

Curriculum Vitae

Himansu Sekhar Nanda, Ph.D

Nanotechnology Alumni Awardee (2023), Indian Institute of Technology Roorkee, Uttarakhand 247667, India

Assistant Professor (Grade-1), Discipline of Mechanical Engineering, Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Jabalpur, Madhya Pradesh 482005, India

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Affiliate Faculty, Terasaki Institute for Biomedical Innovation (TIBI), 21100 Erwin St Los Angeles, CA 91367, United States of America

URL: <https://terasaki.org/institute/people/collaborators/affiliate-faculty.html>

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Facebook: [Biomedical Engineering and Technology Laboratory | Facebook](#) (Lab)

<https://www.facebook.com/himansusekhar.nanda> (Personal)

Principal areas of Interest:

Biomaterials, Biomanufacturing and Biomechanics

Areas of additional Interest: Clean technologies (recycling and renewable energy)

Academic Background:

Academic Degree	Institute/ University	Grade Point Average (GPA)	Academic Duration
Ph.D. (Materials Science and Engineering) Specialization: Biodegradable Polymers and tissue engineering	Polymeric Biomaterials Unit, National Institute for Materials Science, Tsukuba, Japan (University of Tsukuba, Japan) (Mentor: Prof. Guoping Chen, Scientific Editor, Materials Horizon, RSC)	4/4	2011-2014
M-Tech (Nanotechnology)	Indian Institute of Technology Roorkee, Uttarakhand, India (Mentor: Prof. R Jayaganthan, Professor, Department of Engineering Design, IIT Madras)	8.09/10	2008-2010
B-Tech (Biotechnology)	Biju Patnaik University of Technology, Odisha, India	7.59/10	2004-2008

Doctoral Thesis Title:

Preparation of porous scaffolds with controlled drug release for tissue engineering

Doctoral Thesis Advisor:

Professor Guoping Chen, Ph. D. (Kyoto University, Japan)

Principal Investigator and Unit Director, Tissue Regeneration Materials Unit, Research Center for Functional Materials, National Institute for Materials Science, Tsukuba, Ibaraki, Japan

Professor, Department of Material Sciences and Engineering, University of Tsukuba, Japan

Editor, Materials Horizon (RSC)

Professional Experiences:

Designation	Organization	From	To
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Assistant Professor Grade-I	Discipline of Mechanical Engineering, Indian Institute of Information Technology, Design and Manufacturing Jabalpur, Madhya Pradesh, India	OCT-19	TILL
Affiliate Faculty	Terasaki Institute of Biomedical Innovation, Los Angeles, CA, USA	FEB-23	TILL
Research Scientist	Terasaki Institute of Biomedical Innovation, Los Angeles, CA, USA (Mentor: Prof. Ali Khademhosseini)	AUG-22	JAN-23
Assistant Professor Grade-II	Discipline of Mechanical Engineering, Indian Institute of Information Technology, Design and Manufacturing Jabalpur, Madhya Pradesh, India	OCT-17	OCT-19
Post-Doctoral Research Fellow	School of Materials Science and Engineering, Nanyang Technological University and Singapore General Hospital, Singapore (Mentor: Prof. Terry W J Steele)	FEB-16	SEP-17
Post-Doctoral Fellow	Department of Materials Engineering, Physical Sciences and Engineering Division, King Abdullah University of Science and Technology, Kingdom of Saudi Arabia (Mentor: Prof. Enrico Traversa)	OCT-14	DEC-15
Junior Research Fellow	Department of Biological Sciences, Tata Institute of Fundamental Research, Mumbai, India (Mentor: Prof. Krishanu Ray)	FEB-08	JUL-08

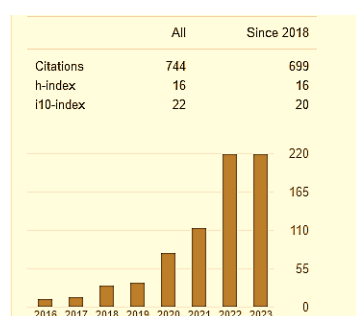
Peer Reviewed Publications:

Citation Analysis (Till 02-11-2023):

<https://scholar.google.com/citations?user=763Q4dsAAAAJ&hl=en>

(Total Citations: 744, H-Index: 16, i10-index: 22, Citation Source: Google Scholar)

Citation Metrics:



International Peer-Reviewed Journals:

(* Principal corresponding author, ** Co-corresponding author, IF: Impact factor)

2023

1. Ansari, Mohammad Aftab Alam, Pooja Makwana, Rajesh Vasita, Prashant Kumar Jain**, and Himansu Sekhar Nanda*. "Development of highly filled calcium sulfate-poly lactic acid biocomposites feedstock for low-cost fused filament fabrication technique." *Ceramics International* (2023). (Elsevier, IF: 5.53, Cite Score: 8).

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DOI: <https://doi.org/10.1016/j.ceramint.2023.09.105>

2. Ansari, Mohammad Aftab Alam, Madhusmita Dash, Gulden Camci-Unal, Prashant Kumar Jain, Syam Nukavarapu, Seeram Ramakrishna, Natashya Falcone Mehmet Remzi Dokmeci, Alireza Hassani Najafabadi, Ali Khademhosseini ** and Himansu Sekhar Nanda*. "Engineered stimuli-responsive smart grafts for bone regeneration." *Current Opinion in Biomedical Engineering* (2023): 100493. (Elsevier, IF: 4.16, Cite Score: 6.7).
DOI: <https://doi.org/10.1016/j.cobme.2023.100493>
3. Nanda, Himansu Sekhar*, Liqun Yang**, Jianshe Hu, Shuai Jiang, and Hongli Mao. "Biodegradable polymers for biomedical applications-Volume II." *Frontiers in Materials* 10 (2023): 1231445. (Frontiers, IF: 3.5)
DOI: <https://doi.org/10.3389/fmats.2023.1231445>
4. kumar Dubey, Abhayjeet, Jingyi Sun, Tushar Choudhary, Madhusmita Dash, Dibakar Rakshit, M. Zahid Ansari, Seeram Ramakrishna, Yong Liu**, and Himansu Sekhar Nanda*. "Emerging phase change materials with improved thermal efficiency for a clean and sustainable environment: An approach towards net zero." *Renewable and Sustainable Energy Reviews* 182 (2023): 113421. (Elsevier, IF: 16.8).
DOI: <https://doi.org/10.1016/j.rser.2023.113421>
5. Nguyen, Huu Tuan, Arne Peirsman, Zuzana Tirpakova, Kalpana Mandal, Florian Vanlauwe, Surjendu Maity, Satoru Kawakita, Danial Khorsandi, Rondinelli Herculano, Christian Umemura, Can Yilgor, Remy Bell, Adrian Hanson, Shaopei Li, Himansu Sekhar Nanda, Yangzhi Zhu, Alireza Hassani Najafabadi, Vadim Jucaud, Natan Barros, Mehmet Remzi Dokmeci**, and Ali Khademhosseini*. 2023. "Engineered Vasculature for Cancer Research and Regenerative Medicine" *Micromachines* 14, no. 5: 978. (MDPI, IF: 3.5).
DOI: <https://doi.org/10.3390/mi14050978>
6. Ansari, Mohammad Aftab Alam, Prashant Kumar Jain, and Himansu Sekhar Nanda*. "Preparation of 3D printed calcium sulfate filled PLA scaffolds with improved mechanical and degradation properties." *Journal of Biomaterials Science, Polymer Edition* (2023): 1-22. (IF: 3.68, Cite Score: 6.7).
DOI: <https://doi.org/10.1080/09205063.2023.2167374>

2022

7. Intravaia, Jonathon T., Trevon Graham, Hyun S. Kim, Himansu S. Nanda, Sangamesh G. Kumbar, and Syam P. Nukavarapu*. "Smart Orthopedic Biomaterials and Implants." *Current Opinion in Biomedical Engineering* (2022): 100439. (Elsevier, IF: 4.16, Cite Score: 6.7).
DOI: <https://doi.org/10.1016/j.cobme.2022.100439>
8. Pemmada, Rakesh, Aishwarya Shrivastava, Madhusmita Dash, Kuiyan Cui, Prasoon Kumar, Seeram Ramakrishna, Yubin Zhou**, Vinoy Thomas**, and Himansu Sekhar Nanda*. "Science-based strategies of antibacterial coatings with bactericidal properties for biomedical and healthcare settings." *Current Opinion in Biomedical Engineering* (2022): 100442. (Elsevier, IF: 4.16, Cite Score: 6.7).
DOI: <https://doi.org/10.1016/j.cobme.2022.100442>

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9. Nanda H S*, Yang L**, Hu J, Mao H and Jiang S (2022) Editorial: Biodegradable Polymers for Biomedical Applications. *Front. Mater.* 9:944755. (Frontiers, IF: 3.5) DOI: <https://doi.org/10.3389/fmats.2022.944755>
 10. Ansari, Mohammad Aftab Alam, Aleksandra A. Golebiowska, Madhusmita Dash, Prasoon Kumar**, Prashant Kumar Jain**, Syam P. Nukavarapu, Seeram Ramakrishna, and Himansu Sekhar Nanda*. "Engineering biomaterials to 3D-print scaffolds for bone regeneration: practical and theoretical consideration." *Biomaterials Science* 10, no. 11 (2022): 2789-2816. (Royal Society of Chemistry, IF: 7.59) (Official Journal of European Society of Biomaterials). DOI: <https://doi.org/10.1039/D2BM00035K>
 11. Lv, Yarong, Yulong Xu, Xinyu Sang, Chenxi Li, Yong Liu**, Quanyi Guo**, Seeram Ramakrishna, Ce Wang, Ping Hu, and Himansu Sekhar Nanda*. "PLLA–gelatin composite fiber membranes incorporated with functionalized CeNPs as a sustainable wound dressing substitute promoting skin regeneration and scar remodeling." *Journal of Materials Chemistry B* 10, no. 7 (2022): 1116-1127. (Royal Society of Chemistry, IF: 7.57) DOI: <https://doi.org/10.1039/D1TB02677A>
- 2021
12. Ahirwar, Harbhajan, Ankit Sahu, Vijay Kumar Gupta, Prasoon Kumar, and Himansu Sekhar Nanda*. "Design and finite element analysis of femoral stem prosthesis using functional graded materials." *Computer Methods in Biomechanics and Biomedical Engineering* 25, no. 11 (2022): 1262-1275. (Taylor and Francis, IF: 2.03, Cite Score: 2.5) (Official Journal of European Society of Biomechanics) DOI: <https://doi.org/10.1080/10255842.2021.2006648>
 13. Chen, Huizhi, Liyan Wang, Xinling Zeng, Herbert Schwarz, Himansu Sekhar Nanda**, Xinsheng Peng**, and Yubin Zhou*. "Exosomes, a new star for targeted delivery." *Frontiers in Cell and Developmental Biology* 9 (2021): 751079. (Frontiers, IF: 6.68, Cite Score: 2.7) DOI: <https://doi.org/10.3389/fcell.2021.751079>
 14. Nanda, Himansu Sekhar**, Vinoy Thomas, Syam P. Nukavarapu, and Aldo R. Boccaccini*. "Biomaterials 2021: Future of biomaterials." *Current Opinion in Biomedical Engineering* 2021, 18:100304 (Editorial for special issue: Biomaterials 2021) (Elsevier, IF: 4.16, Cite Score: 6.7). DOI: <https://doi.org/10.1016/j.cobme.2021.100304>
 15. Ahirwar, Harbhajan, Vijay Kumar Gupta, and Himansu Sekhar Nanda*. "Finite element analysis of fixed bone plates over fractured femur model." *Computer Methods in Biomechanics and Biomedical Engineering* 24, no. 15 (2021): 1742-1751. (Taylor and Francis, IF: 2.03, Cite Score: 2.5) (Official Journal of European Society of Biomechanics). DOI: <https://doi.org/10.1080/10255842.2021.1918123>
 16. Ahirwar, Harbhajan and Himansu Sekhar Nanda*, "Design, 3D Development and Finite Element Analysis of Cylindrical Mesh Cage Bioimplants from Biometals", *Adv. Mater. Lett.*, 2021, 12 (6), 21061641 (VBRI-IAAM, IF: Pending). DOI: <https://doi.org/10.5185/AMLETT.2021.061641>

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17. Zhu, Xiaoxian, Huizhi Chen, Yanfang Zhou, Jin Wu, Seeram Ramakrishna, Xinsheng Peng, Himansu Sekhar Nanda** and Yubin Zhou*. "Recent advances in biosensors for detection of exosomes." *Current Opinion in Biomedical Engineering* (2021): 100280 (Elsevier, IF: 4.16, Cite Score: 6.7).
DOI: <https://doi.org/10.1016/j.cobme.2021.100280>
18. Telang, Vicky Subhash, Rakesh Pemmada, Vinoy Thomas, Seeram Ramakrishna, Puneet Tandon, and Himansu Sekhar Nanda. "Harnessing additive manufacturing for magnesium-based metallic bioimplants: Recent advances and future perspectives." *Current Opinion in Biomedical Engineering* 17 (2021): 100264. (Elsevier, IF: 4.16, Cite Score: 6.7).
DOI: <https://doi.org/10.1016/j.cobme.2021.100264>

2020

19. Singh, Manisha, Himansu Sekhar Nanda, Justin Yin Hao Lee, Jun Kit Wang, Nguan Soon Tan, and Terry WJ Steele*. "Photocurable platelet rich plasma bioadhesives". *Acta Biomaterialia* 117 (2020): 133-141. (Elsevier, IF: 10.63, Cite Score: 15.6)
DOI: <https://doi.org/10.1016/j.actbio.2020.09.030>
20. Pemmada, Rakesh, Xiaoxian Zhu, Madhusmita Dash, Yubin Zhou**, Seeram Ramakrishna**, Xinsheng Peng, Vinoy Thomas, Sanjeev Jain, and Himansu Sekhar Nanda*. "Science-Based Strategies of Antiviral Coatings with Viricidal Properties for the COVID-19 Like Pandemics". *Materials* 13, no. 18 (2020): 4041. (MDPI, IF: 4.04, Cite Score: 3.5)
DOI: <https://doi.org/10.3390/ma13184041>
21. Xu, Zhiyang, Yulong Xu, Papia Basuthakur, Chitta Ranjan Patra, Seeram Ramakrishna, Yong Liu**, Vinoy Thomas, and Himansu Sekhar Nanda*. "Fibroporous PLLA/Gelatin composite membrane doped with cerium oxide nanoparticles as bioactive scaffolds for future angiogenesis." *Journal of Materials Chemistry B* 8, no. 39 (2020): 9110-9120. (Royal Society of Chemistry, IF: 7.57)
DOI: <https://doi.org/10.1039/D0TB01715A>
22. Djordjevic, Ivan, Oleksandr Pokholenko, Ankur Harish Shah, Gautama Wicaksono, Lluís Blancafort, John V. Hanna, Samuel J. Page, Himansu Sekhar Nanda, et al. "CaproGlu: Multifunctional tissue adhesive platform". *Biomaterials* 260, (2020): 120215. (Elsevier, IF: 15.3, Cite Score: 21.5)
DOI: <https://doi.org/10.1016/j.biomaterials.2020.120215>
23. Ahirwar, Harbhajan, Yubin Zhou**, Chinmaya Mahapatra, Seeram Ramakrishna, Prasoon Kumar**, and Himansu Sekhar Nanda*. "Materials for Orthopedic bioimplants: Modulating degradation and surface modification using integrated nanomaterials". *Coatings* 10, no. 3 (2020): 264. (MDPI, IF: 3.3, Cite Score: 3.9)
DOI: <https://doi.org/10.3390/coatings10030264>
24. Zhou, Yubin, Chinmaya Mahapatra, Huizhi Chen, Xinsheng Peng, Seeram Ramakrishna, and Himansu Sekhar Nanda*. "Recent developments in fluorescent aptasensors for detection of antibiotics". *Current Opinion in Biomedical Engineering* 13 (2020): 16-24. (Elsevier, IF: 4.16, Cite Score: 6.7)
DOI: <https://doi.org/10.1016/j.cobme.2019.08.003>

2019

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25. Shah, Ankur Harish, Oleksander Pokholenko, Himansu Sekhar Nanda, and Terry WJ Steele*. "Non-aqueous, tissue compliant carbene-crosslinking bioadhesives". *Materials Science and Engineering C100* (2019): 215-225. (Elsevier, IF: 7.32, Cite Score: 12.6) (2022 onwards as Biomaterials Advances)
DOI: <https://doi.org/10.1016/j.msec.2019.03.001>

2018

26. Singh, Manisha, Himansu Sekhar Nanda, Richard D. O'rorke, Adam E. Jakus, Ankur Harish Shah, Ramille N. Shah, Richard D. Webster, and Terry WJ Steele*. "Voltagluce Bioadhesives Energized with Interdigitated 3D-Graphene Electrodes". *Advanced Healthcare Materials* 7, no. 21 (2018): 1800538. (Wiley, IF: 11.09)
DOI: <https://doi.org/10.1002/adhm.201800538>
27. Nanda, Himansu Sekhar, Ankur Harish Shah, Gautama Wicaksono, Oleksandr Pokholenko, Feng Gao, Ivan Djordjevic, and Terry WJ Steele*. "Non-thrombogenic hydrogel coatings with carbene-cross-linking bioadhesives." *Biomacromolecules* 19, no. 5 (2018): 1425-1434. (ACS, IF: 6.99)
DOI: <https://doi.org/10.1021/acs.biomac.8b00074>

2017

28. Nethi, Susheel Kumar, Himansu Sekhar Nanda**, Terry WJ Steele, and Chitta Ranjan Patra*. "Functionalized nanoceria exhibit improved angiogenic properties." *Journal of Materials Chemistry B* 5, no. 47 (2017): 9371-9383. (Royal Society of Chemistry, IF: 7.57)
DOI: <https://doi.org/10.1039/C7TB01957B>
29. Nanda, Himansu Sekhar, Manisha Singh, and Terry WJ Steele*. "Thrombogenic responses from electrocured tissue adhesives." *ECS Transactions* 77, no. 11 (2017): 547-555. (IOP Science, IF: 0.52)
DOI: <https://doi.org/10.1149/07711.0547ecst>

2016

30. Nanda, Himansu Sekhar*. "Surface modification of promising cerium oxide nanoparticles for nanomedicine applications." *RSC Advances* 6, no. 113 (2016): 111889-111894. (RSC, IF: 4.04)
DOI: <https://doi.org/10.1039/C6RA23046F>
31. Nanda, Himansu Sekhar*. "Preparation and Biocompatible Surface Modification of Redox Altered Cerium Oxide Nanoparticle Promising for Nanobiology and Medicine." *Bioengineering* 3, no. 4 (2016): 28. (MDPI, IF: 5.05, Cite Score: 6.1)
DOI: <https://doi.org/10.3390/bioengineering3040028>
32. Nanda, Himansu Sekhar, Naoki Kawazoe, and Guoping Chen*. "Ionic salt induced morphology and drug release control of insulin incorporated biodegradable PLGA microsphere." *Advanced Material Letters* 7 (2016): 866-871. (VBRI, IF: pending)
DOI: <https://doi.org/10.5185/amlett.2016.6907>

2014

33. Nanda, Himansu Sekhar, Tomoko Nakamoto, Shangwu Chen, Rong Cai, Naoki Kawazoe, and Guoping Chen*. "Collagen microgel-assisted dexamethasone release from PLLA-collagen hybrid scaffolds of controlled pore structure for osteogenic

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differentiation of mesenchymal stem cells." *Journal of Biomaterials Science, Polymer Edition* 25, no. 13 (2014): 1374-1386. (Taylor and Francis, IF: 3.52, Cite Score: 4.9)
DOI: <https://doi.org/10.1080/09205063.2014.938980>

34. Nanda, Himansu Sekhar, Naoki Kawazoe, Qin Zhang, Shangwu Chen, and Guoping Chen*. "Preparation of collagen porous scaffolds with controlled and sustained release of bioactive insulin." *Journal of Bioactive and Compatible Polymers* 29, no. 2 (2014): 95-109. (SAGE, IF: 2.5)

DOI: <https://doi.org/10.1177/0883911514522724>

35. Nanda, Himansu Sekhar, Shangwu Chen, Qin Zhang, Naoki Kawazoe, and Guoping Chen*. "Collagen scaffolds with controlled insulin release and controlled pore structure for cartilage tissue engineering." *BioMed Research International* 2014 (2014). (Hindwai, IF: 3.4, Cite Score: 4.1)

DOI: <https://doi.org/10.1155/2014/623805>

2011

36. Sekhar Nanda, Himansu, and Narayan Chandra Mishra*. "Amphotericin B" Loaded Natural Biodegradable Nanofibers as a Potential Drug Delivery System against Leishmaniasis." *Current Nanoscience* 7, no. 6 (2011): 943-949. (Bentham Science, IF: 1.9)

DOI: <https://doi.org/10.2174/157341311798220628>

Contributed Book Chapters and Books:

Book Chapters:

1. Pemmada, Rakesh, Vicky Subhash Telang, Madhusmita Dash, John Lalith Charles Richard, Puneet Tandon, Seeram Ramakrishna, and Himansu Sekhar Nanda*. "3D printing for functional tissue engineering." *Tissue Engineering*, pp. 415-430. Academic Press, 2022.
DOI: <https://doi.org/10.1016/B978-0-12-824064-9.00017-4>
2. Zhou, Yubin, Huizhi Chen*, Lianxian Guo, Jianqiang Liu, Hui Zhou, Liyan Wang, Himansu Sekhar Nanda, and Xinsheng Peng. "Biosensors in tissue engineering." *Tissue Engineering*, pp. 431-448. Academic Press, 2022.
DOI: <https://doi.org/10.1016/B978-0-12-824064-9.00026-5>
3. Telang, Vicky Subhash, Rakesh Pemmada, Seeram Ramakrishna, Puneet Tandon, and Himansu Sekhar Nanda*. "Overview of Current Additive Manufacturing Technologies for Titanium Bioimplants." *Nanoscale Engineering of Biomaterials: Properties and Applications* (2022): 117-130.
DOI: https://doi.org/10.1007/978-981-16-3667-7_5

Conference Presentations (Invited/Oral/Poster):

2023

1. Himansu Sekhar Nanda* and Terry W J Steele, "Carbene cross-linked tissue adhesives for soft tissue repair and fixation" *International Conference on Biomaterials and Healthcare 2023 (BioHeal 2023)* at Paramarth Niketan, Rishikesh, India, 13th-16th April 2023 (Invited)
2. Madhusmita Dash, Himansu Sekar Nanda*, and Soobhankar Pati*. "Tonic Liquid based Extraction of Critical Metals from Waste Lithium- Ion Batteries towards sustainable metal recycling", *International Conference on Biomaterials and*

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[Healthcare 2023 \(BioHeal 2023\)](#) at Paramarth Niketan, Rishikesh, India, 13th-16th April 2023 [[Best Poster Award in the field of Innovations in Solid Waste Management for better Health, Award received from Padma Bhusan Prof. N. K. Ganguly, Former DG, Indian Council of Medical Research \(ICMR\), India\]](#)]

3. Changyu Ma, Himansu Sekhar Nanda, Alejandro Gomez, Tianqi Zheng, Natan Barros, Ahmad Rashad, Runrun Chen, Shuyi Huang, Ali Khademhosseini, Alireza Hassani, Xiaochun Li, Bingbing Li*. "3D printing and surface engineering of Ti64 scaffolds for enhanced Osseointegration", [Terasaki Innovation Summit](#) at Luskin Conference Center, UCLA, Los Angeles, 8th -10th March 2023 (Poster)
4. Himansu Sekhar Nanda* and Terry W J Steele, "Carbene Cross-linked Adhesive Biomaterials for Tissue Fixation," [International Conference on Polymers for Advanced Technology](#) at International Convention Center, Panjim, Goa, India, 23rd - 25th February, 2023 (Invited).

2022

5. Himansu Sekhar Nanda* and Terry W J Steele, "Carbene crosslinked multifunctional tissue adhesives for the future clinic," [International Conference on Biomaterials, Regenerative Medicine and Devices](#), Indian Institute of Technology Guwahati, India, Dec 15, 2022 -Dec 18, 2022, 2022 (Invited).
6. Himansu Sekhar Nanda* and Terry W J Steele, "Dendrimer-based multifunctional tissue adhesives for the future clinic," [The Eighth Asian Conference on Mechanics of Functional Materials and Structures](#), Indian Institute of Technology Guwahati, India, Dec 11, 2022 -Dec 14, 2022 (Invited)
7. Mohammad Aftab Alam Ansari, Prashant Kumar Jain* and Himansu Sekhar Nanda*, "Design and Fabrication of Osteoconductive Hybrid Scaffolds for Bone Augmentation through Fuse Filament Fabrication," [Tsukuba Biomedical Engineering Forum 2022](#) at National Institute for Materials Science, Tsukuba, Japan, Jan 21, 2022 (Oral).
8. Rishi Kumar, Mohd. Zahid Ansari*, Himansu Sekhar Nanda*, "Comparative analysis of degradation behavior of synthetic porous scaffolds using computer methods of biomedical engineering," [Tsukuba Biomedical Engineering Forum 2022](#) at National Institute for Materials Science, Tsukuba, Japan, Jan 21, 2022 (Oral).
9. Vicky Subhash Telang, Puneet Tandon* and Himansu Sekhar Nanda*, "Stent Deformation Analysis of Magnesium and its Alloys using Finite Element Method," [Tsukuba Biomedical Engineering Forum 2022](#) at National Institute for Materials Science, Tsukuba, Japan, Jan 21, 2022 (Oral).
10. Himansu Sekhar Nanda* and Terry W J Steele, "Engineering Carbene Crosslinked Dendrimer Bioadhesives for Future Clinic," [Tsukuba Biomedical Engineering Forum 2022](#) at National Institute for Materials Science, Tsukuba, Japan, Jan 21, 2022 (Oral).

2021

11. Mohammad Aftab Alam Ansari, Prashant Kumar Jain* and Himansu Sekhar Nanda*, "Preparation and characterization of biphasic Poly- (Lactic Acid) bone scaffold using fused filament fabrication," [Indian Chemical Engineering Congress & 74th Annual Session of Indian Institute of Chemical Engineers \(CHEMCON\) 2021](#) at Bhubaneswar, India, 27th-30th December 2021 (Poster). [[CHEMCON 2021 Best](#)

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Poster Award (Petroleum and Polymer)]

12. Rishi Kumar, Mohd. Zahid Ansari* and Himansu Sekhar Nanda*, "Porous scaffold degradation using computational fluid dynamics." [Indian Chemical Engineering Congress & 74th Annual Session of Indian Institute of Chemical Engineers \(CHEMCON\) 2021](#) at Bhubaneswar, India, 27th-30th December 2021 (Oral).
13. Vicky Subhash Telang, Puneet Tandon* and Himansu Sekhar Nanda*, "Numerical Simulation of Biodegradable Mg-alloy Stent under Micro Stress Environment." [Indian Chemical Engineering Congress & 74th Annual Session of Indian Institute of Chemical Engineers \(CHEMCON\) 2021](#) at Bhubaneswar, India, 27th-30th December 2021 (Poster).
14. Himansu Sekhar Nanda*, Vijay Kumar Gupta, Harbhajan Ahirwar, Rahul Verma and Kaushalesh Kumar Pandey, "Comparative Evaluation of Orthopedic Bioimplant Designs using Computer Methods of Biomedical Engineering." [Advanced Materials for Biomedical Engineering of CLUSTER \(Biomaterials and Soft Materials\), Materials Research Meeting \(MRM\) 2021](#) at Pacifico Yokohama, Japan, 13th- 17th December 2021 (Invited).
15. Mohammad Aftab Alam Ansari, Prashant Kumar Jain* and Himansu Sekhar Nanda*, "Fabrication and characterization Poly- (Lactic Acid) based radial gradient porous scaffold for bone augmentation using fused filament fabrication." [International Virtual Conference on Biomaterial-Based Therapeutics, Engineering and Medicine \(BIOTEM-2021\)](#) at Manipal Academy of Higher Education (MAHE), Manipal, India, 17th-20th December 2021 (Poster).
16. Rishi Kumar, Mohd. Zahid Ansari* and Himansu Sekhar Nanda*, "Degradation behavior of porous scaffolds under simulated in vivo conditions using computational approach." [International Virtual Conference on Biomaterial-Based Therapeutics, Engineering and Medicine \(BIOTEM-2021\)](#) at Manipal Academy of Higher Education (MAHE), Manipal, India, 17th-20th December 2021 (Poster).
17. Vicky Subhash Telang, Puneet Tandon* and Himansu Sekhar Nanda*, "Stress Evolution in Coronary Stent using Finite Element Method." [International Virtual Conference on Biomaterial-Based Therapeutics, Engineering and Medicine \(BIOTEM-2021\)](#) at Manipal Academy of Higher Education (MAHE), Manipal, India, 17th-20th December 2021 (Poster).
18. Himansu Sekhar Nanda* and Terry W J Steele, "Carbene crosslinked tissue adhesives for Biomedical Applications." [2021 International Conference on Scientific Research Transformation and Technological Innovation \(ICTRI-HEE 2021\)](#) at Chengdu University, China, 27th - 28th October 2021 (Invited).
19. Himansu Sekhar Nanda* and Terry W J Steele, "Soft Tissue Polymer Bioadhesives: Bridging the gap in regenerative medicine." [Advanced Nanomaterials Congress \(AMC-Nano\)](#) at Gammalkilsvägen, Ulrika, Sweden, 24th- 27th October 2021 (Invited).
20. Himansu Sekhar Nanda*, Manisha Singh and Terry W J Steele, "Cerium Oxide-Bioadhesive Nanocomposites for Biomedical Applications." [International e-conference APA Bioforum \(India\)](#), 27th- 28th August 2021 (Oral).

2020

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21. Himansu Sekhar Nanda*, Guoping Chen and Terry W J Steele, "Design Strategies in Development of Biomaterials and Bioadhesives for future Clinic." [International Conference on Functional Materials \(ICFM 2020\)](#) at IIT Kharagpur, India, 6th-9th January 2020 (Invited).

2019

22. Himansu Sekhar Nanda*, Guoping Chen and Terry W J Steele, "Design and development of Biomaterials and Bioadhesives for Future Clinic." [17th NAMIS Workshop on Nano and Microsystems for fundamental, medical and industrial applications](#) at Indian Institute of Technology Bombay, India, 25th-27th November 2019 (Invited).
23. Himansu Sekhar Nanda*, Guoping Chen and Terry W J Steele, "Design based Challenges in Development of Biomaterials and Bioadhesives for future Clinic." [13th World Congress of Regenerative Medicine and Stem Cells](#) at Dalian, China, 1st -3rd November 2019 (Invited).
24. Himansu Sekhar Nanda*, Guoping Chen and Terry W J Steele, "Design and Development of Biomaterials and Bioadhesives for future Clinic." [International Conference on Advances in Polymeric Materials and Human Healthcare \(APA-STERMI\)](#) at Panjim, Goa, India, 16th-18th October 2019 (Oral).

2018

25. Himansu Sekhar Nanda* and C. Mohapatra, "Porous scaffolds for nanomedicine screening." [The 17th International Conference of Asia Pacific Association of Surgical Tissue Banks \(APASTB2018\)](#) at Kuala Lumpur, Malaysia, 27th-31st August 2018 (Oral).
26. Himansu Sekhar Nanda* and C. Mohapatra, "An engineered tumour model via sequential functionalization of nanocerium, Organosilane, biopolymer and porous scaffold." [International symposium on Functional Materials \(ISFM 2018\): Energy and Biomedical Applications](#) at Chandigarh, India, 13th-15th April 2018 (Invited).

2017

27. Himansu Sekhar Nanda, Manisha Singh, Ramille N Shah and Terry W. J. Steele*, "Carbene- based Tuneable on- demand Adhesives as Medical Glue for Fixation of Implantable Biomaterials." [4th International Conference on Advanced Nanomaterial and Nanotechnology \(ICANN\) 2017](#) at Indian Institute of Technology Guwahati, India, 18th – 21st December 2017 (Invited).
28. Himansu Sekhar Nanda, Manisha Singh, Ankur Harish Shah, Ramile N Shah and Terry W. J. Steele*, "PAMAM Bioadhesives: A quest for blood compatible formulations." [6th Asian Biomaterials Congress \(6th ABMC\)](#) at Thiruvananthapuram, India, 23rd -27th October 2017 (Oral).
29. Himansu Sekhar Nanda and Terry W. J. Steele*, "On demand Tissue Adhesives for Emerging Medical Applications." [International Conference on Physics and Mechanics of New Materials and Their Applications \(PHENMA 2017\)](#) at PDPM-IIITDM Jabalpur, India, 14th -16th October 2017 (Invited).
30. Himansu Sekhar Nanda, Gao Feng, Ivan Djordjevic and Terry W. J. Steele*, "Surface Modified PAMAM-g-diazirine Bioadhesives for Blood Contacting Applications." [9th International Conference on Materials for Advanced Technologies 2017 \(ICMAT](#)

Curriculum Vitae

2017) at Suntec, Singapore, 18th-23rd June 2017 (Oral).

31. Himansu Sekhar Nanda, Gao Feng, Ivan Djordjevic and Terry W. J. Steele*, "Preparation of platelet resistant PAMAM-g-diazirine bioadhesives for blood contacting applications." [The International Conference on Surfaces, Coatings, and Interfaces 2017 \(Surf Coat Korea 2017\)](#) at Incheon, South Korea, 29th-31st March 2017 (Oral).

2016

32. Himansu Sekhar Nanda*, Naoki Kawazoe and Guoping Chen*, "Micro-and nano-therapeutics impregnated designer scaffolds for tissue engineering and nanomedicine screening." [3rd Indo-Austrian Symposium on Advances in Materials Engineering \(AME 2016\)](#) at Indian Institute of Technology Bombay, India, 19th-20th December 2016 (Invited).
33. Himansu Sekhar Nanda* and Enrico Traversa, "Cerium oxide nanoparticle impregnated-(PLGA-collagen) porous scaffold as an in vitro platform for nanomedicine screening." [International Conference on Functional Materials \(ICFM-2016\)](#) at Indian Institute of Technology Kharagpur, India, 12th-14th December 2016 (Oral).
34. Himansu Sekhar Nanda*, Naoki Kawazoe and Guoping Chen*, "Modulation of protein release behavior of PLGA microspheres using ionic salt." [International Symposium on Polymer Analysis and Characterization \(ISPAC\) 2016](#) at Nanyang Technological University Singapore, Singapore, 12th-15th June 2016 (Oral).

2015

35. Himansu Sekhar Nanda, Nokamoto Tomoko, Shangwu Chen, Naoki Kawazoe and Guoping Chen*, "Preparation of PLLA-collagen porous scaffold with controlled pore structure for bone tissue engineering therapeutics." [4th International Conference on Advanced Nanomaterial and Nanotechnology \(ICANN\) 2015](#) at Indian Institute of Technology Guwahati, India, 8th-11th December 2015 (Oral).

2014

36. Himansu Sekhar Nanda, Naoki Kawazoe, Qin Zhang, Shangwu Chen and Guoping Chen*, "Preparation of a long-term insulin releasing porous collagen scaffold for skin tissue regeneration." [2nd Hoffman family symposium: International Symposium on Smart Biomaterials](#) at National Institute for Materials Science Tsukuba, Japan, 24th-25th March 2014 (Poster).

2012

37. Himansu Sekhar Nanda, Naoki Kawazoe and Guoping Chen*, "Preparation of protein incorporated biodegradable microbeads with controllable release profile." [International Symposium on Biocompatibility and Applications of Nanocarbons](#) jointly with [6th annual meeting of Nano-Biomedical society](#) at National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan, 9th-10th July 2012 (Poster).
38. Himansu Sekhar Nanda, Naoki Kawazoe and Guoping Chen*, "Preparation of PLGA microbeads for controlled delivery of insulin." [9th World Biomaterials Congress](#) at Chengdu, China, 1st-5th June 2012 (Poster).

2011

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39. Himansu Sekhar Nanda, R Jayaganthan, and Narayan Chandra Mishra*,
"Nanofibers—A potential drug delivery system for leishmaniasis." [International Conference on Nanomaterials and Nanotechnology 2011 \(ICNANO\)](#) at New Delhi, India, 18th -21st December 2011 (Poster).
40. Himansu Sekhar Nanda*, Lelin Patel, Poonam Suthar, Nidhi Gaur, and Rajanikantha Nahak, "Molecular modeling and Ligand-protein interaction of N-protein of Chandipura virus." [International Conference & Exhibition on Proteomics and Bioinformatics](#) at Hyderabad, India, 6th -8th June 2011 (Poster).
41. Himansu Sekhar Nanda*, Lelin Patel, Nidhi Gaur, and Rajanikantha Nahak, "CHKGVAcPredB: A database of peptide vaccine design, functions & mutations for Chikugunya virus." [International Conference & Exhibition on Proteomics and Bioinformatics](#) at Hyderabad, India, 6th -8th June 2011 (Poster).
42. Himansu Sekhar Nanda, R Jayaganthan, Narayan Chandra Mishra*, "A Novel Process Optimization Strategy for Successful Encapsulation of 'Amphotericin B' in Gelatin based Nanofiber: A new Direction to Drug Delivery against Sever Fungal Infections." [4th Winter School on Nanotechnology in Advanced Drug Delivery](#) at National Institute of Pharmaceutical Education and Research Mohali, India, 28th march to Feb 4 2011 (Oral). (Nominated for Budding Nanotechnologist Award competition).

2010

43. Himansu Sekhar Nanda, R Jayaganthan and Narayan Chandra Mishra*,
"Amphotericin B loaded natural nanofiber as a potential drug delivery system against Leishmaniasis." [International Symposium of Materials on Regenerative Medicine \(ISOMRM\)](#) at National Health Research Institute, Taiwan, November 3rd-5th 2010 (Oral). (Nominated for [Young Investigator Award Competition in Materials and Regenerative Medicine](#))

Invited Lectures and Seminars:

1. Delivered a invited lecture on "[Emerging concepts of tissue repair using functional bioadhesives](#)", at Center of Nanotechnology(CON), Indian Institute of Technology Roorkee (17-04-2023, Host: Prof. P. Gopinath, Head, CON, IIT Roorkee)
2. Delivered a public lecture on "[Emerging design principles in biomaterials for tissue repair and fixation](#)" at Manipal School of Life Sciences (MSLS), Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, India. (08-04-2023, Chair: Dr.Bhisham Narayan Singh, MSLS)
3. Delivered an invited lecture on "[Biomaterials processing for Biomedical Engineering](#)" at Online Faculty Development Program on "Advances in Material Processing and Additive Manufacturing" held at IIITDM Jabalpur, sponsored by E&ICT Academy. (05-09-2022, Chair: Dr. Manu Srivastav, Mechanical Engineering, IIITDM Jabalpur)
4. Delivered an invited lecture on "[Biomaterials based Emerging Technologies for Tissue Engineering](#)" at the School of Pharmacy & Guangdong Provincial Key Laboratory of Research and Development of Natural Drugs, Guangdong Medical University, Republic of China (22-06-2022, Host: Professor Chengyu Lu, Dean, School of Pharmacy)
5. Delivered an invited lecture on "[Design and development of porous scaffolds from biocompatible materials](#)" in AICTE sponsored Short Term Course on "Near Net

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- Shape Processes for Metallic and Biocompatible Materials-the Smart Manufacturing Approach" held at IIITDM Jabalpur (05-03-2020, Chair: Prof. Puneet Tandon, Mechanical Engineering, IIITDM Jabalpur).
6. Delivered an invited lecture on "[Design and Development of Tissue Adhesives from Biocompatible Materials](#)" in AICTE sponsored Short Term Course on "Biomedical Applications of Additive Manufacturing using Medical Image Processing" held at IIITDM Jabalpur. (12.03.2020, Chair: Prof. Prashant Kumar Jain and Dr. Himansu Sekhar Nanda, IIITDM Jabalpur)
 7. Delivered a lecture on "[Design and Development of Porous Scaffolds for Tissue Engineering](#)" in AICTE sponsored Short Term Course on "Biomedical Applications of Additive Manufacturing using Medical Image Processing" held at IIITDM Jabalpur. (12.03.2020, Chair: Prof. Prashant Kumar Jain and Dr. Himansu Sekhar Nanda, IIITDM Jabalpur)
 8. Delivered a seminar on "[Clinical Grade Bioadhesives](#)" at the Department of Macromolecular Engineering, State Key Laboratory of Molecular Engineering of Polymers, Fudan University, China. (06.06.2019, Host: Prof. Jiandong Ding, Director, State Key Laboratory of Molecular Engineering of Polymers)
 9. Delivered an invited seminar on "[Design and development of Biomaterials and Bioadhesives for Future Clinic](#)" at the Department of Chemical Engineering, Indian Institute of Technology Bombay, Mumbai. (13.03.2019, Host: Faculty Search Committee, Department of Chemical Engineering, IIT Bombay)
 10. Delivered a public lecture on "[Design and development of clinically important biomaterials and bioadhesives for future medicine](#)" at Beijing University of Chemical Technology China. (09.07.2018, Host: Prof. Young Liu, College of Materials Science and Engineering, BUCT, Beijing)
 11. Delivered a talk on "[Design and development of mechanically robust biomaterials and bioadhesives for Clinical Applications](#)" at the Indian Institute of Technology-Goa, India. (11.06.2018, Host: Prof. Dharendra Bahadur, IIT Goa)
 12. Delivered a seminar on "[Designer scaffolds of controlled pore structure and controlled drug delivery for regenerative medicine](#)" at the Department of Bioscience and Bioengineering, Indian Institute of Technology Guwahati, India. (25.08.2016, Host: Prof. Kannan Pakshirajan, IIT Guwahati)
 13. Delivered a seminar on "[Controlled drug release from porous scaffolds of controlled pore structure for tissue engineering](#)" at the Centre of Excellence for Sustainable Polymers (COE-SUSPOL), Indian Institute of Technology Guwahati, India. (14.12.2015: Host: Prof. V K Katiyar and Prof. Ravi Shankar, IIT Guwahati)
 14. Delivered an invited seminar on "[Controlled insulin delivery from collagen porous scaffolds of controlled pore structure for skin tissue engineering application](#)" at the Department of Biological Science, Birla Institute of Technology and Science, Pilani (K. K. Birla Goa Campus), Goa, India (04.12.2015, Host: Prof. Meenal Kowshik, Head, Department of Biological Science, BITS Pilani, K. K. Birla GOA Campus)
 15. Delivered an invited seminar on "[Drug releasing porous scaffolds of controlled pore structure for tissue regeneration and directed stem cell differentiation](#)" at Center of

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Nanotechnology, Indian Institute of Technology Roorkee (10.09.2014, Host: Prof. R. Jayaganthan, IIT Roorkee)

16. Delivered an invited seminar on "[Preparation of controlled release porous collagen scaffolds of controlled pore structure for long term delivery of bioactive human insulin](#)" at Nanoscale Materials and Bio-analytical chemistry lab, Institute of Atomic and Molecular Sciences, Academia Sinica (27.12.2013, Host: Prof. Y. T. Chen, IAMS, Academia Sinica, Taiwan)
17. Delivered an invited seminar on "[Multifunctional porous 3D scaffolds for controlled delivery of insulin and tissue regeneration](#)" at Center of Nanotechnology, Indian Institute of Technology–Roorkee (09.01.2013, Host: Prof. R. Jayaganthan, IIT Roorkee)
18. Delivered an invited public lecture on "[Natural biodegradable nanofibers as a potential drug delivery system](#)" at the Indian scientist association at Japan-Tsukuba chapter, Tsukuba, Japan (18.06.2011, Host: Prof. Sunil Kaul, AIST-Japan)

Conferences, Seminars, and Lecture Series (Organized):

1. An International Symposium on "[Additive Manufacturing of Metallic Alloys and Composites: Academic and Industrial Perspective](#)" organized by IIITDM Jabalpur (11.04.2023-13.04.2023, role as a Co-convener)
2. An International Symposium on "[Emerging Materials for Biomedical Engineering](#)" jointly organized by IIITDM Jabalpur and Indian National Science Academy (INSA) New Delhi under the aegis of Society for Biomaterials & Artificial Organs India (SBAOI) & Society for Tissue Engineering and Regenerative Medicine India (STERMI). (30.01.2022-31.01.2022, role as a Convener)
3. An institute-level distinguished lecture on "[Science & Higher Learning for Healthy Life & Planet](#)" delivered by Prof. Seeram Ramakrishna from National University of Singapore as an inaugural lecture of Biomedical Engineering and Technology Lab, IIITDM Jabalpur. (10.04.2021, as Coordinator)
You tube link: <https://www.youtube.com/watch?v=1pxeXMCeUXs>
4. AICTE sponsored Short Term Course on "[Additive Biomedical Applications of Additive Manufacturing using Medical Image Processing](#)" held at IIITDM Jabalpur. (07.03.2020-11.03.2020, as a Co-coordinator)

Conference and workshops attended:

1. [Next generation Confocal Microscope for Advanced Bio-imaging](#) at Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore.
2. SWISS-Japanese [International workshop on Nanosciences: Materials Phenomena at Small Scale](#) at National Institute for Materials Science, Japan
3. [MANA international symposium 2013](#) (Inaugural talk by Professor Akira Suzuki, Nobel laureate in chemistry 2010 and Professor J Georg Bednorz , Nobel laureate in physics, 1987)
4. [Australian MANA workshop on Nanotechnology](#) at International Center for Materials and Nanoarchitectonics (MANA) , National Institute for Materials Science Japan
5. [MANA International symposium 2012](#) (an inaugural talk by Prof. Ei-Echi Negichi, 2010 Nobel Laureate in Chemistry and Professor Henerich Rohler, Nobel laureate in Physics, 1986) at Tsukuba International Congress Center, Epochal, Tsukuba

Curriculum Vitae

6. International workshop cum [Joint IIT Bombay-University of Alberta, Canada Meeting on “Development of Low-Cost Lab-on-a-Chip Medical Devices for Health Monitoring”](#) held at IIT Bombay, India
7. 2nd IEEE International workshop on [“Electron Devices and Semiconductor Technology \(IEDST 2009\)”](#) at IIT Bombay, Mumbai, India
8. 2nd INUP Workshop on [“Nanofabrication Technologies”](#) at IIT Bombay, Mumbai, India
9. International conference on [“Knowledge Sharing and IP Management Evolving Strategies”](#) in Asia Pacific (KIPASPA 2009)” at IIT Roorkee, India
10. Indo-US Workshop on [“Microfluidics and fabronics \(Microfabrication\) IUWMF 09”](#) at Department of Mechanical and Chemical Engineering, IIT Kharagpur
11. 11th Orissa Bigyan Congress [“Indian Science Congress: Bhubaneswar Chapter”](#) at Kalinga Institute of Industrial Technology (KIIT) University, Bhubaneswar, India
12. International conference on [“Emerging Trends in Biological Sciences”](#) at Kalinga Institute of Industrial Technology (KIIT) University, Bhubaneswar, India (an inaugural talk by Prof. Richard Ernst Nobel Laureate, 1991, ETH Zurich, Switzerland)
13. International workshop on [“physics on biology: A synergy”](#) at School of Physics, University of Hyderabad (UOH), Hyderabad, India
14. International symposium on ["chromosome to genome"](#) at Center for Cellular and Molecular Biology (CCMB), Hyderabad, India
15. 11th ADNAT Convention on ["Advances in structural Biology and structure predication”](#) at Center for Cellular and Molecular Biology (CCMB), Hyderabad, India
16. Two days [Intellectual Property Rights \(IPR\) workshop cum training program on “Inventing into future”](#) at University College of Engineering (UCE), Osmania University (OU), Hyderabad

Short term projects and specialized training:

1. Certificate Training Course on [“Research Integrity Course Module in Biomedical Sciences Track”](#) at School of Materials Science and Engineering, Nanyang Technological University Singapore (Certified on 16th June 2016).
2. Certificate Training Course on [“Responsible Care and Use of Laboratory Animal Course \(RCULAC\)”](#) at Agency of Science, Technology and Research (A* STAR), Biological Resource Centre, Singapore. (Registered Certificate number: BRC/ACU/R/03/2017)
3. Science Academics Refresher Course on [“Modern Biotechnological Techniques”](#) sponsored by Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi and The National Academy of Sciences , India, Allahabad in collaboration with Manipal Life Science Center, Manipal University (2011).
4. Short term training on [“protein modeling and bioinformatics database design”](#) at Biomedical Informatics Center, Rajendra Memorial Institute of Medical Sciences, ICMR), India
5. Short term training on [“Protein crystallization and Biocomputing”](#) at Centre of excellence in structural Biology and Biocomputing, Indian Institute of Science, Bangalore, India (2009)

Curriculum Vitae

6. Short term training on “**Bioprocess Engineering**” at Department of Biotechnology, Birla Institute of Technology (BIT)-Mesra, India
7. Short term research work on "**Isolation screening, biochemical characterization, pilot scale production and partial purification of protease from soil bacteria**"(Bioprocess Engineering) at Department of Industrial Biotechnology, Jain University, Bangalore, India
8. Two weeks hands on training on "**Modern instrumental method for pharmaceutical analysis**" at Center of Environment, IST, JNTU, Hyderabad (Analysis of pharmaceutical samples by HPLC, GC, GC-MS, FTIR, UV-Vis spectrophotometer)

Editorial Activities (Special Issues, Books, and Editorials):

Special Issues in Peer-Reviewed Journals:

1. Themed Issue: Biomaterials 2021: Future of Biomaterials, Journal: **Current Opinion in Biomedical Engineering, Elsevier (IF: 4.16, Cite Score: 6.7)**
Ed(s): Aldo R. Boccaccini, Ph.D., **Himansu Sekhar Nanda, Ph.D.**, Syam Nukavarapu, Ph.D., and Vinoy Thomas, Ph.D.
Article collections: <https://www.sciencedirect.com/journal/current-opinion-in-biomedical-engineering/special-issue/10SVZ7HP44Z>
2. Themed Issue: Biodegradable Polymers for Biomedical Applications, Journal: **Frontier in Materials (Biomaterials) and Frontier in Bioengineering and Biotechnology (Biomaterials) (IF: 3.5)**
Ed(s): Liqun Yang, Ph.D., Jianshe Hu, Ph.D., Shuai Jiang, Ph.D., Hongli Mao, Ph.D., and **Himansu Sekhar Nanda Ph.D.**
Article collections: <https://www.frontiersin.org/research-topics/22710/biodegradable-polymers-for-biomedical-applications#articles>
3. Themed Issue: Biomaterials: Intelligent Biomaterials, Journal: **Current Opinion in Biomedical Engineering, Elsevier (IF: 4.16, Cite Score: 6.7)**
Ed(s): Seeram Ramakrishna, Ph.D., Ravin Narain, Ph.D., **Himansu Sekhar Nanda, Ph.D.**, Gulden Camci-Unal, Ph.D., and Masoud Mozafari Ph. D
Article collections: <https://www.sciencedirect.com/journal/current-opinion-in-biomedical-engineering/vol/24/suppl/C>
4. Themed Issue: Advances in Metallic Biomaterials, Journal: **Bioengineering, MDPI (in progress) (IF: 5.05)**
Ed(s): Bingbing Li, Ph. D., **Himansu Sekhar Nanda, Ph. D.**, and Geetha Manivasagam, Ph. D.
Article collections: https://www.mdpi.com/journal/bioengineering/special_issues/4437NA4BN7
5. Themed Issue: Advances in Exosome Biosensors, Journal: **Biosensors, MDPI (in progress) (IF: 5.97)**
Ed(s): Nan-Fu Chiu, Ph. D., Yu Sheng Hsiao, Ph. D., Yun-Ju Lai and **Himansu Sekhar Nanda, Ph. D**
Article collections: https://www.mdpi.com/journal/biosensors/special_issues/86E94607W5

Curriculum Vitae

6. Themed Issue: Biodegradable Polymers for Biomedical Applications Volume II, Journal: [Frontier in Materials \(Biomaterials\)](#) and [Frontier in Bioengineering and Biotechnology \(Biomaterials\)](#) (IF: 3.5)
Ed(s): Liqun Yang, Ph.D., Jianshe Hu, Ph.D., Shuai Jiang, Ph.D., Hongli Mao, Ph.D., and Himansu Sekhar Nanda Ph.D.
Article collections: <https://www.frontiersin.org/research-topics/33684/biodegradable-polymers-for-biomedical-applications---volume-ii#articles>

Awards and Honors:

1. [Best Poster Award in Innovations in Solid Waste Management for better Health](#) at International Conference on Biomaterials and Healthcare (BioHeal 2023) (Award received from Padma Bhusan Prof. N. K. Ganguly Former DG, ICMR, India)
2. [Nanotechnology Alumnus Award \(2023\)](#) from Center of Nanotechnology, Indian Institute of Technology Roorkee, Uttarakhand, India.
3. [Best poster presentation award in Petroleum and Polymer](#) from Indian Chemical Engineering Congress & 74th Annual Session of Indian Institute of Chemical Engineers (CHEMCON) 2021, IMMT, Bhubaneswar, India.
4. [Best Researcher Award \(2021\)](#) from VDG Good Professional Association in International Scientist Awards on Engineering, Science, and Medicine (ISAP2021 Awards) Pondicherry, India.
5. ["Belt and Road" visiting scholarship \(2019\)](#) from Beijing University of Chemical Technology China (declined).
6. [Senior visiting scholarship \(2019\)](#) from State Key Laboratory of Molecular Engineering of Polymers, Fudan University, China
7. ["Belt and Road" visiting scholarship \(2018\)](#) from Beijing University of Chemical Technology China.
8. [National Institute for Materials Science \(NIMS\) International Travel Grant](#) for poster presentation at World Biomaterials Congress 2012 held at Chengdu, China
9. [National Institute for Materials Science \(NIMS\) Graduate Research Assistantship \(GRA\)](#) Awardee for AY 2011 for doctoral studies at NIMS, Japan.
10. [National Institute for Materials Science, Japan international travel award](#) for AY-2012, 2010 (candidate called for selection of NIMS Graduate Research Assistantship) .
11. [TIGP doctoral program award \(2010\)](#) in Nanoscience and Nanotechnology for doctoral studies at Academia Sinica, Taiwan (declined)
12. [International intern award from TIGP summer internship program](#) (Nanoscience and Technology)-2010 at Academia Sinica, Taiwan (declined)
13. [Fellow of Summer Undergraduate Mentorship in Mechanical Engineering Research-2010](#) from the Department of Mechanical Engineering, Indian Institute of Science Bangalore (declined).
14. [Ministry of Human Resource and Development, Government of India fellowship](#) (through GATE) for master studies at Indian Institute of Technology.
15. [Gitanjali memorial award](#) (Best student) at the junior school level.

Thesis Supervised:

1. No of Ph. D. students: 1 (Completed)+1 (Thesis submitted)+ 3 (In progress)

Curriculum Vitae

2. No of Master students: 7 (Completed)
3. No of B-Tech students: 2 (Completed)

Courses taught (for UG and PG students):

Engineering Materials; Micro electro mechanical systems: Microfabrication and applications; Manufacturing processes; Additive manufacturing for medical applications; Biomaterials science and engineering; Biomedical engineering: Fundamentals and applications; Research methodology for mechanical engineers

Courses developed (for UG and PG students):

Biomaterials science and engineering; Biomedical engineering: Fundamentals and applications; Research methodology for mechanical engineers

Sponsored Research Projects:

1. "Bioactive Hybrid Scaffold Manufacturing via Surface Modification of 3D-printed Hydrophobic Scaffolds" as a Start-up Research Grant from Science and Engineering Research Board, Department of Science and Technology, Government of India (Project no. SRG/2019/001504, Grant amount: 23,25,400 INR) as Principal Investigator (Current status: Completed) (Dec 2019-Mar 2022)
2. "Electrospun Nanofibers for Tissue Engineering and Regenerative" Medicine as Faculty Initiation Grant from IIITDM Jabalpur (Grant amount: 3,00,000 INR) as Principal Investigator (Current status: Completed) (Mar 2019-Jun 2022)
3. "Biomimetic Bone Scaffold of Tailored Radial Porosity Gradient using Fused Deposition Manufacturing" as Senior Visiting Scholar Research Grant from State Key Laboratory of Molecular Engineering of Polymers, Fudan University, China (Project no. FP101, Grant amount: 30,000 RMB) as Principal Investigator (Current status: Completed) (Jan 2019 –Nov 2019).

Administrative duties:

1. Faculty-in-Charge, Central Workshop, Mechanical Engineering, IIITDM, Jabalpur, Madhya Pradesh 482005 , India (Feb 2023- Till)
2. Member, Department Postgraduate Committee, IIITDM Jabalpur, Madhya Pradesh 482005 , India (Feb 2022- Till)
3. Member, Undergraduate, and Postgraduate Thesis Award Committee, Society of Biomaterials and Artificial Organs, India (SBAOI) (Apr 2022- Till)

Project proposal reviewer:

Swiss National Science Foundation; The French National Research Agency; Indian Council of Medical Research (ICMR)

Other outreach activities:

1. Initiated the MOU between Institute of Advanced Materials(IAM), Sweden and IIITDM Jabalpur (2021)
2. Initiated the MOU between CSIR-Indian Institute of Chemical Technology (CSIR-IICT) and IIITDM Jabalpur (2020)
3. Initiated the MOU between Beijing University of Chemical Technology and IIITDM Jabalpur (2019)
4. Coordinator (India) of BUCT International Summer Camp for S & T Innovation held at Beijing, China (2019)

Membership in Professional Societies:

Curriculum Vitae

1. Professional Member, American Institute of Chemical Engineers (AIChE) (2023-Till)
2. Life Member, Society of Biomaterials and Artificial Organs, India (SBAOI) (2021-Till)
3. Life Member, Asian Polymer Association (APA) (2021- Till)
4. Life member, Indian Institute of Chemical Engineers (IChE) (2021- Till)
5. Annual Member, Biomedical Engineering Society (BMES) (2021-Till)
6. Professional Member, The Minerals, Metals & Materials Society (TMS) (2021- Till)
7. Full Member, International Society of Biomechanics (ISB) (2021-Till)
8. Professional (Regular) Member, American Chemical Society (ACS) (2021- Till)

References:

Referee-1 (Ph. D. advisor)	<p>Prof. Guoping Chen Principal Investigator and Unit Director, Tissue Regeneration Materials Unit, Research Centre for Functional Materials, National Institute for Materials Science, Japan Professor, University of Tsukuba, Japan Scientific Editor, Materials Horizon (RSC) Phone: +81-29-860-4496 Fax: +81-29-860-4706 Email: Guoping.CHEN@nims.go.jp</p>
Referee-2 (M-Tech thesis supervisor)	<p>Prof. R Jayaganthan Professor, Department of Engineering Design, Indian Institute of Technology, Madras Phone: +91 44 22574735 (Off), +917358048942 (M) E-mail: edjay@iitm.ac.in, metarj@gmail.com</p>
Referee-3	<p>Prof. Seeram Ramakrishna Professor, Department of Mechanical Engineering Director, Center for Nanotechnology & Sustainability National University of Singapore 9 Engineering Drive 1 Singapore 117576 Biomaterials Section Editor, Current Opinion in Biomedical Engineering (Elsevier) Mobile: +65 90107766 Email: seeram@nus.edu.sg</p>
Referee-4	<p>Syam Nukavarapu, Ph.D. Castleman Professor in Engineering Innovation Biomedical Engineering Materials Science & Engineering/ Orthopaedic Surgery University of Connecticut 260 Glenbrook Road, Unit 3247 Storrs, Connecticut 06269 E-mail: syam.nukavarapu@uconn.edu Phone: 860.486.6975 Fax: 860.486.2500</p>
Referee-5	<p>Prof. Young Liu Associate Professor, College of Materials Science and Engineering, Beijing University of Chemical Technology, Beijing, China Mobile: +8613521008075 (M) Email: yongliu@mail.buct.edu.cn</p>

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Himanshu Sekhar Nanda

(HIMANSU SEKHAR NANDA, DATE: 02-11-2023)

