishing Group, USA and the Editors of Journal of

Bioanalysis & Biomedicine, Journal of Bioequivalence & Bioavailability and journal of Pharmaceutical Sciences & Emerging drugs applaud.

- Acted as **Co-Chairman** in Orthopaedic surgery session at the 41st Annual Congress of Indian Society for Veterinary Surgery, 2017 at College of Veterinary Science, Tirupati during 14-16th December, 2017
- **Chairman**, Workshop in MILAN-2017-18 organized by National Institute of Animal Biotechnology and Directorate of Research, Extension and Farms, WBUAFS held on 26.6.2018 at Mohanpur, Nadia.
- **Convener**, Scientific committee of 125th Anniversary of erstwhile Bengal Veterinary College, Kolkata of 2018.
- **Co-Chairman**, Scientific committee of international conference and IMSACON-VIII on “Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety” to be held on November 22-24, 2018 at Kolkata.
- **Rapporteur**, Session I. Livestock, poultry and fisheries resources: A way to livelihood by doubling farmers’ income of international conference and IMSACON-VIII on “Technological Innovations in Muscle Food Processing for Nutritional Security, Quality and Safety” to be held on November 22-24, 2018 at Kolkata.

Student placement

1. One M.V.Sc student Dr Bipasa Tripathy has been selected for admission to Doctoral degree programme at GADVASU, Ludhiana for the Academic Session 2017-18 through ICAR's All India Competitive Examination.
2. One of my M.E. student Promita Bhattacharjee, PhD has been placed as Postdoctoral Research Fellow, Trinity Centre for Bioengineering, Trinity Biomedical Sciences Institute, Dept. of Mechanical and Manufacturing Engineering, School of Engineering
3. A student Dr. Howa Begam has carried out Ph. D work under CSIR SRF Fellowship and now is working as Teaching Associate at National Institute of Technology, Raipur
4. A Ph. D student Dr. V. Lalzawmliana of this department joined as Assistant Professor, College of Veterinary sciences, Tripura where I acted as pivotal role in his thesis.
5. A Ph. D student of this department joined as Teaching Assistant, Banaras Hindu University where I acted as pivotal role in his thesis.
6. One of my Ph. D student Dr Munmun De is now Asst Medical Director at VCA Animal Hospitals, Los Angeles, California, United States.
7. One student, Sarmita Sinha received CSIR SRF fellowship for pursuing her Ph. D research
8. One student, Piyali Das received CSIR SRF fellowship for pursuing her Ph. D research.
9. One M.V. Sc student Dr A.V.V.N.G.S V. Kishore has been selected for ICAR's All India Competitive Examination for Admission to 25% Seats in Doctoral degree programmes of universities under ICAR-AU system, conducted by National Testing Agency (NTA) for the Academic Session 2019-20
10. Somnath Jan, Snehasish Ghosh, Paramita Gayen, Rituparna Sinha Roy, and Samit Kumar Nandi. Engineered Bio-inspired Peptide Based Total Wound Care. Presented at the First Canadian Peptide and Protein Community Virtual Symposium, 27–28 May 2021

University administrative activities

1. Member, Counselling cum admission process for admission to 1st year B. V. Sc & A. H. Course (Academic Session 2018-19 & 2019-20).

2. Member, at Faculty level (Veterinary & animal Sciences) for purchase of equipments
3. Member, working committee for Belgachia veterinary clinics.
4. Convener of Press and Publicity Committee of the 12th Convocation of the university held on 14th June, 2018.
5. Observer for EVETS 2018 conducted by West Bengal Joint Entrance Board held on 26.5.2018.
6. Committee Member for selection of X-ray Technician & Dialysis Technician of the university.
7. Head Examiner of West Bengal Civil Service Examination (Main) 2017
8. Tabulator of the undergraduate results of the faculty of veterinary Sciences & Animal Husbandry.

Doctoral level (Ph. D.)

Sl No	Name of the student	Title of Thesis	Year
1.	Dr. Munmun De Ph. D. in Veterinary Surgery & Radiology	Evaluation of magnesium-alloy and glass-based coated bone plates in Animal Model As Supervisor	2016
2.	Dr. Nilendu Jyoti Maitra Ph D in Agriculture and Rural Development, West Bengal State University	Studies on production and productivity performance through modulated scientific rearing of small ruminants for rural development. As Co-Supervisor	2016
3.	Miss Howa Begam Ph. D in Biomedical Engineering, Jadavpur University	Study on the development, physical, mechanical and biological characterization of fine-grained doped hydroxyapatite. As Supervisor	2016
4.	Miss Priyanka Majee	Biocompatibility and drug release studies on doubly coated implant material with Bio-ceramics and antibiotic-loaded Bio-polymer. As Supervisor	2017
5.	Kanchan Majee Ph. D in Ceramic Engineering, National Institute of Technology Rourkela	Gelatin, Chitosan and Bioactive Nanoceramic Based Composite Scaffold for Orthopaedic Application. As Co-Supervisor	2017
6.	Miss Sarmita Sinha in Mechanical Engineering, Jadavpur University	<i>In vitro</i> and <i>in vivo</i> performance analysis of Nitinol as orthopaedic implants As Supervisor	2019
7.	Mr. Sujan Kumar Samanta in Biomedical Engineering, Jadavpur University	Development, Characterization and <i>in vivo</i> performance analysis of doped Beta Tricalcium Phosphate ceramics As Supervisor	2019
8.	Miss Piyali Das in Biomedical Engineering, Jadavpur University	Development of decellularized caprine cartilage in cartilage tissue engineering. As Supervisor	2021

9.	Mrs. Dalia Acharya	Development, Characterization and performance analysis of eggshell derived calcium phosphate As Supervisor	
10	Pratik Das	Extracts from Natural wastes (seeds) and Bioinspired biomaterials for improved wound healing. As Supervisor	
11	Mr. Akhilesh Misra Ph. D in Veterinary Pharmacology and Toxicology	Disposition kinetics and toxicological study of nano-ceramic based anticancer drugs in rabbits As Advisory Committee member	2014
12	Dr. V. Lalzawmliana	Evaluation of mesoporous bioactive glass alone and in combination with growth factor in bone healing in animal model; As Advisory Committee member	2017
13	Dr. Vinod Kumar	Development of doped magnesium phosphate bioceramics for bone tissue engineering. As Advisory Committee member	2018
14	Dr. Sajira Bano	Studies on bone related disorders in dog with special reference to osteoarthritis and its therapy with herbal components. As Advisory Committee member	2019
15	Dr. Sonali Jana	Assessment of cellular and biochemical responses of fish collagen with ion-doped bioactive glass electrospun fibers/mats on diabetic wound healing in rabbit. As Advisory Committee member	2022
16	Dr. Anil Singh	Identification and therapy of light induced damage to the retina in a rabbit model As Advisory Committee member	2022
17	Namrata Maity	Role of Crystalline Protein in rendering Neuroprotection and Cytoprotection Post injury in Cornea and Retina. As Advisory Committee member	2022
18		Toxicity and efficacy study of Mesoporous antibacterial bioactive microsphere impregnated non-woven surgical cotton gauge dressing as haemostat in animal model with special reference to clinical efficacy in dogs. As Advisory Committee member	2023

Post graduate Level (M. V. Sc) as Advisor

SI No	Name of the student	Title of Thesis	Year
	Dr. Suprodip Mondal	Degradable 3D printed biocomposite bone plates for fracture fixation in a rabbit model	2023

	Dr. Pijush Kanti Mahato	Assessment of MXene doped bio-nanocomposite hydrogel for wound healing in the rabbit model.	2023
	Dr. Soumyadip Mallick	Assessment of porous doped Fish scale derived hydroxyapatite bioceramics on bone regeneration in rabbit model	2022
1	Dr. Pallabi Koyal	Evaluation of fish collagen with ion doped bioactive glass electrospun mats in burn wound healing in rabbit.	2021
2.	Dr. Viraj	Development of porous iron manganese copper system for treating small scale bone defect in animal model	2020
3.	Dr. V. Kishore	Development of iron and magnesium-based alloy as temporary metallic orthopaedic implant	2019
4.	Dr. Chandan Saha	Development of silk-based matrices in bone regeneration in animal model	2019
5.	Dr. Mainak Dey	Development of functionalized Silk doped cement composites for bone healing in animal model	2018
6.	Dr. Bipasha Tripathy	Evaluation of doped magnesium silicate implant for bone healing in animal model	2017
7.	Dr. Pintu Kumar Khan	Evaluation of binary Strontium and Lithium doped porous Bioactive Glass on bone healing in animal model	2014
8.	Dr. Rakesh Mandal	Evaluation of doped calcium phosphate based brushite cement as a bone mimicking biomaterial in animal model.	2013
9.	Dr. Brihat Chettri	<i>In vivo</i> Characterization of doped hydroxyapatite alone and in combination with insulin like growth factor 1 for bone healing in animal model	2012
10.	Dr. Ashok Akela	Evaluation of autologous bone marrow transplantation on wound healing in animal model	2011
11.	Dr. Chandrasekhar Kumar	Evaluation of Bioceramic Coated intramedullary pinning in bone defect healing in rabbit.	2008
12.	Dr. Himanshui Palui	Bovine lameness with special reference to pathogenesis and pain perception in two agroclimatic zones of West Bengal	2008
13.	Dr. Parswanath Mandal	Evaluation of post-operative analgesia of Ketoprofen, Meloxicam, and Tramadol in bitches undergoing ovariohysterectomy.	2003

Master of Engineering (Biomedical Engineering) & MDS as Co-Supervisor

Sl No	Name of the student	Title of Thesis	Year
1	Somali Mandal	Development and Characterization of doped and undoped biphasic calcium phosphate	2013
2	Promita Bhattacharya	Development and Characterization of hydroxyapatite	2011

		doped with divalent and tetravalent cations	
3	Dr. Papia Sarkar Department of Periodontics, Guru Nanak institute of Dental sciences and research, Panihati, Kolkata	Efficacy of biodegradable material as a vehicle for local drug delivery system: an animal study	2018

M.V. Sc (As Advisory Committee Member)

Sl No.	Name of the student	Title of Thesis	Degree	Year
	Dr. Madud Musthafa	Assessment of the wear debris on bone tissue toxicity/necrosis in a rabbit model	M. V. Sc	2023
	Dr.	Assessment of the converted marine-based electrospun composite mat for wound healing in a rabbit model	M. V. Sc	2023
	Dr. Chandresh Soni	Assessment of 3D printed bioresorbable bone plate and screw for osteosynthesis in canine model	M. V. Sc	2023
1.	Dr. Jasna Nambiar	Infrared thermal imaging and colour Doppler Ultrasonography and non-invasive multimodal approach for assessment and characterization of tumour features in small animals	M. V. Sc	2022
2.	Dr. Vaishak Gowda	Effects of heat treatment on in vivo biocompatibility of magnesium-zirconium-strontium-cerium alloy in rabbit bone defect model.	M. V. Sc	2022
3.	Dr. Samsamul Hoque	Assessment of magnesium-zinc-calcium-manganese- based alloy as biodegradable implant in bone defect healing in rabbit model.	M. V. Sc	2022
4.	Dr. Mansi	Clinico-diagnostic studies and therapeutic management of hypo-albuminuria related problems in canine with special reference to hepatic disorders.	M. V. Sc	2022
5.	Shyamasree Deb	Gross anatomy and Histological studies on the digestive system of Melopsittacus undulatus	M. V. Sc	2022
6.	Preyna Gurung	Studies on clinico-therapeutic management of canine parvovirus	M. V. Sc	2022
7.	Sk. Rijawal Karim	Investigation of pathophysiology of ivermectin induced retinal toxicity and its	M. V. Sc	2022

		reversal in rabbit model		
8.	Vinayak M. N.	Evaluation of egg shell membrane incorporated with ion doped bioactive glass mats in wound healing in rabbit model	M. V. Sc	2022
9.	Arka Pravo Roy	Assessment of doped bioactive glass-coated eggshell membrane in diabetic wound healing of experimental rabbit model	M. V. Sc	2022
10.	Sumon Roy	Evaluation of ZnO nanoparticles incorporated polyhydroxyethyl methacrylate membrane in wound healing in rabbit model	M. V. Sc	2021
11.	Chaudhuri Mohammad Tarif	Evaluation of decellularized platelet Rich fibrin loaded strontium doped porous magnesium phosphate Bioceramics on bone regeneration in Animal model	M. V. Sc	2020
12.	Md Rabiul Khan	Evaluation of degradable magnesium-based alloys implant to repair bone defect in animal model	M. V. Sc	2021
13.	Md Shafiul Feaiza Siddique	Contrast enhanced ultrasonography in Dogs	M. V. Sc	2021
14.	Sumana Gharami	Healing potency of large sized corneal defects with natural scaffolds as inlay grafts	M. V. Sc	2019
15.	Mofizur Rahaman	Evaluation of metal ion doped porous magnesium phosphate scaffold in bone regeneration	M. V. Sc	2019
16.	Debabrata Mallick	Comparative study of anaesthetic effect of Dexmedetomidine premedicated dog anaesthetized with Isoflurane and Sevoflurane	M. V. Sc	2018
17.	Shashank Mani Tripathy	Target controlled infusion anaesthesia with ketofol in dogs	M. V. Sc	2018
18.	Dipanjan Mondal	Carbon nano particle as drug delivery platform for posterior segment of eye	M. V. Sc	2018
19.	Sekh Yasin	Endoscopic study of upper Gastrointestinal tract of canine in different disease condition	M. V. Sc	2017
20.	Kshounnee Khan	Study of canine pyometra with special reference to a few laboratory and operative technique for their treatment	M. V. Sc	2017
21.	Suedenla T Bhutia	Uninterrupted intravenous anaesthesia in dog	M. V. Sc	2016
22.	Ramesh Kumar Jha	Intracameral use of Nepafenac safety and efficacy study	M. V. Sc	2016
23.	Souradeep Adhikary	Study on Feline anaesthesia with Propofol alone and Propofol Isoflurane combination	M. V. Sc	2016

		in protracted surgery		
24.	Sanjoy Goswami	Management of mandibulo-maxillary fracture in pet animal.	M. V. Sc	2015
25.	Rajen Kumar Sahoo	Comparative studies of Butorphenol-pentazonal tranaldol in atropinized dogs. Anaesthetized with xylazine propofol midzolam anaesthesia	M. V. Sc	2015
26.	Ankur Debnath	Guided biopsy of visual organic in canine	M. V. Sc	2014
27.	Amirul Islam	Evaluation of Alendronate Sodium and porous phosphate free Bioactive glass (PFBG) coated implant in bone healing in rabbit	M. V. Sc	2014
28.	Nirmalya Ranjan Sarkar	Echocardiographic studies of dogs suffering from Ascites	M. V. Sc	2013
29.	Chandana Sarkar	Doppler study in Dog	M. V. Sc	2012
30.	Manloi Konyak	Role of rosuvastatin on segmental bone healing in rabbits.	M.V.Sc	2012
31.	Subir Bhattacharya	A study on gross anatomical and Radiological disposition of the Tarsus of Domestic cat (<i>Felis domesticus</i>)	M. V. Sc	2012
32.	Sabyasachi Konar	Comparative anaesthetic study of Propofol and Thiopental premicated with Midazolam in Atropinised Dog	M. V. Sc	2011
33.	Arumoy Sanyal	Role of simvastatin in augmentation of segmental bone healing in radiology.	M. V. Sc	2011
34.	Kajali Sarkar	Echocardiographic studies of Labrador retriever and Doberman pincher dogs.	M. V. Sc	2011
35.	Geram Jongkey	Matrix Metalloproteinase 2 (MMP-2) Inhibition for prevention of Posterior capsular Opacification	M. V. Sc	2011
36.	Sashi Sekher Prasad Sing	Evaluation of surgico-pathophysiological status of search and rescue (SAR) dog.	M. V. Sc	2010
37.	K. Annadurai	Comparative study of three intramuscular anaesthetic combinations of Xylazine-Ketamine, Xylazine Ketamine Midazolam and Xylazine Ketamine Diazepam in rabbits	M. V. Sc	2010
38.	Ashok Kumar	Effects of Ovariohysterectomy on calcium metabolism in bitches.	M. V. Sc	2009
39.	Rajib Kanti Saha	Application of simplified Type II Acrylic Linear and aluminum Circular external Skeletal Fixator for management of Metacarpal/metatarsal fractures in Goat	M. V. Sc	2008
40.	Falguni Mridha	Evaluation of anaesthetic stress response by using propofol thiopental sodium and	M. V. Sc	2007

		propofol-thiopental sodium mixture for total intravenous anaesthesia in canine.		
41.	Jay Singh	Influence of topical anaesthetics on oculocardiac reflex and corneal healing in rabbits	M. V. Sc	2007
42.	Bidhan Chandra Saha	Efficacy of Peritoneal dialysis on haemodynamic stability in induced acute renal failure in rabbit.	M. V. Sc	2007
43.	P. Asaithambi	Effect of bilateral adrenalectomy on physio-biochemical changes in goat	M. V. Sc	2004
44.	Pritam Kumar Sinha	Effects of Propofol-Midazolam anaesthesia in Pig	M. V. Sc	2003
45.	Hirak Biswas	Prepubertal Gonadectomy: Studies on Surgical Stress in Canine	M. V. Sc	2003
46.	Indrani Mandal	Comparative study of canine anaesthesia using propofol alone and in combination with halothane and nitrous oxide	M. V. Sc	2003
47.	B. Shivakumar	Effect of Adrenalectomy in goat	M. V. Sc	2003