

Bio-sketch: Himansu Sekhar Nanda, PhD



Himansu Sekhar Nanda, Ph.D

Assistant Professor, Department of Mechanical Engineering

Indian Institute of Information Technology, Design and Manufacturing (IIITDM)-Jabalpur

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1. Brief Introduction:

PhD in frontier areas of **Materials Science and Engineering** with research specialization in **Biomaterials and Tissue Engineering** from international graduate school of prestigious **National Institute for Materials Science, Japan (Ranked 12th among top 25 Global Innovators: Government lab** by Clarivate Analytics (2017), Thomson Reuters based on several of its research platforms such as InCites, Web of Science, Derwent Innovations Index, Derwent World Patent Index and Patent Citation Index) with subsequent Post Doc (nanomedicine) from **KAUST Saudi Arabia (Ranked 19th in the world among the fastest rising universities for high quality research output** by Nature Index Rising Stars 2016) and Research Fellow(Bioadhesives or Medical Glue) from **NTU Singapore (ranked 11th in the world and 1st in Asia** in the latest 2018 QS World University Rankings) currently working as an **Assistant Professor in Mechanical Engineering at Indian Institute of Information Technology Design and Manufacturing Jabalpur, M.P. India** with an adjunct appointment to **College of Materials Science and Engineering, Beijing University of Chemical Technology China.**

2. Research Interests:

Functional medical materials for regenerative therapies: scaffold design for tissue engineering and drug delivery, nanomedicine and their functional surface modification, Soft tissue bioadhesives for dynamic drug release and keyhole surgeries, Non thrombogenic hydrogel bioadhesives as coatings for medical implants and devices, Interfacial tissue biomechanics for medical device design

Academic Background:

Academic Degree	Institute/ University	Grade Point Average (GPA)	Academic Duration
Ph.D (Materials Science and Engineering) Specialization: Biomaterials and regenerative medicine	National Institute for Materials Science (NIMS), Japan	NA	2011-2014
M-Tech (Nanotechnology) Research Specialization: Nanomedicine	Indian Institute of Technology (IIT), Roorkee, Uttarakhand, India	8.09/10	2008-2010
B-Tech (Biotechnology)	Biju Patnaik University of Technology (BPUT), Rourkela, Odisha, India	7.59/10	2004-2008

Doctoral thesis title:

“Preparation of porous scaffolds with controlled drug release for tissue engineering”

Doctoral thesis advisor:

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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 (NIMS),Tsukuba, Ibaraki, Japan
Professor, Department of Material Sciences and Engineering, Graduate School of Pure and Applied Sciences, University of Tsukuba, Japan
Associate Editor-Journal of Materials Chemistry B (RSC)

3. Professional Experiences:

Designation	Organization	From	To
Assistant Professor	Department of Mechanical Engineering, Indian Institute of Information Technology, Design and Manufacturing (IIITDM)-Jabalpur, India	Oct-17	Till
Research Fellow	School of Materials Science and Engineering, Nanyang Technological University (NTU), and Singapore General Hospital (SGH), Singapore	Feb-16	Sept 17
Post-Doctoral Fellow	Department of Materials Engineering (PSE division), King Abdullah University of Science and Technology (KAUST), Kingdom of Saudi Arabia	Oct-14	Jan-16
Junior Research Fellow	Department of Biological Sciences, Tata Institute of Fundamental Research (TIFR), India	Feb-08	July-08

4. Awards and Achievements:

1. Gitanjali memorial award (Best student award at junior school level).
2. Junior research fellowship from Tata Institute of Fundamental Research, India.
3. Ranked among top 1.5% students in Graduate Aptitude Test in Engineering (GATE) conducted by Indian Institutes of Technologies and Indian Institute of Science, India.
4. Ministry of Human Resource and Development (MHRD), Government of India fellowship (2008-2010).
5. Selected among 50 Indian post graduates of Indian universities to attend a winter program on “Cell and Developmental Biology” jointly organized by IIT Kanpur and Temasek Life science Laboratory (TLL), Singapore.
6. Selected participant in “Indo-US workshop on micro-fluidics and fabrionics (Microfabrication) (IUWMF 09) by Indo-US Science and Technology Forum.
7. Selected participant in “2nd Indian Nanoelectronics Users Program (INUP) workshop on nanofabrication technologies” at IIT Bombay sponsored by INUP, Government of India
8. Selected as an international participant for “2nd International Winter school for Graduate students: IWSG 2009” by National Nanotechnology Infrastructure Network (NNIN), USA and IIT Bombay sponsored by INUP.
9. Selected as an international intern student in nanoscience and nanotechnology for summer internship programme (SIP-2010) at Academia Sinica through Taiwan International Graduate Program (TIGP) intern fellowship.
10. Selected as a fellow of Summer Undergraduate Mentorship in Mechanical Engineering Research (SUMMER) at Department of Mechanical Engineering, Indian Institute of Science Bangalore for summer 2010.
11. Selected for Taiwan International Graduate Program (TIGP) in Nanoscience and Technology for 2010.
12. National institute for Materials Science (NIMS) travel award to visit NIMS for selection of NIMS Junior Researcher (Global competition for five awards per academic section for admission to joint doctoral program in Materials Sciences and Engineering).
13. Winner of NIMS graduate research assistantship for AY 2011.

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14. Selected among 20 national participants to participate in “Application of Biomedical Informatics in Medical Science with Introduction of Next Generation Sequencing (SOLid)” at Indian Council of Medical Research (ICMR), India.
15. Singhania University international faculty travel grant for presenting the research paper in Young Investigator Award (YIA) competition in ISOMRM 2010 at National Health Research Institutes, Zuhnan, Taiwan.
16. Selected as an international participant for Joint IIT Bombay-University of Alberta, Canada meeting on “Development of Low-Cost Lab-on-a-Chip Medical Devices for Health Monitoring” at IIT Bombay sponsored by INUP, IIT Bombay and University of Alberta.
17. Selected among 25 best instructors in the field of biotechnology and life sciences to attend a refresher course on “Modern Biotechnological Techniques” held at Manipal Life Science Center (MLSc), Manipal University sponsored by Indian Academy of Sciences, National Academy of Sciences and Indian National Science Academy in collaboration with MLSc, Manipal.
18. National Institute for Materials Science international student travel award for research presentation in “World Biomaterials Congress-2012” at Chengdu, China.
19. Selected as “Belt and Road” visiting scholar for academic and research association with Beijing University of Chemical Technology China.

5. Internships/Training and Short Term Projects (national and international):

1. International Traineeship on “The Belt and Road” Visiting Scholar program at Beijing University of Chemical Technology (BUCT) during 30th June to 25th July 2018 (Certified on 25th July 2018).
2. 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).
3. 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)
4. Short term training on “Protein crystallization and Biocomputing” at Centre of excellence in structural Biology and Biocomputing, Indian Institute of Science, Bangalore, India
5. Short term training on “Bioprocess Engineering” at Department of Biotechnology, Birla Institute of Technology (BIT)-Mesra, India (2007)
6. 2 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) (2006)

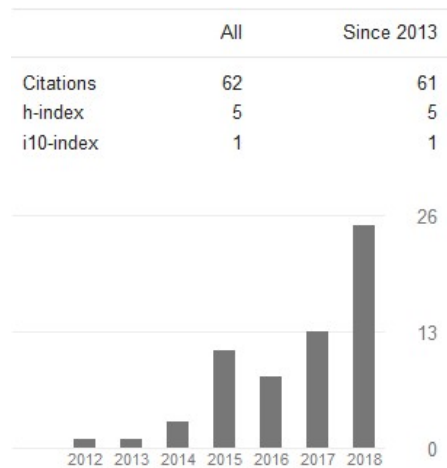
6. Publications:

A. International Journals:

(* **Corresponding author, IF: Impact factor on publication year**)

Citations:

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(Total Citations: 62, H-Index: 5, Citation Source: Google Scholar)

a. Published:

1. 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*. "Voltaglue Bioadhesives Energized with Interdigitated 3D-Graphene Electrodes." *Advanced healthcare materials* (2018): 1800538. (IF: 5.6 , Citations: 1)
2. Nanda, Himansu Sekhar, Ankur Harish Shah, Gautama Wicaksono, Oleksandr Pokholenko, Feng Gao, Ivan Djordjevic, and Terry W J Steele*. "Nonthrombogenic hydrogel coatings with carbene-cross-linking bioadhesives." *Biomacromolecules* 19, no. 5 (2018): 1425-1434. (IF: 5.7 , Citations: 5)
DOI: <http://dx.doi.org/10.1021/acs.biomac.8b00074>
3. 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. (IF: 4.5, Citations: 1)
DOI: <http://dx.doi.org/10.1039/C7TB01957B>
4. Nanda, Himansu Sekhar, Manisha Singh, and Terry WJ Steele*. "Thrombogenic Responses from Electro cured Tissue Adhesives." *ECS Transactions* 77, no. 11 (2017): 547-555. (IF: pending , Citations: 6)
DOI: <http://dx.doi.org/10.1149/07711.0547ecst>
5. Nanda, Himansu Sekhar*. "Surface modification of promising cerium oxide nanoparticles for nanomedicine applications." *RSC Advances* 6, no. 113 (2016): 111889-111894. (IF: 3.2 , Citations: 5)
DOI: <http://dx.doi.org/10.1039/C6RA23046F>
6. 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. (IF: pending , Citations: 3)
DOI: <http://dx.doi.org/10.3390/bioengineering3040028>
7. Nanda, Himansu Sekhar, Naoki Kawazoe, and Guoping Chen*. "Ionic salt induced morphology and drug release control of insulin incorporated biodegradable PLGA microsphere." *Adv Mater Lett* 7 (2016): 866-871. (IF: pending , Citations:3)
DOI: <http://dx.doi.org/10.5185/amlett.2016.6907>
8. 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 differentiation of mesenchymal stem cells." *Journal of Biomaterials Science, Polymer Edition* 25, no. 13 (2014): 1374-1386. (IF: 1.6 , Citations: 7)
DOI: <http://dx.doi.org/10.1080/09205063.2014.938980>
9. 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. (IF: 2.5 , Citations: 9)

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DOI: <http://dx.doi.org/10.1177/0883911514522724>

10. **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). (IF: 2.9 , Citations: 20)

DOI: <http://dx.doi.org/10.1155/2014/623805>

11. **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. (IF:1.9 , Citations: 2)

DOI: <http://dx.doi.org/10.2174/157341311798220628>

b. Manuscripts on communication and progress:

1. Ankur Harish Shah, Oleksandr Prokholenko, **Himansu Sekhar Nanda** and Terry WJ Steele*. "Non aqueous tissue compliant carbene-cross linking bioadhesives"(Submitted to **Materials Science and Engineering-C**)
2. **Himansu Sekhar Nanda***, Manisha Singh and Terry WJ Steele*, "Nanoceria impregnated carbene cross linking bioadhesives for wound packaging" (Target journal for submission: **Biomaterials Science**)
3. **Himansu Sekhar Nanda**, Manisha Singh, Lee Yin Hao, Yip Yun Sheng, Tan Nguan Soon and Terry WJ Steele*. "Carbene based on demand biologic soft tissue adhesive using platelet rich plasma additives". (target journal for submission: **Journal of Materials Chemistry B**)
4. Ivan Djordjevic, Ankur Harish Shaha, **Himansu Sekhar Nanda**, Oleksandr Prokholenko, , Jonathan Teo Shunming, Lee Lui Shiong, Duncan Angu, Gao Feng, Chaw Su Yin, Ong Chee Bing, Sze-Ryn Chung^b, Sarah Too, Muntasir Mannan, Andrew Chin Yuan Hui, Ban Hon Kim Kenneth and Terry WJ Steele*. "Diazirine-grafted polycaprolactone triol: UV activated bioadhesive polymer". (Target journal for submission: **Nature Biomedical Engineering/Science of Translational Medicine**).
5. **Himansu Sekhar Nanda*** and Chinmaya Mohapatra. "Functionalized nanoceria incorporated PLGA-Collagen hybrid scaffolds for nanomedicine screening" (target Journal **Chemical Communications**.)

B. Thesis:

1. Himansu, Sekhar Nanda. "Preparation of Porous Scaffolds with Controlled Drug Release for Tissue Engineering." PhD diss., 筑波大学 (University of Tsukuba), 2014.
2. **Nanda, Himansu Sekhar**. "Controlled Release of Amphotericin B from Electrospun Nanofiber Based On Gelatin: A New Insight to Drug Delivery against Leshmaniasis." (2010).

C. Conference Presentations:

1. **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 Bangi, Ptrajaya, Kuala Lumpur, Malaysia, 27th-31st August 2018 (**Oral**)
2. **Himansu Sekhar Nanda*** and C Mohapatra. "An engineered tumour model via sequential functionalization of nanoceria, organosilane, biopolymer and porous scaffold", **International symposium on Functional Materials (ISFM 2018): Energy and Biomedical Applications** at Hotel Shivalikview, Sector 17 E, Chandigarh, India, 13th-15th April 2018 (**Oral**)
3. **Himansu Sekhar Nanda**, Manisha Singh, Ramille N Shah and Terry WJ 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 (IIT) Guwahati, India, 18th – 21st December 2017 (**Oral**)
4. **Himansu Sekhar Nanda**, Manisha Singh, Ankur Harish Shah, Ramile N Shah and Terry WJ Steele*. "PAMAM Bioadhesives: A quest for blood compatible formulations", **6th Asian Biomaterials Congress (6th ABMC)** at Apollo Dimora Convention Centre, Thiruvananthapuram, India, 23rd -27th October 2017

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(Oral)

5. **Himansu Sekhar Nanda** and Terry WJ 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 (Oral)
6. **Himansu Sekhar Nanda**, Gao Feng, Ivan Djordjevic and Terry WJ Steele*. “Surface Modified PAMAM-g-diazirine Bioadhesives for Blood Contacting Applications”, **9th International Conference on Materials for Advanced Technologies 2017 (ICMAT 2017)** at Suntec, Singapore, 18th-23rd June 2017 (Oral).
7. **Himansu Sekhar Nanda**, Gao Feng, Ivan Djordjevic and Terry WJ 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).
8. **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 (IIT) Mumbai, India, 19th-20th December 2016 (Oral).
9. **Himansu Sekhar Nanda*** “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 (IIT) Kharagpur, India, 12th-14th December 2016 (Oral).
10. **Himansu Sekhar Nanda***, Naoki Kawazoe and Guoping Chen*. “Modulation of protein release behaviour of PLGA microspheres using ionic salt”, **International Symposium on Polymer Analysis and Characterization (ISPAC) 2016** at Nanyang Technological University (NTU), Singapore, 12th-15th June 2016 (Oral).
11. **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 (IIT) Guwahati, India, 8th-11th December 2015 (Oral).
12. **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, Japan, 24th-25th March 2014 (Poster).
13. **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 (NAIST), Japan, 9th-10th July 2012 (Poster).
14. **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).
15. **Himansu Sekhar Nanda**, R Jayaganthan and Narayan Chandra Mishra*. “Amphotericin B loaded natural nanofiber as a potential drug delivery system against leishmaniasis”, **2010 International Symposium of Materials on Regenerative Medicine (2010 ISOMRM)** at National Health Research Institute (NHRI), Taiwan, November 3rd-5th 2010 (Oral, Nominated for Young Investigator Award in materials and regenerative medicine competition).
16. **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 Severe Fungal Infections., **4th Winter School on Nanotechnology in Advanced Drug Delivery** at National Institute of Pharmaceutical Education and Research (NIPER), Mohali, India,

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28th march to 4th February 2011 (Oral, Nominated for Budding Nanotechnologist Award competition).

7. Invited Talks and Public Lectures:

1. 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: Professor Young Liu, Associate Professor, College of Materials Science and Engineering**)
2. Delivered a talk on “Design and development of mechanically robust biomaterials and bioadhesives for Clinical Applications” at Indian Institute of Technology-Goa, India. (11.06.2018, **Host: Professor Dharendra Bahadur, Professor, School of Mechanical Sciences**)
3. Delivered a talk on “Carbene- based Tuneable on- demand Adhesives as Medical Glue for Fixation of Implantable Biomaterials” at 4th International Conference on Advanced Nanomaterial and Nanotechnology (ICANN) 2017 held at Indian Institute of Technology (IIT) Guwahati, India. (18.12.2017, **Host: Prof. P K Iyer, Chairman ICANN**)
4. Delivered an invited talk on “Micro-and nano-therapeutic impregnated designer scaffolds for tissue engineering and nanomedicine screening” at 3rd Indo-Austrian Symposium on 'Advances in Materials Engineering' (AME 2016) held at Indian Institute of Technology (IIT) Mumbai, India. (19.12.2016, **Host: Prof. Amartya Mukhopadhyay, Convener, AME 2016**)
5. Delivered an oral talk on “Cerium oxide nanoparticle impregnated-(PLGA-collagen) porous scaffold as an in vitro platform for nanomedicine screening” at International Conference on Functional Materials (ICFM-2016) held at Indian Institute of Technology (IIT) Kharagpur, India (14.12.2016, **Host: Prof. Susanta Banerjee and Professor Chacko Jacob, Convener, ICFM 2016**)
6. Delivered a seminar on “Designer scaffolds of controlled pore structure and controlled drug delivery for regenerative engineering” at Department of Bioscience and Bioengineering, Indian Institute of Technology (IIT) Guwahati, India. (25.08.2016: **Host: Professor Kannan Pakshirajan, Head of Department, Department of Bioscience and Bioengineering, IIT Guwahati**)
7. Delivered a talk on “Controlled drug release from porous scaffolds of controlled pore structure for tissue engineering” at Centre of Excellence for Sustainable Polymers (COE-SUSPOL), Indian Institute of Technology (IIT) Guwahati, India. (14.12.2015: **Host: Professor V K Katiyar: Director, COE-SusPol and Professor Ravi Shankar: Department of Mechanical Engineering, IIT Guwahati**)
8. Delivered a talk on “Preparation of PLLA-collagen porous scaffold with controlled pore structure for bone tissue engineering therapeutics” at 4th International Conference on Advanced Nanomaterial and Nanotechnology (ICANN) 2015 held at Indian Institute of Technology (IIT) Guwahati, India. (11.12.2015, **Host: Prof. P K Iyer, Chairman ICANN**)
9. Delivered a talk on “Controlled insulin delivery from collagen porous scaffolds of controlled pore structure for skin tissue engineering application” at 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**)
10. Delivered a talk on “Drug releasing porous scaffolds of controlled pore structure for tissue regeneration and directed stem cell differentiation” at Center of Nanotechnology, Indian Institute of Technology Roorkee (10.09.2014, **Host: Prof. R. Jayaganthan**)
11. Delivered a talk 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 (National Academy of Taiwan) (27.12.2013, **Host: Professor Y. T. Chen**)
12. Delivered a talk 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**)

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13. Delivered a public lecture on “Natural biodegradable nanofibers as a potential drug delivery system” at Indian scientist association at Japan-Tsukuba chapter, Tsukuba, Japan (**18.06.2011, Host: Prof. Sunil Kaul, AIST-Japan**)

8. Journal's Editorial and Review Activities:

1. Journal of Stem Cell Research and Medicine (Open Access Text, London): Editorial Board Member
2. Journal of Materials Science and Nanotechnology (Omega Publisher): Editorial Board Member
3. SciFed Nanotech Research Letters (Scientific Federation): Editorial Board Member
4. SciFed Drug Delivery Research Journal (Scientific Federation): Editorial Board Member
5. Current Updates in Nanotechnology (OPR Science): Editorial Board Member
6. Journal of Nanoscience, Nanomedicine & Nanobiology (Henry Publishing Groups): Editorial Board Member
7. Journal of Materials Chemistry B (RSC): Reviewer
8. Indian Journal of Biophysics and Biochemistry (NISCAIR): Reviewer
9. International journal of molecular sciences (IJMS) (MDPI): Reviewer
10. Polymers (MDPI): Reviewer
11. Materials (MDPI): Reviewer
12. Annals of Medicine (Taylor and Francis): Reviewer
13. Bioengineering (MDPI): Reviewer
14. Journal of Personalized Medicine (JPM)(MDPI): Reviewer

9. Membership in Professional Societies

1. Member of American Chemical Society (ACS)
2. Member of International Society of Biomechanics
3. Member of Indian Peptide Society (IPS)
4. Member of Indian Immunology Society (IIS)

10. Countries Visited for Research and Scientific Presentations

India, China, Japan, Taiwan, Kingdom of Saudi Arabia, Malaysia, Singapore

11. Collaborators cum long term research partners

1. School of Materials Science and Engineering, Nanyang Technological University Singapore, Singapore (Bioadhesives for dynamic drug release and wound healing) [**Contact person: Prof. Terry WJ Steele**]
2. Department of Mechanical Engineering and Bioengineering, National University of Singapore (Electrospun nanofibers as medical membrane)[**Contact person: Prof. Seeram Ramakrishna**]
3. College of Materials Science and Engineering, Beijing University of Chemical Technology, China (Melt electrospinning and solution electrospinning for nanofibrous matrix scaffold design) [**Contact person: Prof. Young Liu**]
**taken the leading role in signing the 1st MOU among IITDM and Beijing University of Chemical Technology for long term research cooperation, student exchanges and staff exchanges*
4. Bioceramics and coating Division, CSIR-Central Glass & Ceramic Research Institute, Kolkata, India (Bio-ceramics for drug delivery) [**Contact person: Dr. Subhadip Bodhak, Senior Scientist**]
5. CSIR-Indian Institute of Technology, Hyderabad (Angiogenesis and drug delivery) [**Contact person: Dr. Chittaranjan Patra (Principal Scientist, Associate Professor (Biological Sciences) and Group Leader, Biomaterials Group, IICT, India)**]
6. Department of Mechanical Engineering, Indian Institute of Technology-Guwahati (Surface modification of medical implants for orthopedic applications) [**Contact person: Professor Mamilla Ravi Sankar**]

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- 7. IIITDM-Jabalpur (internal collaboration) [Manufacturing of Custom-made 3D printed Scaffolds for Hard tissue Regeneration [**Contact Person: Professor Puneet Tandon, Department of Mechanical Engineering**]
- 8. IIITDM-Jabalpur (internal collaboration) [Biomechanical Modeling of Implant-Tissue Interface for regenerative medicine [**Contact person: Prof. V K Gupta and Dr. Shivdayal Patel, Department of Mechanical Engineering, IIITDM Jabalpur**]

12. Submitted Proposal(s) and status:

- 1. **Title:** Electrospun Nanofibrous Hybrid Scaffolds for Regenerative Medicine
Funding agency: FIG IIITDM
Grant amount: 3, 00,000 INR
Status: Under review
- 2. **Title:** Multifunctional Hybrid Biomaterials for Long Bone Regeneration and Cancer Therapy **Funding agency:** Foundation of Science and Technology Development (FOSTECT) , Ton Duc Thang University, Vietnam
Grant amount: 1970 million VND
Status: on final revision

13. Teaching:

a. Course (s) Taught:

Name of the course(s): Biomaterials Scinece and Technology(course code:ME688) and Microelectromechanical system(MEMS):Microfabrication and applications (Course code: ME686)
Target students and strength: Mechanical Engineering, Electrical Engineering, Computer Science and Engineering, and Design (UG and PG)
ME686(109 students), ME688 (162 students)

b. Course (s) developped:

Biomaterials Science and Technology (ME688)

14. Personal Information

Name : Himansu Sekhar Nanda
Father’s Name : Mr. Pradipta Kumar Nanda
Mother’s name : Mrs. Binodini Nanda
Spouse name : Dr. (Ms.) Madhusmita Dash
Date of birth : 1st May 1985
Nationality : Indian
Passport No : G3006931 (OLD), R2294827 (New)
Marital Status : Married
Hobbies : Travel, Photography and Cycling

15. References

- 1. **Professor Guoping Chen, Ph.D [PhD thesis supervisor]**
Associate Editor of Journal of Materials Chemistry B (RSC)
Principal Investigator and Unit Director
Tissue Regeneration Materials Unit
Research Center for Functional Materials,
National Institute for Materials Science
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2. Professor R. Jayaganthan, Ph.D [M-Tech thesis supervisor]

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Indian Institute of Technology-Madras
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E-mail: edjay@iitm.ac.in, metarj@gmail.com

3. Professor Narayan Chandra Mishra, Ph.D [M-Tech thesis supervisor]

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4. Professor Terry W.J. Steele, Ph.D [Post doctoral mentor]

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