Academic Profile (CV): 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

Dumna Airport Road, Jabalpur-482005, MP, India

Visiting Assistant Professor, Beijing University of Chemical Technology (BUCT), China

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1. Research Interests:

Healthcare Materials design and manufacturing (Materials for regenerative therapies: scaffold design and additive manufacturing, Interfacial tissue mechanics for medical device design, Soft tissue bioadhesives for dynamic drug release and keyhole surgeries, Non thrombogenic hydrogel bioadhesives as coatings for medical implants and devices, Novel healthcare material manufacturing technologies for commercialization).

2. 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:

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 (High impact materials for biology and medicine)

3. Professional Experiences:

Designation	***Organization***	***From***	***To***
Assistant Professor	***Department of Mechanical Engineering****, Indian Institute of Information Technology, Design and*	*Oct-17*	*Till*

	Manufacturing (IIITDM)-Jabalpur, India		
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.*
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 KAUST post-doctoral fellowship from 2014-2016 under KAUST discovery grant.*
20. *Selected as a NTU Research Fellowship for post-doctoral research program at NTU Singapore (2016-2018).*

5. Internships/Training and Short Term Projects:

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. *Short term training on protein modeling and bioinformatics database design at Biomedical Informatics Center, Rajendra Memorial Institute of Medical Sciences, ICMR), India*
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*
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)*
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 Institute of Vocational and Advanced Studies (JIVAS), Bangalore, India*

6. Publications:

A. International Journal:

(* Corresponding author, ± authors have equal contribution to the manuscript, IF: Impact factor during the publication year)

a. Published:

1. *Nanda, H. S±., A. H. Shah±, G. Wicaksono, O. Pokholenko, F. Gao, I. Djordjevic, and T. W. J. Steele*. "Non-thrombogenic hydrogel coatings with carbene-crosslinking bioadhesives."* ***Biomacromolecules*** *(2018). (IF:5.2 , Citations: 1)*
   DOI: http://dx.doi.org 10.1021/acs.biomac.8b00074
2. *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: 4.54, Citations: 0)*
   DOI: http://dx.doi.org 10.1039/C7TB01957B
3. *Nanda, Himansu Sekhar, Manisha Singh, and Terry WJ Steele*. "Thrombogenic Responses from Electrocured Tissue Adhesives."* ***ECS Transactions*** *77, no. 11 (2017): 547-555. (IF: pending , Citations: 2)*
   DOI: http://dx.doi.org 10.1149/07711.0547ecst
4. *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: 4)*

DOI: http://dx.doi.org/ 10.1039/C6RA23046F

5. *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: 2)*
   DOI: http://dx.doi.org/10.3390/bioengineering3040028
6. *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:2)*
   DOI: http://dx.doi.org/10.5185/amlett.2016.6907
7. *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:1.57 , Citations: 4)*
   DOI: http://dx.doi.org/10.1080/09205063.2014.938980
8. *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: 8)*
   DOI: http://dx.doi.org/10.1177/0883911514522724
9. *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:2.88 , Citations: 19)*
   DOI: http://dx.doi.org/10.1155/2014/623805
10. *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:1.89 , Citations: 2)*
    DOI: http://dx.doi.org/10.2174/157341311798220628

b. Manuscripts on progress:

11. ***Himansu Sekhar Nanda,*** *Manisha Singh, Lee Yin Hao, Yip Yun Sheng, Tan Nguan Soon and Terry W.J. Steele*. “Carbene based on demand biologic soft tissue adhesive using platelet rich plasma additives”. (target journal for submission: **Journal of Materials Chemistry B**)*
12. *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 W. J. Steele*. “Diazirine-grafted polycaprolactone triol: UV activated bioadhesive polymer”. (target journal for submission: **Nature Biomedical Engineering**).*
13. ***Manisha Singh[±], Himansu Sekhar Nanda[±],*** *Richard O’Rorke, Adam E Jakus, Ramille N. Shah and Terry W. J. Steele*. “Carbene- based Tuneable on- demand Bioadhesives for Fixation of 3D-printed Graphene Implants”. (target Journal for submission: **Advanced Health Care Materials**)*
14. *Ankur Harish Shah, **Himansu Sekhar Nanda**, Oleksandr Prokholenko and Terry W. J. Steele*. “On-demand Structure Activation Relationships of Dendrimer Polyethylene glycol based Bioadhesives”. (target Journal for submission: **ACS applied Materials and Interfaces)***
15. ***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. Books:

1. ***Himansu Sekhar Nanda****, Narayan Chandra Mishra, and R Jayaganthan., "Nanofiber based drug delivery system against leishmaniasis", Lambert Academic Publishing (LAP), ISBN 978-3-659-79579-4 (2015)*

D. Conference Presentations:

1. ***Himansu Sekhar Nanda**** and C R 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)***
2. ***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 (IIT) Guwahati, India, 18th – 21st December 2017 (**Oral**)*
3. ***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 Apollo Dimora Convention Centre, Thiruvananthapuram, India, 23rd -27th October 2017 (**Oral**)*
4. ***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 (Oral)*
5. ***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 2017)** at Suntec, Singapore, 18th-23rd June 2017 (**Oral**).*
6. ***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**).*
7. ***Himansu Sekhar Nanda**, Naoki Kawazoe and Guoping Chen., "Micro-and nano-therapuetics 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**).*
8. ***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**).*
9. ***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**).*
10. ***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**).*
11. ***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**).*
12. ***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**).*

13. ***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**).*
14. ***Himansu Sekhar Nanda****, R Jayaganthan and Narayan Chandra Mishra., "Nanofibers—A potential drug delivery system for leishmaniasis",* ***International conference on nanomaterials and nanotechnology*** *2011 at New Delhi, India, 18th- 21st December 2011 (**poster**).*
15. ***Himansu Sekhar Nanda****, Lelin Patel, Poonam Suthar, Nidhi Gaur and Rajanikantha Nahak., "Molecular modelling 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**).*
16. ***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**).*
17. ***Himansu Sekhar Nanda****, R Jayaganthan and Narayan Chandra Mishra., "Amphotericin B loaded natural nanafiber 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**).*
18. ***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 (NIPER), Mohali, India, 28th march to 4th February 2011 (**Oral**, **Nominated for Budding Nanotechnologist Award competition**).*
19. ***Himansu Sekhar Nanda****, R Jayaganthan and Narayan Chandra Mishra., "The act of electrospinning towards drug delivery",* ***International conference on cell signalling and diseases*** *at KIIT University, Bhubaneswar, India, 30th -31st October 2010 (**Poster**).*
20. ***Himansu Sekhar Nanda.,*** *"Gold nanorods: promising future in the direction of Bioimaging",* ***Chandigarh Science Congress*** *at Punjab University, Chandigarh, India, 30th -31st October 2009, (**Oral**).*

7. Invited Talks and Public Lectures:

1. *Delivered a talk on "**An engineered tumour model via sequential functionalization of nanoceria, organosilane, biopolymer and porous scaffold**" at International symposium on Functional Materials (ISFM 2018): Energy and Biomedical Applications held at Hotel Shivalikview, Chandigarh India. (**13.04.2018, Host: Prof. Raju Kumar Gupta, Conference Chair, ISFM 2018**)*
2. *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**)*
3. *Delivered an invited talk on "Micro-and nano-therapuetic 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)***
4. *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)***
5. *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**)*

6. *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**)*
7. *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**)*
8. *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**)*
9. *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**)*
10. *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**)*
11. *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**)*
12. *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. Conference and Workshop Participations:

1. *Two days Intellectual Properly Rights (IPR) workshop cum training program on "Inventing into future" at University College of Engineering (UCE), Osmania University (OU), Hyderabad*
2. *11th ADNAT Convention on "Advances in structural Biology and structure predication" at Center for Cellular and Molecular Biology (CCMB), Hyderabad, India*
3. *International symposium on "chromosome to genome" at Center for Cellular and Molecular Biology (CCMB), Hyderabad, India*
4. *International workshop on "physics on biology: A synergy" at School of Physics, University of Hyderabad (UOH), Hyderabad, India*
5. *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)*
6. *11th Orissa Bigyan Congress "Indian Science Congress: Bhubaneswar Chapter" at Kalinga Institute of Industrial Technology (KIIT) University, Bhubaneswar, India*
7. *COGNIZANCE 2010 technical event at IIT Roorkee*
8. *Indo-US Workshop on "Microfluidics and fabrionics (Microfabrication) IUWMF 09" at Department of Mechanical and Chemical Engineering, IIT Kharagpur*
9. *International conference on "Knowledge Sharing and IP Management Evolving Strategies" in Asia Pacific (KIPASPA 2009)" at IIT Roorkee, India*
10. *2nd INUP Workshop on "Nanofabrication Technologies" at IIT Bombay, Mumbai, India*
11. *2nd IEEE International workshop on "Electron Devices and Semiconductor Technology (IEDST 2009)" at IIT Bombay, Mumbai, India*

12. *Workshop on "Application of Biomedical Informatics in Medical Science with Introduction of SOLid" held at RMRIMS, ICMR, Patna, India*
13. *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*
14. *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*
15. *Australian MANA workshop on Nanotechnology at International Center for Materials and Nanoarchitechnonics (MANA) , National Institute for Materials Science Japan*
16. *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)*
17. *SWISS-Japanese International workshop on Nanosciences: Materials Phenomena at Small Scale at National Institute for Materials Science, Japan*
18. *Next generation Confocal Microscope for Advanced Bio-imaging at Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore.*

9. ***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. *Nanomaterials(MDPI): Reviewer*
15. *Journal of Personalized Medicine (JPM)(MDPI): Reviewer*

10. ***Membership in Professional Societies***

1. *Member of American Chemical Society (ACS) (2014- till date)*
2. *Member of International Society of Biomechanics (2014-till date)*
3. *Member of Indian Peptide Society (IPS) and Indian Immunology Society (IIS) (2007-2011)*
4. *Member in student forum of Intellectual Property Right (IPR) cell of IIT Roorkee (2008-2010)*
5. *Entrepreneurship cell outreach member of IIT Kharagpur (2009-2010)*

11. ***Countries Visited for Research and Scientific Presentations***

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

12. ***Collaborators (Academia and Industries)***

1. *School of Materials Sciene and Engineering, Nanyang Technological University Singapore, Singapore (Bioadhesives for dynamic drug release and wound healing) [**Contact person: Prof. Terry W J Steele, MSE, NTU**]*

2. *Bioceramics and coating Division, CSIR-Central Glass & Ceramic Research Institute, Kolkata, India (Bio-ceramics for drug delivery) [**Contact person: Dr. Subhadip Bodhak, Senior Scientist**]*
3. *Depratment of Polymer & Process Engineering and Center of Nanotechnology, Indian Institute of Technology Roorkee, India (wound packaging using nanocomposite tissue adhesives) [**Contact person: Prof. R.Jayaganthan, Department of Engineering Design, IIT Madras and Prof. Narayan Chandra Mishra, Polymer and Process Engineering, IIT Roorkee (Saharanpur Campus)**]*
4. *New Vision Inc. Taiwan (For commercialization of biomedical lasers for dental and opthalmic applications and research co-operation on development of novel laser based crosslinking) [**Contact person: Dr. J T Lin, CEO, New Vision Inc. Taiwan**]*
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. *Indian Institute of Technology-Guwahati (Surface modification of medical implants for orthopedic applications) [**Contact person: Professor Mamilla Ravi Sankar, Department of mechanical Engineering, IITG**]*
7. *IIITDM-Jabalpur (internal collaboration) [Manufacturing of Custom-made 3D printed Scaffolds for Hard tissue Regeneration (Contact Person: **Professor Puneet Tandon and Professor P K Jain, Department of Mechanical Engineering, IIITDM Jabalpur)**]*
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)]***

13. Submitted Proposal(s):

1. ***Title: Therapeutic Impact of nanomaterials mediated insulin delivery in Diabetic myopathy***
   Funding Agency: The Welcome Trust/DBT India Alliance
   Reference Number: 503771
   *Role: **Co-Principal Investigator***

14. Teaching:

a. Course (s) Taught:

***Name of the course(s):** Biomaterials Scinece and Technology(course code:ME688) and Microelectromechanical system(MEMS)/Microfabrication and applications (ME686)*
***Target students and strength:** Mechanical Engineering, Design (UG and PG)*
*ME686(**109 students**), ME688 (**165 students)***

b. Course (s) developped:

Biomaterials Science and Technology (ME688)

15. Personal Information

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16. References

1. ***Professor Guoping Chen, Ph.D** [**PhD thesis supervisor**]*

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