Dr. Gopinath Packirisamy Ph.D., F.R.S.C., F.R.S.B., FASCh.,
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Startup company: Super Good Nano Pvt. Ltd.

DATE OF BIRTH: 18th October 1980

Academic Record

Indian Institute of Technology (IIT) Guwahati

Ph.D., Biotechnology (CPI 8.8/10) **Dec 2003 - Aug 2008**

Thesis Advisor: Dr. S.S.Ghosh Ph.D.,

Thesis Title: Prodrug Gene Therapy Vectors in Combination Therapies.

Srimad Andavan Arts and Science College,

Bharathidasan University, Trichy.

M.Sc., Biotechnology (81.2%) **April 2003**

B.Sc., Microbiology (76.4%) **April 2001**

Position and Employment

Sl. No.	Institution Place	Position	From (Date)	To (date)
1	IIT Roorkee Department of Biosciences and Bioengineering, Roorkee, Uttarakhand.	Professor	18.03.2021	Till date
2	IIT Roorkee Department of Biosciences and Bioengineering, Roorkee, Uttarakhand.	Associate Professor	29.04.2016	17.03.2021
3	IIT Roorkee Department of Biosciences and Bioengineering, Roorkee, Uttarakhand.	Assistant Professor	06.06.2011	28.04.2016
4	Amrita University Coimbatore, Tamil Nadu.	Assistant Professor	23.09.2010	13.05.2011
5	University of Rochester Medical Center, Rochester, New York, USA.	Post-Doctoral Research Associate	20.10.2008	02.06.2010
6	IIT Guwahati Department of Biosciences and Bioengineering, Guwahati, Assam	Senior Research Fellow	04.01.2008	14.09.2008

Area of Research

Biosensor, Biomedical Nanotechnology, Tissue Engineering, Food nanotechnology

Awards and recognitions

1. Super Good Nano Pvt. Ltd.--Winner of Best startup Award in the Startup Expo 2022 on 25th November 2022 held at IIT Roorkee.
2. My interview on *"Nanotechnology can provide affordable treatments"* was published in the journal "**Nature Medicine**" 28, pages 630–632 (2022)- ***(IF=87.241) (Q1)***
3. Received the prestigious "Yogmaya Devi Award in Biomedical Sciences" (Citation and Cash prize Rs. 25,000/=) by Maharashtra Association for the Cultivation of Science (MACS), Pune, India on 28th February 2022 (National Science Day).
4. Fellow of Royal Society of Biology (FRSB), United Kingdom (01 October 2021).
5. Fellow of the Academy of Sciences (FASCh), Chennai (21 September 2021).
6. Received the prestigious "ILSI-India Young Scientist Award 2021 for *Improving Public Health in the Areas of Food Safety, Nutrition and Wellbeing*" (Citation, and Cash prize Rs. 50,000/=) by International Life Sciences Institute-India (ILSI-India), New Delhi, India on 8th March 2021.
7. Received the prestigious "ICMR-prize for Biomedical Research-2019" (Citation, Medal and Cash prize Rs. 50,000/=) by Indian Council of Medical Research (ICMR), New Delhi, India.
8. Received the prestigious "AMI-Alembic Award-2020" (Citation, Medal and Cash prize Rs. 25,000/=) by THE ASSOCIATION OF MICROBIOLOGISTS OF INDIA (AMI) on 02 Feb 2021.
9. Received the prestigious **Virendra Nath Malti Mital Award 2018** on 05th January 2021 at IIT Roorkee. The Annual Award of Rs. 1,00,000/- is given to an eminent Engineer for Innovative and Creative Work with patent in the field of Engineering in India in any discipline to an Indian National for the work done in India. https://www.youtube.com/watch?v=H_Q4d-L5Fe4&t=3578s
10. Fellow of Royal Society of Chemistry (FRSC), United Kingdom (11 November 2020).
11. Received the prestigious "Shastri Institutional Collaborative Research Grant (SICRG) award (2020-21)" by Shastri Indo-Canadian Institute on 10th November 2020
12. Top 11 contenders of Outstanding Teacher Award under Post Graduate Category 2020 and 2022, IIT Roorkee
13. Our team has received the "BIRAC-SRISTI-Gandhian Young Technological Innovation (GYTI-2019) award" (Grant of Rs. 15 lakh, citation and certificate) from Shri. M. Venkaiah Naidu, Honorable Vice president of India on July 06, 2019 at Vigyan Bhawan, New Delhi.
14. Member of Royal Society of Chemistry (MRSC) Conferred by Royal Society of Chemistry, Cambridge, UK in 2019. (23 April 2019)
15. Certificate of appreciation as a highly cited author for our publication in the journal "*Catalysis Science & Technology*" by Royal Society of Chemistry, Cambridge, UK in 2019
16. Shri. Om Prakash Sharma Award for a Young Scientist for outstanding contributions in Biomedical Research by the Indian Academy of Biomedical Sciences (Cash prize Rs. 5,000/=, medal and certificate) received on 25th February 2019.
17. G.D.Naidu award for young scientist for the Year 2018 by Makkal Sinthanai Peravai, a non-profit organization (Citation and Cash prize Rs. 1,00,000/=) received on 4th August 2018
18. Received the prestigious "**Institute research fellowship for Outstanding Young faculty 2017**", IIT Roorkee.
19. Prof.H.S.Srivastava Foundation young scientist award for Year 2016-17 (Citation, Medal and Cash prize Rs. 15,000/=), received on 23rd March, 2018 in Jawaharlal Nehru University, New Delhi

20. DST-Fast Track Young Scientist Award—2012 by Department of Science and Technology, Govt. of India.
21. DBT- Rapid Grants for Young Investigator (RGYI) Award 2012, by Department of Biotechnology, Govt. of India.
22. Received "Bharat Jyoti Award" from Dr. Bhishma Narain Singh (Former Governor of Tamil Nadu and Assam) at a seminar on "Economic growth and National Integration" at New Delhi on 29th August 2012.
23. Shortlisted by the American Biographical Institute for "Great Minds of the 21st Century"
24. Research Fellowship, Ministry of Human Resource Development, India. **Dec 2003 – Dec 2007**
25. University rank holder in M.Sc., Biotechnology **April – 2003**
26. Qualified in Graduate Aptitude test in Engineering (GATE) Exam **March – 2003**
27. Short term training at All India Institute of Medical Sciences (AIIMS) **Jan – March 2003**
28. Summer Training Fellowship from Indian Academy of Sciences (IAS) **May – June 2002**
29. Our research article was featured in **"ATLAS of Science"** website as "Carica papaya loaded PVA-Gelatin nanofibrous scaffold: a wound dressing material" (19th January 2021)
30. Our research article was featured in "**NATURE INDIA**" website as "Glowing biosensor to detect an aggressive lung cancer" (26th November 2020).
31. Our research article was featured in "**NATURE INDIA**" website as "Fluoroscent nanotags seek out, kill cancer cells"(20th November 2017) and in **"ATLAS of Science"** website as "Next generation nanomaterials with potential "track and kill "strategy against cancer" (November 27, 2017)
32. Our research articles are featured in "**NATURE INDIA**" website as "Suicidal nanoscaffolds for lung cancer"(25th November 2015) and in **"ATLAS of Science"** website as "Fluorescent carbon dots integrated hydrogels for lung cancer therapy" (April 6, 2016)
33. Our research articles published in *ACS Omega (2021), ACS Applied Bio Materials (2019)(2022), Biomaterials Science (2015), Journal of Materials Chemistry B (2015) and Journal of Applied Polymer Science (2015)* have been selected for **cover page of the issue**.
34. Our research articles published in *Nano Today (2020), Nano Express (2020), ACS Applied Bio Materials (2019), Advances in Colloid and Interface Science (2015), Environmental Science: Nano (2015), International Nano Letters (2013) and Colloids and Surfaces B: Biointerfaces (2010)* have been listed/selected under the ***(Highly Accessed) article.***
35. One of our research articles published in ***Colloids and Surfaces B: Biointerfaces (2010)*** has been listed/selected under the *Top 25 Hottest articles* from **April to June 2010.**
36. One of our review articles published in ***Applied Biochemistry and Biotechnology (2006)*** has been listed/selected under the top 10 articles in the area of adenoviral gene therapy.
37. One of our research articles published in ***'Nanotechnology' (2008)*** has been listed/selected under the most downloaded paper within a month of publication.
38. My interview titled "**Recent advances in nanomedicine"** was published in "**Express Health Care"** dated January 15, 2014.
39. An article titled **"Advances in nanomedicine - understanding the intricacies of nanoparticle drug delivery"** was published in **"Nanowerk"** dated August 28, 2008 regarding our research work on Gene therapy combined with Nanotechnology (silver nanoparticles). http://www.nanowerk.com/spotlight/spotid=6959.php
40. An article titled **Treating Cancer** was published in "**The Times of India-Education times"** dated April 21, 2008, regarding our research work on Gene therapy combined with Nanotechnology (silver nanoparticles).

Guest editor of journals:

- Serving as a member in RSC Advances: reviewer panel
- Editor, Methods Collections, Plasmonic Materials for Light-driven Applications, JoVE journal
- Editor, Micromachines, Special Issue "Biomedical Micromachine Development: Harnessing the Potential of Metal Nanoparticles" MDPI Journal
- Editor, Nanomaterials, Special Issue " Recent Advances in Cancer Nanotechnology "MDPI Journal
- Associate Editor for "Environmental Nanotechnology" section of Frontiers in Nanotechnology
- Review Editor for Nanobiotechnology section of "Frontiers in Bioengineering and Biotechnology", Frontiers in Biomaterials Science - Imaging and Diagnostics, "Frontiers in Pharmacology - Respiratory Pharmacology" , and "Frontiers in Molecular Biosciences"
- Review Editor for Stem Cell Research section of "Frontiers in Genetics" and "Frontiers in Cell and Developmental Biology"
- Guest Associate Editor in Nanobiotechnology
- Guest Associate Editor in Molecular and Cellular Pathology
- Guest Associate Editor in Microbiotechnology

Patents:

Granted

1. P.Gopinath, Ashish and Rangadhar Pradhan. Patent granted on 11 April 2023 for "Fluorescence based cost-effective rapid diagnostic kit for detection of small-cell lung cancer biomarker" Indian Patent Application number 202011010110.
2. P.Gopinath and S. Uday Kumar. Patent granted on 09 May 2023 for "Magnetic-field actuated hybrid nanofiber scaffold and apparatus for 4D tissue engineering", Indian Patent Application number 201711007507.
3. M. Goswami, S.Raj Kumar and P.Gopinath. Patent granted on 04 August 2023 for "A method of preparing biocompatible hydrogel for non-invasive drug delivery" Indian Patent Application No. 202211042908

Industrial design registration

4. P.Gopinath, Ashish Kalkal, Rangadhar Pradhan Deepanshu Sharma, and Ayush Tiwari. Design registered on 30.06.2023 for **"**Integrated electronic nose system for non-invasive lung cancer detection".
5. P.Gopinath, Ashish Kalkal, Rangadhar Pradhan Deepanshu Sharma, and Ayush Tiwari. Design registered on 03.07.2023 for **"**A lab-based electromechanical pneumatic spray coating device".

Filed

6. P.Gopinath and Sarim Khan. Patent filed on 24.01.2020 for "3-D porous scaffolds for bone tissue engineering" Indian Patent application number 202011003365.
7. P.Gopinath, Vinay Kumar and Soumyadeep Basak. Patent filed on 27.01.2020 for "Low cost, autoclavable and Multifunctional biomaterial based nanofibrous permeable hanging cell culture insert and fabrication thereof", Indian Patent Application number 202011003619.
8. Rangadhar Pradhan, Sanjeev Manhas, P.Gopinath and Ashish. Patent filed on 29.01.2020 for "Impedimetric sensors for cytotoxicity analysis", Indian Patent Application number 202011003839.
9. P.Gopinath, S. Raj Kumar and Abhishek Sharma. Patent filed on 24.04.2020 for "Polyacrylonitrile-Graphene-Oxide-Silver nanocomposite based fibrous membrane filter for air purification", Indian Patent Application number 202011017645.
10. P.Gopinath and Dravin Pratap Singh. Patent filed on 07.07.2020 for "Silk fibroin nanofiber based edible coating for enhancing the shelf life of horticulture products" Indian Patent Application number 202011028795.

11. P.Gopinath and Soumyadeep Basak. Patent filed on 08.07.2020 for "Photosensitizer-based highly efficient, rapid antimicrobial device and applications thereof" Indian Patent Application number 202011028953.
12. P.Gopinath and Soumyadeep Basak. Patent filed on 08.10.2020 for "Photosensitizer based antimicrobial tunnel device for disinfection" Indian Patent Application number 202011043894
13. P.Gopinath and Vinay Kumar. Patent application filed on 17.11.2020 for "Fabrication of bio-degradable triple layered nano-fibrous bandages and applications thereof" Indian Patent Application number 202011049934
14. M. Goswami, S.Raj Kumar and P.Gopinath. Patent application filed on 27.07.2022 for "A polymeric hydrogel lens for non-invasive drug delivery" Indian Patent Application No. 202211042907
15. P.Gopinath, Ashish Kalkal, Deepanshu Sharma, Ayush Tiwari and Rangadhar Pradhan. Patent filed on 24.02.2023 for MXene graphene nanohybrid thin film based electrochemical biosensors for analyte detection, its method of preparation and applications thereof" Indian Patent Application number 202311012554.
16. P.Gopinath and Dravin Pratap Singh. Patent filed on 19.04.2023 for "A method of synthesis of Tragacanth gum-based nano-nutraceuticals by encapsulation of beetroot juice and Ocimum basilicum leaves as new health supplement" Indian Patent Application number 202311028625
17. P.Gopinath, Dravin Pratap Singh and Ayush Tiwari. Filed design application on 31.05.2023 for "Multipurpose device for sustainable agriculture practices" Application no. 387411-001
18. Unnikrishnan B S , M. Goswami, and P.Gopinath. Patent filed for **"** A drug-eluting biopolymer-based lens and its method of preparation" Indian Patent Application No. 202311045659
19. Unnikrishnan B S and P.Gopinath. Patent filed for **"**Biopolymeric film as a new platform for imaging of biological samples using scanning electron microscope"
20. P.Gopinath, Soumyadeep Basak, Ayush Tiwari, Deepanshu Sharma. "A 3D-printed, compact, wirelessly-controlled, uniaxial cyclic mechanical stretching device with a Cell Loading Cassette and applications thereof"

Technology licensing/Commercialization:

- Technology transfer (patent license) agreement has been signed for "Magnetic-field actuated hybrid nanofiber scaffold and apparatus for 4D tissue engineering (Patent Application number 201711007507)". This is the first licensing of a patented technology from IIT Roorkee.

List of publications *(*Corresponding author) (IF= Impact Factor)*

1. A.Kalkal, R.Pradhan, **P.Gopinath*** Gold nanoparticles modified reduced graphene oxide nanosheets based dual-quencher for highly sensitive detection of carcinoembryonic antigen. *International Journal of Biological Macromolecules* **2023** ***(IF=8.025) (Q1)***.
2. P. Mishra, P. Saravanan, **P. Gopinath**. Built in electric-field active 2D β-BN/ZIS coated water-fed photoelectrode for methane conversion into hydrogen gas and VAPs through non-oxidative coupling. *Chemical Engineering Journal*, 468, 143634, **2023** ***(IF=16.744) (Q1)***.
3. S.Sharma, R. Adalati, BS Unnikrishnan, M. Sharma, R. Rani, **P. Gopinath**, R. Chandra. *Physiological fluid based flexible NbN||TiN supercapacitor for biocompatible energy storage applications.* *Journal of Alloys and Compounds*, **2023** ***(IF=6.731) (Q1).***

4. V. Kumar, **P.Gopinath***. 3D porous sodium alginate-silk fibroin composite bead based in vitro tumor model for screening of anti-cancer drug and induction of magneto-apoptosis. *International Journal of Biological Macromolecules* **2023** ***(IF=8.025) (Q1)***.
5. Z.Y. Keenan, W.Y. Lim, A. Kalkal, **P.Gopinath**, N. Ramakrishnan. Electrophoretic Deposited Mg Ion Functionalised Graphene Oxide based Ultra-High Sensitivity Humidity Sensor. *IEEE Transactions on Instrumentation & Measurement.* **2023** ***(IF=5.332) (Q1)***.
6. S.Basak, **P.Gopinath***, Ferrogels: a wonder material from mechanobiological perspective. *Current Opinion in Biomedical Engineering*, 100449, **2023** ***(IF=4.164) (Q1)***.
7. M. Goswami, R. Sadasivam, **P. Gopinath**, Viability studies of hydrogel contact lens on a 3D Printed platform as ocular drug delivery carrier for diabetic retinopathy.*Materials Letters*, 333,133636, **2023, *(IF=3.574) (Q2)***.
8. P. Mishra, P.Saravanan , **P.Gopinath,** Photoelectrochemical oxidation of nonoxidative methane into the value-added product over FRET-induced ZnO/ Ag@Ag4V2O7 Donor-Acceptor heterojunction. *International Journal of Hydrogen Energy*, 48, 586-599, **2023** ***(IF=7. 139)***
9. S. Jindal, **P.Gopinath***. Exploration of connexin-43 modulating, multifunctional silver nanocluster- hydrogel system for theranostic management of cancer. *Materials Today Chemistry*, **2022** ***(IF=7.613)***
10. S. Naqvi, V. A. Khanadeev, B.N. Khlebtsov, N.G. Khlebtsov, M.S. Deore, **P.Gopinath***.Albumin-based nanocarrier for the simultaneous delivery of antioxidant gene and phytochemical to combat oxidative stress. *Frontiers in Cell and Developmental Biology*, **2022, *(IF=6.684) (Q1)***.
11. S.J.Phang, S.Basak, HX. The, **P.Gopinath**, Mh. B. Fauzi, U. R. Kuppusamy, Y. P. Neo, M. L. Looi. Advancements in Extracellular Matrix-Based Biomaterials and Biofabrication of 3D Organotypic Skin Models. *ACS Biomaterials Science & Engineering*. 8, 3220–3241, **2022, *(IF=5.395) (Q1)***.
12. D.P.Singh, **P.Gopinath***.Applications of nanotechnology to combat the problems associated with modern food. Journal of the Science of Food and Agriculture. **2022, *(IF=4.125) (Q1)***.
13. S. Chockalingam, **P.Gopinath**, R. Paulmurugan. Editorial: Nanomaterials for targeted delivery of therapeutic and imaging agents. *Frontiers in Cell and Developmental Biology*, **2022, *(IF=6.684) (Q1)***.
14. J.Kumar,S.Basak, A. Kalkal, **P.Gopinath***.Recent advances in nanotechnology and microfluidic-based approaches for isolation and detection of circulating tumor cells (CTCs).*Nano-Structures & Nano-Objects*. 31, 100886, **2022, *(Q1)***.
15. S.Hussain, **P.Gopinath**, K. Misra, M. Tariq, Md Palashuddin Sk. Editorial: Quantum Dots for Biological Applications. *Frontiers in Bioengineering and Biotechnology*, **2022, *(IF=6.064) (Q1)***.
16. S. Raj Kumar, **P.Gopinath,** M. Goswami*. Biocompatible soft hydrogel lens as topical implants for diabetic retinopathy. *Materials Letters*,**318,** 132174, **2022, *(IF=3.574) (Q2)***. featured in "**NATURE INDIA**"
17. M. Narayan, S. Raj Kumar, **P.Gopinath***. Electrospun polyacrylonitrile-Moringa Olifera based nanofibrous bio-sorbent for remediation of Congo red dye. *Journal of Environmental Management.* **2022, *(IF=8.901) (Q1)***.

18. V. Kumar, A. Kumar, N. S.Chauhan, G. Yadav, M. Goswami, **P.Gopinath***. Design and fabrication of dual protein based tri-layered nanofibrous scaffold for efficient wound healing. *ACS Applied Bio Materials*. 5, 6, 2726–2740, **2022,*(Q1)***. *(Cover page of the issue)*
19. A.Kalkal,P.Allawadhi,P.Kumar,A.Sehgal,A.Verma,K.Pawar,R.Pradhan,B.Paital,**P.Gopinath*** .Sensing and 3D printing technologies in personalized healthcare for the management of health crises including the COVID-19 outbreak. *Sensors International*, Volume 3, 2022, 100180
20. S.Hussain, **P.Gopinath**, K. Misra, M. Tariq and Md Sk. Palashuddin. Editorial: Quantum Dots for Biological Applications. *Frontiers in Bioengineering and Biotechnology*. **2022, *(IF=6.064) (Q1)***.
21. A.Kalkal, S.Kadian, S. Kumar, G.Manik, P.Sen, S. Kumar* *and* **P.Gopinath***.Ti_3C_2-MXene decorated with nanostructured silver as a dual-energy acceptor for the fluorometric cancer biomarker detection. *Biosensors and Bioelectronics*, **2022, *(IF=12.545) (Q1)***. featured in **"ATLAS of Science"**
22. D.P.Singh, **P. Gopinath***.Biopolymer based edible coating for enhancing the shelf life of horticulture products. *Food Chemistry: Molecular Sciences*. (2022) featured in **"ATLAS of Science"**
23. S. Jindal, S.S.Ghosh, **P.Gopinath***.Core-shell nanofibre scaffold mediated co-delivery of connexin-43 gene and histone deacetylase inhibitor for anticancer therapy. *Materials Today Communications*, **2021 *(IF=3.662)***
24. D. Bhattacharya, V. Kumar, **P.Gopinath***. Biocompatible Carbon Nanodots from Red Onion Peels for Anti-Oxidative and Bioimaging Applications. *Materials Express*, **2021, *(IF=1.111) (Q1)***.
25. S. Basak and **P.Gopinath***. Graphene-Based Nanomaterials for Biomedical, Catalytic,and Energy Applications. *ChemistrySelect* 2021, *6*, 9669 –9683 ***(IF=2.307) (Q2)***.
26. A. Kalkal, S. Kadian, R. Pradhan, G. Manik, and **P.Gopinath***. Recent advances in graphene quantum dots based optical and electrochemical (bio)analytical sensors. *Materials Advances*, 5513-5541, **2021**
27. A. Kalkal, S. Kumar, P. Kumar, R.Pradhan, M. Willander*, **P.Gopinath***, S. Kumar*, and B. D.Malhotra*.Recent advances in 3D printing technologies for wearable (bio)sensors**.** *Additive Manufacturing***, 2021, *(IF=11.632) (Q1)***.
28. P. Mukherjee, P. Saravanan*,**P.Gopinath**, M. Jang. Biocatalyst physiology and interplay: A protagonist of MFC operation. *Environmental Science and Pollution Research*, 43217-43233, **2021,** (***IF=5.190***) ***(Q2)***.
29. P. Mishra, P.Saravanan , **P.Gopinath,**M.Jang,C. Wang. A subtle review on the challenges of photocatalytic fuel cell for sustainable power production. *International Journal of Hydrogen Energy*, **2021,** (***IF=7.139***) ***(Q1)***.
30. A. Kalkal, P. Allawadhi, R.Pradhan*, A.Khurana*, K.K. Bharani, and **P.Gopinath*** Allium sativum derived carbon dots as a potential theranostic agent to combat the COVID-19 crisis. *Sensors International* , **2021**.
31. A. Kuila, S. Routu, **P. Gopinath**, M. Jang, C. Wang, P. Saravanan*. Improved charge carrier dynamics through a type II staggered Ce MOF/mc BiVO4 n-n heterojunction for enhanced visible light utilization. *Applied Surface Science*, **2021,** (***IF=7.392***) ***(Q1)***.
32. S. K. Jena, R. Sadasivam, **P.Gopinath*** , P. Saravanan. Nanoremediation: Sunlight mediated dye degradation using Electrospun PAN/CuO-ZnO Nanofibrous Composites. *Environmental Pollution*, **2021,** (***IF=9.988***) ***(Q1)***.

33. A.Sharma, S. Raj Kumar, V.K. Katiyar, **P. Gopinath*.**Graphene oxide/silver nanoparticle (GO/AgNP) impregnated polyacrylonitrile nanofibers for potential application in air filtration. *Nano-Structures & Nano-Objects*. **2021** ***(Q1)***
34. S. Basak, V. Kumar, **P.Gopinath*.**One-step fabrication of low cost, autoclavable and multifunctional silk-based nanofibrous permeable hanging cell culture inserts for various biological applications. *ACS Omega*, **2021,** (***IF=4.132***) ***(Q1)***. *(Cover page of the issue)*
35. S.Jindal, S. Chockalingam, S.S.Ghosh, **P. Gopinath*.**Connexin and gap junctions: Perspectives from biology to nanotechnology based therapeutics. *Translational Research*, 144-167, **2021*(I.F =10.171) (Q1)***
36. V.K.Lakshmanan*, S. Jindal, **P.Gopinath*.** S. Ojha, S. Lian, A.Kaushik, A.I.M.A.Alzarooni, Y.A. F.Metwally, S.P. Thyagarajan, Y.D. Jung, S.Chouaib*. Nanomedicine-based Cancer Immunotherapy: Recent Trends and Future Perspectives. *Cancer Gene therapy*, 911–923, **2021** ***(I.F =5.854) (Q2)***
37. Garima, S.Jindal, S.Garg, I.Matai, **P. Gopinath,** A. Sachdev. Dual-Emission Copper Nanoclusters Based Ratiometric Fluorescent Probe for Intracellular Detection of Hydroxyl and Superoxide Anion Species. *Microchimica Acta*, 188:13,**2021** ***(I.F=6.408) (Q1)***
38. R. Pradha**n*,**A. Kalkal,S. Jindal, **P.Gopinath*,**S.Manha**s*.**Four Electrode-Based Impedimetric Biosensors for Evaluating Cytotoxicity of Tamoxifen on Cervical Cancer Cells. *RSC Advances*, **2021,**11, 798–806 ***(IF=4.036) (Q1)***
39. R. Sadasivam, **P.Gopinath** , S. Shakya, M. Goswami. Non-invasive multimodal imaging of Diabetic Retinopathy: A Survey on treatment methods and Nanotheranostics. *Nanotheranostics*.**2021**,5,166-181 ***(Q1)***
40. R. Pradhan, S. A. Raisa, P. Kumar, A. Kalkal, N. Kumar, **P.Gopinath**, S. Manhas. Optimization, Fabrication, and Characterization of Four Electrode-Based Sensors for Blood Impedance Measurement. *Biomedical Microdevices*. **2021**, ***(IF=3.783) (Q2)***
41. P. Allawadhi, A. Khurana, S. Allwadhi, K.Joshi, **P.Gopinath** *, K. K. Bharani*. Nanoceria as a possible agent for the management of COVID-19, *Nano Today*, **2020**, ***(IF=18.962) (Q1)***
42. S.Basak, **P. Gopinath***. Nano-based antiviral coatings to combat viral infections. *Nano-Structures & Nano-Objects*. **2020,** 24, 100620 ***(Q1)***
43. S.Jindal, **P. Gopinath***. Nanotechnology based approaches for combatting COVID-19 viral infection, *Nano Express*, **2020**, 1, 022003
44. S. Devi, S. Shaswat, V. Kumar, A. Sachdev, **P. Gopinath**, S. Tyagi Nitrogen-doped carbon quantum dots conjugated isoreticular metal-organic framework-3 particles based luminescent probe for selective sensing of trinitrotoluene explosive. *Microchimica Acta*, **2020**, 187:536, ***(IF=6.408) (Q1)***
45. M. Passi, S. Shahid , S. Chockalingam ,IK. Sundar*, **P.Gopinath***.Conventional and Nanotechnology Based Approaches to Combat Chronic Obstructive Pulmonary Disease: Implications for Chronic Airway Diseases. *International Journal of Nanomedicine*, **2020**, 15, 3803-3826 ***(IF=7.033) (Q1)***
46. M. Passi, V. Kumar and **P.Gopinath***. Theranostic nanozyme: Silk fibroin based multifunctional nanocomposites to combat oxidative stress. *Materials Science & Engineering C*, **2020,** Volume 107, 110255. ***(IF=8.457) (Q1)***

47. S. Khan, M. Garg, S. Chockalingam, **P.Gopinath**, P.P. Kundu. TiO2 doped Chitosan/Poly (vinyl alcohol) nanocomposite film with enhanced mechanical properties for application in Bone tissue regeneration. *International Journal of Biological Macromolecules*, **2020,** 143, 285-296 ***(IF=8.025) (Q1)***
48. A. Kalkal, R. Pradhan, S. Kadian, G. Manik, and **P.Gopinath***. Biofunctionalized graphene quantum dots based fluorescent biosensor towards efficient detection of small cell lung cancer. *ACS Applied Bio Materials*, **2020 ,**3, 4922–4932 ***(Q2)*** featured in "**nature INDIA**"
49. S. Khan, S. Chockalingam, P.P. Kundu, **P.Gopinath***.Fabrication of bimodal porous scaffold with enhanced mechanical properties using silanized sisal fibers for potential application in bone tissue engineering. *Materials Today Communications*, **2020,** 25, 101260, ***(IF=3.662) (Q2)***
50. S. Raj Kumar and **P.Gopinath***. Facile Architecture of Highly Effective Nanofibrous Membrane Adsorbent via Electrospun followed by Hydrothermal Carbonization for Potential Application in Dye Removal from Water. *Environmental Science and Pollution Research*, **2020,** 27, 11905–11918 ***(IF=5.190) (Q2)***
51. N. Yadav, R. Kumar, A.K. Singh, S. Mohiyuddin, **P. Gopinath**. Systematic approach of chromone skeleton for detecting Mg^{2+}, ion: Applications for sustainable cytotoxicity and cell imaging possibilities. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, **2020**,235, 118-290 ***(IF=4.831) (Q2)***
52. Palak Gupta, S. Rajkumar and **P.Gopinath***. Development of Sunlight-Driven Reduced Graphene Oxide (rGO)/CeO_2-CuO Nanofibrous Photocatalyst for Efficient Removal of Organic Dyes. *Journal of Nanoscience and Nanotechnology*, **2020,** 20, 7480-7494 ***(IF=1.134) (Q3)***
53. S. Shahid, S. Mohiyuddin and **P.Gopinath***. Synthesis of multi-color fluorescent carbon dots from mint leaves: A robust bioimaging agent with potential antioxidant activity. *Journal of Nanoscience and Nanotechnology*, **2020**, 20, 6305-6316**.** ***(IF=1.134) (Q3)***
54. Sauraj ,V. Kumar, B. Kumar, R. Priyadarshi, F. Deeba, A. Kulshreshtha, A. Kumar, G. Agrawal, **P.Gopinath**, Y.S.Negi. Redox Responsive Xylan-SS-Curcumin Prodrug Nanoparticles for Dual Drug Delivery in Cancer Therapy. *Materials Science & Engineering C*, **2020,** Volume 107, 110356. ***(IF=8.457) (Q1)***
55. S.Uday Kumar and **P.Gopinath***. Fabrication of nanofibrous scaffold grafted with gelatin functionalized polystyrene microspheres for manifesting nano-mechanical cues of stretch stimulated fibroblast. *ACS Applied Bio Materials*, **2019**, 2, 5323-5339 *(Cover page of the issue)* ***(Q2)***
56. Aparna Verma, Tamoghna Ghosh, Bharat Bhushan, **P.Gopinath**, Naveen K. Navani, Pranita P. Sarangi, Kiran Ambatipudi. Characterization of Difference in Structure and Function of Fresh and Mastitic Bovine Milk Fat Globules. *PLoS One***,** August 29, **2019** ***(IF=3.752) (Q1)***
57. A. Khurana, P.Anchi ,P. Allawadhi, V. Kumar ,N. Sayed, **P. Gopinath**, C. Godugu. SOD Mimetic Rare Earth Nanoparticle Restrains Acute Pancreatitis by Modulation of Oxidative Stress, HSPs, PECAM and ICAM. *Nanomedicine (Future Medicine, London)*, **2019** , Volume 14 ***(IF=6.096) (Q1)***

58. J. Ahlawat, V. Kumar and **P.Gopinath***. *Carica Papaya* loaded poly (vinyl alcohol)-gelatin nanofibrous Scaffold for potential application in wound dressing. *Materials Science & Engineering C*, **2019**, Volume 103, 109834 ***(IF=8.457) (Q1)*** featured in **"ATLAS of Science"**
59. V.Gupta, S.Mohiyuddin A.Sachdev, P.K.Soni, **P.Gopinath**, S. Tyagi**.** PEG functionalized zirconium dicarboxylate MOFs for docetaxel drug delivery *in vitro*. *Journal of Drug Delivery Science and Technology***. 2019**, 52, 846-855***(IF=5.062) (Q2)***
60. S. Aiswarya Devi , Vinay Kumar, M. Harshiny ,**P.Gopinath** , M. Matheswaran. Electrospinning of Fe-doped ZnO nanoparticles incorporated polyvinyl alcohol nanofibers for its antibacterial treatment and cytotoxic studies. *European Polymer Journal*, **2019**,118, 27-35 ***(IF=5.546) (Q1)***
61. S.Raj Kumar, S. Chokalingam, **P.Gopinath***. Hierarchical Architecture of Electrospun Hybrid PAN/Ag-rGO/Fe3O4 Composite Nanofibrous Mat for Antibacterial Applications, *ChemistrySelect*, **2019**, 4, 5044 –5054 ***(IF=2.307) (Q2)***
62. A.Khurana, P. Anchi, P. Allawadhi, V.Kumar, N. Sayed, **P. Gopinath**, C. Godugu. Yttrium oxide nanoparticles reduce the severity of acute pancreatitis caused by cerulein hyperstimulation, *Nanomedicine: Nanotechnology Biology and Medicine* **2019**, 18, 54-65 ***(IF= 6.458) (Q1)***
63. A.Sachdev, R.Raj, I. Matai, V.Kumar, **P. Gopinath** , S.Mishra. Label-free Fluorescence "Turn-on" Detection of SO32- by Gold Nanoclusters: Integration in a Hydrogel Platform and Intracellular Detection. *Analytical Methods*, **2019**, 11, 1214-1223 ***(IF= 3.352) (Q1)***
64. K.N.Pandiyaraj, M.C.Ramkumar,A.Arun Kumar, P.V.A.Padmanabhan, P.Moorthi, Avi Bendavid,Pieter Cools, N.De Geyter, R. Morent, Vinay Kumar, **P.Gopinath**, Pi-Gsu, R.R.Deshmukh. Evaluation of surface properties of low density polyethylene (LDPE) films tailored by atmospheric pressure non-thermal plasma (APNTP) assisted co-polymerization and immobilization of chitosan for improvement of antifouling properties. *Materials Science and Engineering C*, **2019,** 94, 150-160 ***(IF=8.457) (Q1)***
65. Sauraj V. Kumar, B. Kumar, F. Deeba, S. Bano, A. Kulshreshtha, **P. Gopinath,** Y.S.Negi. Lipophilic 5-fluorouracil prodrug encapsulated xylan-stearic acid conjugates nanoparticles for colon cancer therapy. *International Journal of Biological Macromolecules*. 2019, 128, 204-213***(IF=8.025) (Q1)***.
66. S. Devi, Raju K Gupta, A. K. Paul, Vinay Kumar, Abhay Sachdev, **P. Gopinath** and S. Tyagi. Ethylenediamine Mediated Luminescence Enhancement of Pollutant Derivatized Carbon Quantum dots for Intracellular Trinitrotoluene detection: Soot to Shine. *RSC Advances*, **2018**, 8, 32684-32694 ***(IF=4.036) (Q1)***
67. S. Mohiyuddin, S. Naqvi, **P.Gopinath***. Enhanced Anti-neoplastic/therapeutic potential of 5-fluorouracil loaded Calcium phosphate Nanoparticles: An *in vitro* study in search of enhanced efficacy. *Beilstein Journal of Nanotechnology*, **2018**, 9, 2499-2515 ***(IF= 2.968) (Q1)***

68. R.Selvam,S.Ramasamy,S.Mohiyuddin, I. V.M.V.Enoch*, **P.Gopinath***, D.Filimonov*. Molecular encapsulator–appended poly(vinyl alcohol) shroud on ferrite nanoparticles. Augmented cancer–drug loading and anticancer property. *Materials Science and Engineering C,* **2018**, 93, 125-133 ***(IF=8.457) (Q1)***
69. A.Malik, M.Nath, S. Mohiyuddin, **P.Gopinath**. Multifunctional CdSNPs@ZIF-8: Potential Antibacterial Agent against GFP-expressing *Escherichia coli* and *Staphylococcus aureus* and Efficient Photocatalyst for Degradation of Methylene Blue. *ACS Omega*. **2018**, 3, 8288−8308 (***IF=4.132***) ***(Q1)***.
70. K.N. Pandiyaraj, M.C. RamKumar, A. Arun Kumar, P.V.A. Padmanabhan, A.M.Trimukhe, R.R. Deshmukh, P. Cools, R. Morent, N. De Geyter, V. Kumar, **P. Gopinath**, S.K. Jaganathan. Influence of operating parameters on development of polyethylene oxide-like coatings on the surfaces of polypropylene films by atmospheric pressure cold plasma jet-assisted polymerization to enhance their antifouling properties. *Journal of Physics and Chemistry of Solids*, **2018**,123,76-86 ***(IF=4.383) (Q2)***
71. I.V.M.V. Enoch*, S. Ramasamy,S.Mohiyuddin, **P.Gopinath***,R. Manoharan.Cyclodextrin–PEGconjugate-wrapped magnetic ferrite nanoparticles for enhanced drug loading and release. *Applied Nanoscience*, **2018**,8,273-284 ***(IF=3.869)*** ***(Q1)***
72. M.C. Ramkumar, K.N. Pandiyaraj, A. ArunKumar, P.V.A. Padmanabhan, S. Uday Kumar, **P. Gopinath,** A. Bendavid, P. Cools, N. De Geyter, R. Morent, R.R. Deshmukh**.** Evaluation of mechanism of cold atmospheric pressure plasma assisted polymerization of acrylic acid on low density polyethylene (LDPE) film surfaces: Influence of various gaseous plasma pretreatment. *Applied Surface Science***, 2018**,439,991-998 ***(IF=7.392) (Q1)***
73. Sauraj, S. Uday Kumar, Vinay kumar, Ruchir Priyadarshi, **P. Gopinath**,Yuvraj Singh Negi. pH responsive prodrug nanoparticles based on xylan-curcumin conjugate for the efficient delivery of curcumin in cancer therapy. *Carbohydrate Polymers*, **2018,** 188,252-259 ***(IF=10.723) (Q1)***
74. U. Sah, K.Sharma, N. Chaudhari, M. Sankar* and **P. Gopinath***. Antimicrobial Photodynamic Therapy: Single-walled carbon nanotube (SWCNT)-porphyrin conjugate for visible light mediated inactivation of Staphylococcus aureus. *Colloids and Surfaces B-Biointerfaces*, **2018,** 162, 108-117 ***(IF=5.999) (Q1)***
75. P.Dubey and **P.Gopinath***. Enhanced targeted anticancer potential of AKT-1 siRNA, an inhibitor of Protein Kinase B, in combination with silver nanoparticle against non-small cell lung adenocarcinoma. *Nano-Structures & Nano-Objects*. **2018,**14,106-109. ***(Q1)***
76. N. Singh, A. Sachdev and **P. Gopinath*,** Polysaccharide functionalized single walled carbon nanotubes as nanocarriers for delivery of curcumin in lung cancer cells. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1534-154***1(IF=1.134) (Q3)***
77. T. Pal, S. Mohiyuddin, **P.Gopinath***. Facile and Green Synthesis of Multicolor Fluorescence Carbon Dots from Curcumin: In Vitro and in Vivo Bioimaging and Other Applications. *ACS Omega*. **2018**, 3, 1, 831–843. ***(IF=4.132) (Q1)***.

78. S.Uday Kumar, B. Bhushan, and **P.Gopinath***. Bioactive carbon dots lights up microtubules and destabilises cell cytoskeletal framework - a robust imaging agent with therapeutic activity. *Colloids and Surfaces B: Biointerfaces*, **2017**, 159,662-672. ***(IF=5.999) (Q1)*** featured in "**NATURE INDIA**" and "**ATLAS of Science**"
79. Bharat Bhushan, Vitaly Khanadeev, Boris Khlebtsov, Nikolai Khlebtsov and **P. Gopinath***. Impact of albumin based approaches in nanomedicine: Imaging, targeting and drug delivery. *Advances in Colloid and Interface Science*, **2017**,246, 13-39.***(IF=15.190) (Q1)***
80. S.Raj Kumar, S. Mohiyuddin, **P.Gopinath***. Electrospun Polyacrylonitrile (PAN) templated 2D nanofibrous mats: A platform towards practical applications for the dye removal and bacterial disinfection. *ACS Omega*. **2017**, 2, 6556–6569 (***IF=4.132***) ***(Q1)***.
81. S. Naqvi, S. Mohiyuddin, **P.Gopinath***.Niclosamide loaded biodegradable chitosan nanocargoes: an in vitro study for the potential application in cancer therapy. *Royal Society Open Science*. **2017,** 4, 170611 (***IF=3.653***) ***(Q1)***.
82. A.Saini, K. R.Justin Thomas, A. Sachdev and **P.Gopinath**. Photophysics, electrochemistry, morphology and bioimaging applications of new 1,8-naphthalimide derivatives containing different chromophores. *Surface and Coatings Technology*, **2017**,12, 2612–2622 ***(IF=4.865) (Q1)***
83. M.C.Ramkumar, K.N. Pandiyaraj, A.Arun Kumar, P.V.A.Padmanabhan, P. Cools, N. De Geyter, R. Morent, S.Uday Kumar, Vinay Kumar, **P.Gopinath**, S. K.Jaganathan, R.R. Deshmukh. Atmospheric pressure non-thermal plasma assisted polymerization of poly (ethylene glycol) methylether methacrylate (PEGMA) on low density polyethylene (LDPE) films for enhancement of biocompatibility. *Surface and Coatings Technology*, **2017**,329, 55-67 ***(IF=4.865) (Q1)***
84. K.Navaneetha Pandiyaraj, A.Arun Kumar , M.C.RamKumar, S.Uday Kumar, **P.Gopinath**, Pieter Cools, N. De Geyter, R. Morent, M. Bah, S. Ismat Shah, Pi-Guey Su, R.R. Deshmukh. Effect of processing parameters on the deposition of SiOx-like coatings on the surface of polypropylene films using glow discharge plasma assisted polymerization for tissue engineering applications. *Vacuum*, **2017**,143, 412-422. ***(IF=4.110) (Q1)***
85. D. Malwal and **P. Gopinath***. Silica stabilized magnetic-chitosan beads for removal of arsenic from water. *Colloid and Interface Science Communications*, **2017**, 19, 14-19 (***IF=5.633***) ***(Q1)***
86. D. Malwal and **P. Gopinath***.CuO-ZnO nanosheets with p–n heterojunction for enhanced visible light mediated photocatalytic activity. *ChemistrySelect*, **2017**, 2, 4866–4873. ***(IF=2.307) (Q2)***
87. B. Tirkey, B. Bhushan, S.Uday Kumar and **P.Gopinath***. Prodrug encapsulated albumin nanoparticles as an alternative approach to manifest anti-proliferative effects of suicide gene therapy. *Materials Science & Engineering C*, **2017**, 73, 507–515 ***(IF=8.457) (Q1)***
88. Sauraj, S.Uday Kumar, **P.Gopinath,** Y.S. Negi. Synthesis and bio-evaluation of xylan-5-fluorouracil-1-acetic acid conjugates as prodrugs for colon cancer treatment. *Carbohydrate Polymers*, **2017,** 157, 1442–1450 ***(IF=10.723) (Q1)***

89. N. Pal, P.Dubey, **P.Gopinath,** K. Pal. Combined effect of cellulose nanocrystal and reduced graphene oxide into poly-lactic acid matrix nanocomposite as a scaffold and its anti-bacterial activity. *International Journal of Biological Macromolecules*, **2017**, 95, 94–105 ***(IF=8.025) (Q1)***
90. S.Raj Kumar and **P. Gopinath***, *In situ* synthesis of chitosan coated silver-zinc oxide nanocomposites and its enhanced antibacterial properties. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 8797–8805***(IF=1.134) (Q3)***
91. D. Malwal and **P.Gopinath***. Efficient adsorption and antibacterial properties of electrospun CuO-ZnO composite nanofibers for water remediation. *Journal of Hazardous Materials*, **2017**, 321, 611–621 ***(IF=14.224) (Q1)***
92. D. Malwal and **P. Gopinath***, Rapid and efficient removal of arsenic from water using electrospun CuO-ZnO composite nanofibers. *RSC Advances*, **2016**, 6, 115021-115028 ***(IF=4.036) (Q1)***
93. S.Raj Kumar and **P. Gopinath***, Dual applications of silver nanoparticles incorporated functionalized MWCNTs grafted surface modified PAN nanofibrous membrane for water purification. *RSC Advances*, **2016**, 6, 109241 - 109252 ***(IF=4.036) (Q1)***
94. P.Dubey and **P.Gopinath***. Functionalized Graphene Oxide based Nanocarrier for Tumor-Targeted Combination Therapy to Elicit Enhanced Cytotoxicity against Breast Cancer cells in vitro. *ChemistrySelect*, **2016**, 1, 4845 – 4855. ***(IF=2.307) (Q2)***
95. P.Dubey and **P.Gopinath***. PEGylated Graphene Oxide based Nanocomposite grafted Chitosan/Polyvinyl alcohol Nanofiber as an Advanced Antibacterial Wound Dressing. *RSC Advances*, **2016**, 6, 69103-69116 ***(IF=4.036) (Q1)***
96. B.Bhushan, S.Nandhagopal, R.Rajesh Kannan and **P.Gopinath***. Therapeutic Nanozyme: Antioxidative and cytoprotective effects of nanoceria against hydrogen peroxide induced oxidative stress in fibroblast cells and in zebrafish. *ChemistrySelect*, **2016**, 1, 2849 – 2856. ***(IF=2.307) (Q2)***
97. B. Bhushan, S.Uday Kumar and **P.Gopinath***. Multifunctional carbon dots as efficient fluorescent nanotags for tracking cells through successive generations. *Journal of Materials Chemistry B*, **2016,** 4, 4862-4871 ***(IF=7.571) (Q1)***
98. K.Navaneetha Pandiyaraj, P.V.A.Padmanabhan, A.Arun, M.C.RamKumar, R.R.Deshmukh, Avi Bendavid, Pi-G Su, A.Sachdev, **P.Gopinath**. Cold atmospheric pressure (CAP) plasma assisted tailoring of LDPE film surfaces for enhancement of adhesive and cytocompatible properties: Influence of operating parameters. *Vacuum*, **2016**, 130,34-47 ***(IF=4.110) (Q1)***
99. B.Bhushan, S.Nandhagopal, R.Rajesh Kannan and **P.Gopinath***. Biomimetic nanomaterials: Development of protein coated nanoceria as a potential antioxidative nano-agent for the effective scavenging of reactive oxygen species in vitro and in zebrafish model. *Colloids and Surfaces B: Biointerfaces*, **2016**, 146, 375–386 ***(IF=5.999) (Q1)***
100. S. Uday Kumar and **P.Gopinath***. Field-actuated Antineoplastic Potential of Smart and Versatile PEO-bPEI Electrospun Scaffold by Multi-staged Targeted Co-delivery of Magnetite Nanoparticles and Niclosamide-bPEI Complexes. *RSC Advances*, **2016**,6,46186-46201 ***(IF=4.036) (Q1)***

101. P.Dubey and **P.Gopinath***. Nanocarriers for AKT siRNA based gene therapy. *Austin Journal of Biotechnology & Bioengineering*. **2016**, 3(2), 1061 **Editorial** ***(IF=2.8)***
102. S. Uday Kumar and **P.Gopinath***. Nanotechnology- A Promising Approach for Suicide Gene Therapy. *Austin Journal of Nanomedicine & Nanotechnology*. **2016**, 4(1), 1042. **Editorial**
103. B.Bhushan and **P.Gopinath***. Nano-Enabled Approaches for Lung Cancer Therapy. *Austin Journal of Lung Cancer Research*. **2016**, 1(2), 1008. **Editorial**
104. K.Navaneetha Pandiyaraj, A. Arun Kumar M.C.Ram Kumar, R.R.Deshmukh, Avi Bendavid , Pi-Guey Su, S.Uday Kumar, **P.Gopinath**. Effect of cold atmospheric pressure plasma gas composition on the surface and cyto-compatible properties of low density polyethylene (LDPE) film. *Current Applied Physics*, **2016**, 16,784-792 ***(IF=2.856) (Q2)***
105. D. Malwal and **P.Gopinath***. Enhanced photocatalytic activity of hierarchical three dimensional metal oxide@CuO nanostructures towards the degradation of Congo red dye under solar radiations. *Catalysis Science & Technology* , **2016**,6, 4458-4472 ***(IF=6.177) (Q1)***
106. I. Matai and **P.Gopinath***. Hydrophobic Myristic acid Modified PAMAM Dendrimers Augments the Delivery of Tamoxifen to Breast Cancer Cells. *RSC Advances*, **2016**, 6,24808-24819 ***(IF=4.036) (Q1)***
107. K.N.Pandiyaraj, A.Arun Kumar, M.C.Ramkumar, A.Sachdev, **P.Gopinath**, Pieter Cools, N. De Geyter, R. Morent, R.R.Deshmukh, M.N. Nadagouda. Influence of non-thermal TiCl4/Ar+O2 plasma-assisted TiOx based coatings on the surface of polypropylene (PP) films for the tailoring of surface properties and cytocompatibility. *Materials Science and Engineering C*, **2016**, 62, 908–918 ***(IF=8.457) (Q1)***
108. A. Sachdev, I. Matai and **P.Gopinath***. Carbon Dots Incorporated Polymeric Hydrogels as Multifunctional Platform for Imaging and Induction of Apoptosis in Lung Cancer Cells. *Colloids and Surfaces B: Biointerfaces*, **2016**, 141, 242–252 ***(IF=5.999) (Q1)*** featured in **ATLAS of Science**
109. A. Sachdev and **P.Gopinath***. Monitoring the Intracellular Distribution and ROS Scavenging Potential of Carbon dots-Cerium oxide Nanocomposites in Fibroblast Cells. *ChemNanoMat*, **2016**,2, 226–235. ***(IF=3.820) (Q1)***
110. I. Matai and **P.Gopinath***. Chemically Crosslinked Hybrid Nanogels of Alginate and PAMAM Dendrimers as Efficient Anticancer Drug Delivery Vehicles. *ACS Biomaterials Science & Engineering*, **2016**, 2,213–223. ***(IF=5.395) (Q1)***
111. P. Dubey and **P.Gopinath***.Fabrication of electrospun poly (ethylene oxide)-poly (capro lactone) composite nanofibers for co-delivery of niclosamide and silver nanoparticles exhibits enhanced anti-cancer effects in vitro. *Journal of Materials Chemistry B*, **2016**, 4, 726-742 ***(IF=7.571) (Q1)***
112. D. Malwal and **P.Gopinath***. Fabrication and Applications of Ceramic nanofibers in Water Remediation: A review. *Critical Reviews in Environmental Science and Technology*, **2016**,46, 500-534 ***(IF=11.750) (Q1)***
113. R. Manoj Kumar, K. K. Kuntal, S. Singh, P. Gupta, B. Bhushan, **P. Gopinath** and D. Lahiri. Electrophoretic deposition of hydroxyapatite coating on Mg–3Zn alloy for orthopaedic application. *Surface and Coatings Technology*, **2016**,287,82–92 ***(IF=4.865) (Q1)***

114. S. Nayak, B. Bhushan, R. Jayaganthan, **P. Gopinath**, R.D. Agarwal and D.Lahiri. Strengthening of Mg based Alloy through Grain Refinement for Orthopedic Application. *Journal of the Mechanical Behavior of Biomedical Materials*,**2016**,59,57–70 ***(IF=4.042) (Q2)***
115. B. Bhushan and **P.Gopinath***. Tumor-targeted folate-decorated albumin stabilised silver nanoparticle induce apoptosis at low concentration in human breast cancer cells. *RSC Advances*, **2015**,5,86242-86253***(IF=4.036) (Q1)***
116. S. Uday Kumar and **P.Gopinath***. Bioactive core-shell nanofiber hybrid scaffold for efficient suicide gene transfection and subsequent time resolved delivery of prodrug for anticancer therapy. *ACS Applied Materials & Interfaces*, **2015**, 7, 18717–18731 ***(IF= 10.383) (Q1)*** featured in "**NATURE INDIA**
117. I. Matai, A. Sachdev and **P.Gopinath***. Self-assembled hybrids of fluorescent carbon dots and PAMAM dendrimers for epirubicin delivery and intracellular imaging. *ACS Applied Materials & Interfaces*, **2015,**7,11423-11435 ***(IF= 10.383) (Q1)***
118. P. Dubey, B. Bhushan, A. Sachdev, I. Matai, S. Uday Kumar and **P.Gopinath***. Silver nanoparticles incorporated composite nanofiber for potential wound dressing applications. *Journal of Applied Polymer Science*, **2015**, 132, 42473. *(Cover page of the issue)* ***(IF= 3.057) (Q1)***
119. P. Dubey, I. Matai, S. Uday Kumar, A. Sachdev, B. Bhushan and **P.Gopinath***. Perturbation of cellular mechanistic system by silver nanoparticles toxicity: cytotoxic, genotoxic and epigenetic potential. *Advances in Colloid and Interface Science*, **2015,** 221:4-21 ***(IF=15.190) (Q1)*** **(Highly Accessed)**
120. B. Bhushan and **P.Gopinath***. Antioxidant nanozyme: A facile synthesis and evaluation of reactive oxygen species scavenging potential of nanoceria encapsulated albumin nanoparticles. *Journal of Materials Chemistry B*, **2015,** 3, 4843-4852. ***(IF=7.571) (Q1)***
121. S. Uday Kumar and **P.Gopinath***. Controlled delivery of bPEI-niclosamide complexes by PEO nanofibers and evaluation of its anti-neoplastic potentials. *Colloids and Surfaces B: Biointerfaces*, **2015,** 131:170-81. ***(IF=5.999) (Q1)***
122. A. Sachdev and **P.Gopinath***. Green synthesis of multifunctional carbon dots from coriander leaves and their potential application as antioxidants, sensors and bioimaging agents. *Analyst*, **2015,** 140, 4260-4269. ***(IF=5.227) (Q1)***
123. I. Matai, A. Sachdev and **P.Gopinath***. Multicomponent 5-fluorouracil loaded PAMAM stabilized-silver nanocomposites synergistically induce apoptosis in human cancer cells. *Biomaterials Science*, **2015**,3,457–468 *(Cover page of the issue)* ***(IF=7.590) (Q1)***
124. A.Sachdev, I.Matai and **P.Gopinath***. Dual-functional carbon dots-silver@zinc oxide nanocomposite: *In vitro* evaluation of cellular uptake and apoptosis induction. *Journal of Materials Chemistry B*, **2015**,3,1208–1220 *(Cover page of the issue)* ***(IF=7.571) (Q1)***
125. B. Bhushan, P. Dubey, S. Uday Kumar, A. Sachdev, I. Matai, **P.Gopinath***. Bionanotherapeutics: Niclosamide Encapsulated Albumin Nanoparticles as a Novel Drug Delivery System for Cancer Therapy. *RSC Advances*, **2015**,5,12078–12086 ***(IF=4.036) (Q1)***

126. D. Malwal and **P.Gopinath***. Fabrication and characterization of poly (ethylene oxide) templated nickel oxide nanofibers for dye degradation. *Environmental Science: Nano*, **2015**,2,78–85 (Top 10 most downloaded articles in 2015) ***(IF= 9.473) (Q1)***
127. S. Uday Kumar, I. Matai, P. Dubey, B. Bhushan, A. Sachdev and **P.Gopinath***. Differentially cross-linkable core-shell nanofibers for tunable delivery of anticancer drugs: Synthesis, characterization and its anticancer efficacy. *RSC Advances*, **2014,** 4, 38263–38272. ***(IF=4.036) (Q1)***
128. B. Bhushan, S. Uday Kumar, I. Matai, A. Sachdev, P.Dubey and **P. Gopinath***,Ferritin Nanocages: A Novel Platform for Biomedical Applications. *Journal of Biomedical Nanotechnology* **2014**, 10, 2950-2976 ***(IF= 3.641) (Q1)***
129. A. Sachdev, I. Matai and **P. Gopinath***. Implications of surface passivation on physicochemical and bioimaging properties of carbon dots. *RSC Advances*, **2014**, 4, 20915-20921***(IF=4.036) (Q1)***
130. I.Matai, A. Sachdev, P. Dubey, S. Uday Kumar, B. Bhushan and **P. Gopinath***, Antibacterial Activity and Mechanism of Ag-ZnO Nanocomposite on *S.aureus* and GFP-expressing Antibiotic Resistant *E.coli* *Colloids and Surfaces B: Biointerfaces* **2014**,115, 359–367 ***(IF=5.999) (Q1)***
131. G. Bhargavi, I. Matai, A. Sachdev, S. Uday Kumar and **P. Gopinath***,Microwave Assisted Synthesis of Chitosan Nanorods and Assessment of its Antibacterial Activity against GFP-Expressing Antibiotic Resistant *E. coli* *Journal of Chitin and Chitosan Science*, **2013**, 1, 1–6.
132. A. Sachdev, I. Matai, S.Uday Kumar, B.Bhushan, P. Dubey and **P. Gopinath***. A novel one-step synthesis of PEG passivated multicolour fluorescent carbon dots for potential biolabeling application *RSC Advances*, **2013**, 3, 16958-16961. ***(IF=4.036) (Q1)***
133. Sukumar UK, Bhushan B, Dubey P, Matai I, Sachdev A and **P.Gopinath***. Emerging applications of nanoparticles for lung cancer diagnosis and therapy. *International Nano Letters*,**2013**, **3**:45 **(Highly Accessed)** ***(Q4)***
134. G. Sahni, **P. Gopinath** and P. Jeevanandam. A Novel Thermal Decomposition Approach to Synthesize Hydroxyapatite-Silver Nanocomposites and their Antibacterial Action against GFP-expressing Antibiotic Resistant *E.coli*. *Colloids and Surfaces B: Biointerfaces* **2013**,Volume 103, Pages 441–447 ***(IF=5.999) (Q1)***
135. N. Kaur, N. Choudhary, R.N. Goyal ,S. Viladkar , I. Matai , **P. Gopinath**, S. Chockalingam ,D. Kaur. Magnetron sputtered Cu3N/NiTiCu shape memory thin film heterostructures for MEMS applications. *Journal of Nanoparticle Research* **2013,**15:1468. ***(IF=2.533) (Q2)***
136. V.K. Yata, **P.Gopinath** and S.S.Ghosh, Emerging Implications of Nonmammalian Cytosine Deaminases on Cancer Therapeutics. *Applied Biochemistry and Biotechnology*, **2012**, 167(7):2103-16***(IF=3.094) (Q2)***
137. **P. Gopinath**, S.K. Gogoi, P.Sanpui, A. Paul, A. Chattopadhyay and S.S. Ghosh, Signaling Gene Cascade in Silver Nanoparticle Induced Apoptosis, *Colloids and Surfaces B-Biointerfaces*, **2010** Jun 1;77(2):240-5. Top 25 Hottest articles. ***(IF=5.999) (Q1)***

138. Roman J, Rangasamy T, Guo J, Sugunan S, Meednu N, **Gopinath Packirisamy**, Shimoda L, Golding A, Semenza G and Georas SN, T Cell Activation Under Hypoxic Conditions Enhances Interferon-gamma Secretion, *American Journal of Respiratory Cell and Molecular Biology* , **2010**, 42, 123-128. ***(IF=7.748) (Q1)***

139. **P. Gopinath** and S.S.Ghosh, Understanding Apoptotic Signaling Pathways in Cytosine Deaminase-Uracil Phosphoribosyl Transferase Mediated Suicide Gene Therapy *in vitro*, *Molecular and Cellular Biochemistry*, **2009**, 324, 21-29.***(IF=3.842) (Q2)***

140. **P. Gopinath**, S.K. Gogoi, A. Chattopadhyay and S.S. Ghosh, Implications of Silver Nanoparticle Induced Cell Apoptosis for *in vitro* Gene Therapy, *Nanotechnology* **, 2008**, **19 (7). *(IF=3.953)* (Q1)**

141. **P. Gopinath** and S.S.Ghosh, Implication of functional activity for determining therapeutic efficacy of suicide genes *in vitro*, *Biotechnology Letters* **, 2008**, 30, 1913-1921. ***(IF=2.716) (Q2)***

142. **P. Gopinath** and S.S.Ghosh, Apoptotic Induction with Bifunctional *E. coli* Cytosine Deaminase- Uracil Phosphoribosyltransferase Mediated Suicide Gene Therapy Is Synergized By Curcumin Treatment *in vitro*, *Molecular Biotechnology* **, 2008**, 39, 39-48.***(IF=2.860) (Q2)***

143. **P. Gopinath** and S.S. Ghosh, Monitoring green fluorescent protein for functional delivery of *E. coli* cytosine deaminase suicide gene and the effect of curcumin *in vitro*, *Gene Therapy and Molecular Biology* **, 2007,** 11, 219-228. ***(IF=0.10)***

144. S.K. Gogoi, **P. Gopinath**, A. Paul, A. Ramesh, S.S. Ghosh**,** and A. Chattopadhyay, Green Fluorescent Protein Expressing *Escherichia coli* as a model system for investigating the Antimicrobial activities of Silver Nanoparticles**,** *Langmuir***, 2006**, 22, 9322-9328.***(IF=4.331) (Q1)***

145. S.S. Ghosh, **P. Gopinath**, and A. Ramesh, Adenoviral Vectors: A promising tool for Gene therapy, *Applied Biochemistry and Biotechnology***, 2006**, 133 (1), 9-29. ***(IF=3.094) (Q2)***

Books

1. **Gopinath**, P., Uday Kumar, S., Matai, I., Bhushan, B., Malwal, D., Sachdev, A., Dubey, P. Cancer Nanotheranostics. Springer. ISBN 978-981-287-434-4. **(2015)**
2. Deepika Malwal, **P.Gopinath,** Fabrication of nanofibers for dye degradation. Lambert Academic Publishing (LAP) ISBN 978-3-659-63721-6.**(2014)**
3. Abhay Sachdev, **P.Gopinath,** Chitosan based carbon nanodots and nanoparticles for bio-applications. Lambert Academic Publishing (LAP) ISBN 978-3-659-30120-9. **(2014)**
4. Ishita Matai, **P.Gopinath,** Novel nanocomposites and nanofibers for biomedical applications.

   Lambert Academic Publishing (LAP) ISBN 978-3-659-31255-7. **(2014)**
5. **Gopinath Packirisamy,** Prodrug Gene Therapy Vectors in Combination Therapies- An update.

   Lambert Academic Publishing (LAP) ISBN 978-3-8383-4650-2. **(2010)**

Book edited

1. Emerging Nanotechnologies for Medical Applications [Editors: Dr. Nabeel Ahmad, **Dr. P. Gopinath**], Elsevier INC. Publishing Pennsylvania. **2023**.

2. Intelligent Nanomaterials for Drug Delivery Applications [Editors: Dr. Nabeel Ahmad, **Dr. P. Gopinath**], Elsevier INC. Publishing Pennsylvania. **Published Date: 1st May 2020**. Paperback ISBN: 9780128178300

3. 3D Printing Technology in Nanomedicine [Editors: Dr. Nabeel Ahmad, **Dr. P. Gopinath** and Prof. Rajiv Dutta], Elsevier INC. Publishing Pennsylvania. **Published Date: 29th March 2019**. eBook ISBN: 9780128158913, Paperback ISBN: 9780128158906

Book chapters

1. A. Kalkal, **P. Gopinath***, 'Recent Advances on Carbon Nanostructure-Based Biosensors' in a book titled "Current and Future Developments in Nanomaterials and Carbon Nanotubes: Application of Nanomaterials in Energy Storage and Electronics" Bentham Press. **(2023)**
2. A. Kaur, R. Sharma, I.K. Sundar, **P.Gopinath***, 'Nano-based Therapies for Pulmonary Inflammatory Diseases' in a book titled "Nanobiotechnology applied to inflammatory diseases: approaching micro and nano points of views", Springer Nature. pp 241–269 **(2023)**
3. A. Charan, S. Basak, **P. Gopinath***, 'Electrospun Nanofibers for Scaffolds' in a book titled "Electrospinning for Advanced Energy, Environmental, Medical and Textile Applications" Wiley, USA. **(2023)**
4. S. Jindal, P.Allawadi, S. Sinha, A.Khurana, K.K. Bharani, **P. Gopinath*,** 'Zebrafish as a versatile model for cancer research' in a book titled "Zebrafish model for biomedical research: creating waves in ocean of evidence" Springer Nature **(2021)**
5. Poornima Dubey, **P. Gopinath**, Duncan Q.M. Craig, Vinita Takiar. 'Applications of Electrospraying in Tissue Engineering' in a book titled **"**Biomedical Applications of Electrospinning and Electrospraying" Elsevier. **(2021)**
6. M.C.Ramkumar, K. Navaneetha Pandiyaraj, P.V.A.Padmanabhan, **P. Gopinath**, R.R.Deshmukh. 'Enhancement of polymeric material surface properties using various surface modification techniques' in a book titled "Green polymeric nanocomposites" CRC Press ISBN: 978-1-138-48657-7 **(2019)** Chapter 07.
7. Ashish Kalkal, Nabeel Ahmad, **P. Gopinath*,** Alexandr Vinogradov, '3D printing in medicine; Current Challenges and Potential Applications' in a book titled "3D Printing Technology in Nanomedicine" Elsevier. **(2019)** 1-22.
8. Vinay Kumar, Saba Naqvi, **P. Gopinath***, 'Application of Nanofibers in Tissue Engineering' in a book titled "Applications of Nanomaterials: Advances and Key Technologies" Elsevier. **(2018)** 179-203.
9. Saba Naqvi, Vinay Kumar, **P. Gopinath***, 'Nanomaterials toxicity: A challenge to end users' in a book titled "Applications of Nanomaterials: Advances and Key Technologies" Elsevier. **(2018)** 315-343.
10. Deepika Malwal, **P. Gopinath***, 'Recent advances in the synthesis of metal oxide (MO) nanostructures' in a book titled "Applications of Nanomaterials: Advances and Key Technologies" Elsevier. **(2018)** 255-281.
11. Vinay Kumar, **P. Gopinath***, Vinoth-Kumar Lakshmanan, K. Navaneetha Pandiyaraj, 'Surface analysis technique for assessing hemocompatibility of biomaterials' in a book titled "Hemocompatibility of Biomaterials for Clinical Applications" Elsevier. ISBN: 978-0-08-100499-9 (online) ISBN: 978-0-08-100497-5 (print) **(2018)**, 119-161.
12. M.C.Ramkumar, Pieter Cools, A.Arunkumar, Nathalie De Geyter, Rino Morent, Vinay kumar, S.Udaykumar, **P.Gopinath**, K.Navaneetha Pandiyaraj, 'Polymer coatings for biocompatibility and reduced non-specific adsorption' in a book titled "Hemocompatibility of Biomaterials for Clinical Applications" Elsevier. ISBN: 978-0-08-100498-2 (online) ISBN: 978-0-08-100496-8 (print) **(2018)**, 155-198.
13. S.Raj Kumar and **P. Gopinath***, 'Nano-Bioremediation: Applications of Nanotechnology for Bioremediation' in a book titled "Remediation of Heavy Metals in the Environment" CRC Press eBook ISBN 9781466510029 **(2016)** 27–48.

14. A. Sachdev, S. Uday Kumar, I. Matai, G. Bhargavi, P. Dubey, B. Bhushan and **P.Gopinath***. 'Polymers as nanocarrier for cancer theranostic applications' in a book titled *"Recent Developments in Carbohydrates Polymer Research"* Research Signpost Publishers **(2014)** chapter 4, page no. 45-55, ISBN: 978-81-308-0534-4

15. I. Matai, A. Sachdev, S. Uday Kumar, P. Dubey, B. Bhushan and **P.Gopinath*** **'**Dendrimer: A promising nanocarrier for cancer therapy' in a book titled *"Nanotechnology: Recent Trends, Emerging Issues and Future Directions"* Nova publishers **(2014)** chapter 7, page no. 127-155, ISBN 978-1-63117-561-9.

Conference Publications / Presentations (Abstracts)

1. Mojumdar A., Unnikrishnan B.S., & **Packirisamy, G**., "A smartphone-based detection of cancer biomarkers in bio-fluids" oral presentation in the 5th International Saliva Summit of India (SALSI) 2023 organized by Kroyonas, India in association with Oasis Diagnosis, USA accredited by the American Council of Training & Development (ACTD), USA. (Best paper presentation Award). January 27-28 2023.
2. Kalkal, A., Kumar, S., & **Packirisamy, G**., "Electrophoretic deposited Graphene quantum dots and Ti_3C_2-MXene thin films for electrochemical detection of neuron-specific enolase" poster presentation in the IEEE 12th International Conference "Nanomaterials: Applications & Properties" held on Sept. 11-16, 2022, at GALAXY hotel, Kraków, Poland.
3. Kalkal, A., Pradhan, R., Kumar, S., & **Packirisamy, G**., "Nano-enabled fluorescent biosensor for small cell lung cancer detection" poster presentation in the Symposium on "Sensors for Society" organized by the Electrochemical society student chapter, Special Center for Nanoscience, Jawaharlal Nehru University, New Delhi. (Best poster presentation Award). April 27 2022.
4. Kalkal, A., Kumar, S., **Packirisamy G**., "Graphene quantum dots and Ti_3C_2-MXene nanohybrid based fluorescent biosensor for neuron specific enolase detection", oral presentation in the international conference on "Recent Advances in Nano Medical Sciences (RANMS 2022)" jointly organized by Institute of Nano Medical Sciences and Institution of Eminence, University of Delhi held during 22nd - 23rd June 2022 (Best oral presentation Award).
5. Kalkal, A., **Packirisamy G**., "Nanotechnology based rapid diagnostic kit to detect small cell lung cancer" oral presentation in 3rd National Biomedical Research competition 2021 (NBRCOM-2021) from 6th to 10th December 2021 organized by Society of young Biomedical Scientists (SYBS) (Best oral presentation).
6. S. Basak, **P. Gopinath**, presented a poster titled "Antiviral Nanomaterials as Coatings to Combat Viral Infections" in the 10th Virtual Nanotechnology Poster Conference organised by the International Nanoscience community held on 19th April 2021
7. S. Jindal, **P. Gopinath**, presented a poster titled "Nanotechnology based approaches for targeting connexins and gap junctions" in the 10th Virtual Nanotechnology Poster Conference organised by the International Nanoscience community held on 19th April 2021
8. S. Jindal, **P. Gopinath**, Nanofibrous scaffolds for cancer management. "Two Days Indo-Belgium Workshop on Emerging Trends in Smart Nanomaterials" held during December 02 & 03, 2019 at IIT Roorkee
9. **P.Gopinath**. Cancer Nanotheranostics: Tumor-specific targeting of both imaging probes and anticancer agents. Delivered invited lecture in International conference on Nanomedicine (ICON-2019) held during February 25 & 26, 2019 at Madurai Kamaraj University, Madurai, Tamil Nadu, India.
10. **P.Gopinath**.Theranostic carbon dots from rosy periwinkle plant leaves for cancer therapy. Delivered invited lecture in "8th Annual meeting of Indian Academy of Biomedical Sciences & Conference on Delibration on Translation of basic scientific insights into affordable heathcare products" held during February 25- 27, 2019 at CSIR-NIIST, Thiruvananthapuram, Kerala, India.
11. **P.Gopinath**. Nano-Enabled Approaches for Cancer Diagnosis and Therapy .Delivered invited lecture in 3rd PAN IIT Biotech Meet-2019 "Cancer precision medicine and personalised therapeutics" held during Jan 31 – Feb 02, 2019 at IIT Madras, Chennai, Tamil Nadu, India.

12. **P.Gopinath**. Cancer Nanotechnology: Nanoscale Approaches for Cancer Diagnosis and Therapy. Delivered invited lecture in International Conference on Advances in Therapeutic Molecules and Drug Design (ATMDD, 2019) held during Jan 09 - 11, 2019 at Karpagam Academy of Higher Education (Deemed to be University), Coimbatore, Tamil Nadu, India.
13. Mehak Passi, Vinay Kumar, **P.Gopinath.** Silk fibroin based nanocarriers for delivery of anti-oxidant agents. International Symposium on Functional Materials (ISFM -2018): Energy and Biomedical Applications, Chandigarh, April 13-15, 2018, *OL-13*.
14. Kalvakunta Paul Reddy, Poornima Dubey, **P. Gopinath** and A. Murugadoss, High Yield Synthesis of Branched Gold Nanoparticles as Highly Efficient Photothermal Agents. International conference on Nanotechnology: Ideas, Innovations & Initiatives-2017 (ICN:3I-2017) held on December 06-08, 2017 at IIT Roorkee
15. S. Naqvi, **P. Gopinath**, Calcium phosphate nanocarriers for cancer gene therapy. International conference on Nanotechnology: Ideas, Innovations & Initiatives-2017 (ICN:3I-2017) held on December 06-08, 2017 at IIT Roorkee
16. P. Dubey, **P.Gopinath,** Duncan Craig, Fabrication and Characterization of Biomimetic Nanofibrous Scaffold as Skin Repair Graft in Treatment of Wound. International Conference on Nanomedicine and Nanobiotechnology 2017 held during September 25-27, 2017 in Barcelona, Spain.
17. Kajal Sharma, Shanid Mohiyuddin, **P. Gopinath**. Synthesis and Characterisation of carbon dots-graphene oxide nanocomposites incorporated in sodium alginate nanogels for theranostic application. Think Nano 2017, Indian Institute of Science, Banagalore, India, September 14-15, 2017.
18. Jyoti Ahlawat, **P.Gopinath**, "Development of PVA-Gelatin based nanofiber scaffold for potential application in wound dressing", Nano India - 2017, Indian Institute of Technology Delhi, Delhi, India, March 15-16, 2017. *P-004.*
19. Tathagata Pal, **P. Gopinath**, "Curcumin Based Multi-functional Carbon Dots For Bio Applications", Nano India - 2017, Indian Institute of Technology Delhi, Delhi, India, March 15-16, 2017. P-121.
20. Kajal Sharma, **P.Gopinath**, "Synthesis and characterization of silica nanoparticles using teak leaves and impregnating it with silver nanoparticles for antibacterial activity", Nano India - 2017, Indian Institute of Technology Delhi, Delhi, India, March 15-16, 2017. *P-249.*
21. Abhishek Sharma, **P.Gopinath**, "Polymeric nanofibers for potential application in air filtration", Nano India - 2017, Indian Institute of Technology Delhi, Delhi, India, March 15-16, 2017. P-222
22. S. Naqvi, **P. Gopinath**, "Size-controlled synthesis of anticancer drug doped biodegradable and biocompatible calcium phosphate nanoparticles" Fourth International Conference on Nanostructured Materials and Nanocomposites (ICNM-2017) held at Mahatma Gandhi University, Kottayam, Kerala, India from 10-12 February 2017.*P-38.*
23. **P.Gopinath** and S.Uday Kumar, Nanoscaffold for Gene Directed Enzyme Prodrug Therapy (GDEPT)' in BIT's 6th Annual World Congress of Nano Science & Technology-2016 (Nano S&T-2016) Singapore, October 26-28, 2016.
24. S. Raj Kumar, **P.Gopinath**, Synthesis of quarternary ammonium compounds (QACs) encapsulated polymeric nanofibrous sponges for bacterial disinfection. International Conference on Nano for Energy and Water (New), at University of Petroleum and Energy Studies (UPES), Dehradun, India, held on February 22-24, 2017
25. D. Malwal and **P. Gopinath**, "Silica stabilized magnetic chitosan hybrid beads for efficient water remediation applications", International Conference on Nano for Energy and Water (NEW'17) & Indo-French Workshop on Water networking , UPES Dehradun, India, 22-24 January, 2017. P-66 (Abstract id 67)
26. P. Dubey, **P.Gopinath**, Fabrication and characterization of honey based scaffold for tissue engineering application. "International Conference of Young Researchers on Advanced Materials (IUMRS-ICYRAM 2016)" held on December 11 - 15, 2016. (ABS-488-ICYRAM) at IISc Bangalore.

27. D. Malwal and **P. Gopinath**, "One-dimensional CuO/ ZnO nanofibers with p-n heterojunction for enhanced photocatalytic degradation of dyes", International Conference on Advanced Materials (SCICON'16), 2016, Coimbatore, India, 19-21 December, 2016. P-45 (Abstract Id 55)

28. I. Matai , **P.Gopinath**, Carbon Dots Tagged PAMAM Dendrimers for pH Responsive Drug Delivery and Intracellular Imaging. "First international conference on Advanced Materials, SCICON'16 – Materials for a Better Tomorrow" held on December 19 - 21, 2016.

29. A.Sachdev, **P.Gopinath**, Cerium Oxide Based Nanocomposites as Theranostic Agents for Hydrogen Peroxide Mediated Oxidative Stress. "First international conference on Advanced Materials, SCICON'16 – Materials for a Better Tomorrow" held on December 19 - 21, 2016.

30. B.Bhushan, **P.Gopinath**, "Impact of albumin on translational research- A journey from laboratory to market", 5th Annual International Convention of Association of Pharmacy Professionals on "Redefining Pharmacy Education and Regulations for Translational Drug Research in India" Jan 22-23, 2016.

31. S.Uday Kumar, **P.Gopinath**, "Core-Shell Nanofibers for Controlled Delivery of Anticancer Drugs with Synergistic Activity", Indo-Australian conference BiTERM 2015, Anna University, Chennai, India, February 5-7, 2015. *P-79 (MAP 08).*

32. B.Bhushan, **P.Gopinath**, "Fabrication, Characterization, and Anticancer Potential of Niclosamide Encapsulated Albumin Nanoparticles", RBF 7th International Symposium on "Advances in New Drug Discovery Technologies and Translational Research" Feb 2-4, 2015. *P-33*

33. P.Dubey, **P.Gopinath**, "Evaluation of antibacterial and anticancer potential of drug loaded Ag/PEO/PCL blend composite nanofibers", RBF 7th International Symposium on "Advances in New Drug Discovery Technologies and Translational Research" Feb 2-4, 2015. *P-35*

34. A.Sachdev, I.Matai, **P.Gopinath**, "Synthesis of Carbon Dots-Ag/ZnO Nanocomposites for Theranostic Applications," TechConnect World 2014 Innovation Conference, Washington, DC, United States of America, June 16-18, 2014.

35. S.Uday Kumar, **P.Gopinath**, "Antitumor efficacy of niclosamide loaded PEO:PEI fibers with tunable release profile," TechConnect World 2014 Innovation Conference, Washington, DC, United States of America, June 16-18, 2014.

36. P.Dubey, **P.Gopinath**, "A novel and facile approach for in situ synthesis of silver nanoparticles in nanofibers for antimicrobial wound dressing," TechConnect World 2014 Innovation Conference, Washington, DC, United States of America, June 16-18, 2014.

37. R.Chauhan and **P.Gopinath**. Microwave assisted synthesis of chitosan-silver nanocomposite and study of its antibacterial activity. *NanoSci-2014 Guwahati; December 20-21,**2014**.P-64 (PP 16)*

38. Deepika Malwal and **P.Gopinath**. Development of bacterial lipid encapsulated silver nanoparticles for enhanced antibacterial activity. *ICONSAT, INST Mohali; March 3-5, **2014**. P-18 (T-8)*

39. Abhay Sachdev, Ishita Matai and **P. Gopinath.** One-step hydrothermal synthesis of water soluble green luminescent carbon dots for bioimaging. *ICONSAT, INST Mohali; March 3-5, **2014**. P-01 (T-8)*

40. Ishita Matai, Abhay Sachdev and **P. Gopinath.** Chitosan as a nanocarrier for intracellular delivery of lysozyme. *ICONSAT, INST Mohali; March 3-5, **2014**. P-21 (T-8)*

41. A. Sachdev, I. Matai, S. Uday Kumar, P. Dubey, B. Bhushan, and **P.Gopinath**. Chitosan-based fluorescent non-viral vector for simultaneous delivery of gene and imaging agents. *Asian Chitin Journal, Volume 9 No.1June **2013**. Page No.17.*

42. S. Uday Kumar, A. Sachdev, P. Dubey, B. Bhushan, I. Matai and **P.Gopinath**. Curcumin loaded chitosan-PEO nanofibers for wound healing. *Asian Chitin Journal, Volume 9 No.1June **2013**. Page No.17.*

43. I. Matai, A. Sachdev, S. Uday Kumar, P. Dubey, B. Bhushan, and **P.Gopinath**. Enhanced Antibacterial activity of Chitosan-drug conjugates against *S.aureus* and antibiotic resistant GFP expressing *E.coli. Asian Chitin Journal, Volume 9 No.1June **2013**. Page No.18.*

44. I. Matai, G.Bhargavi, A. Sachdev, S. Uday Kumar, P. Dubey, B. Bhushan, and **P.Gopinath**. Chitosan Nanoparticles: Synthesis, Characterization and Antibacterial activity. *Asian Chitin Journal, Volume 9 No.1June **2013**. Page No.18.*

45. Sarika Sharma, Ishita Matai, Sulaxna Sharma, Pooja Agarwala, **P. Gopinath** R.C.Agarwala, and V.Agarwala. Synthesis and Characterization of ZnO nanoparticles and study of their Antibacterial activity against Gram positive *S. aureus* and recombinant Green Fluorescent Protein (GFP) expressing antibiotic resistant Gram Negative *E.coli* bacteria.Uttarakhand State Science and Technology Congress (USSTC). 21-23 November, **2012**.

46. Sarika Sharma, Sulaxna Sharma, Pooja Agarwala, R.C.Agarwala, V.Agarwala, and **P. Gopinath.** A study on Ni-P and Ni-P-ZnO composite coatings developed by electroless technique. International Conference on "Advances in Materials and Processing Challenges and Opportunities (AMPCO 2012)" during Nov. 2-4, **2012** organized by Deptt. of Metallurgical and Material Engg.IIT Roorkee.

47. T.Rangasamy, P.Gopinath, U. Sivagnanalingam, M. Shafiq, M. Yamamoto, T.J. Mariani, D.J. Prockop, S.R. Kleeberger, R. Tuder, S. Georas, Investigating The Therapeutic Potential Of Nrf2 Wild-Type And Nrf2-Deficient Mesenchymal Stem Cells In Elastase Induced Pulmonary Emphysema. *Am. J. Respir. Crit. Care Med*.**2011**; 183: A6136.

48. **Packirisamy G**, Bhatt S, Tuder RM, Prockop D, Mustafa, Mitzner W, Georas SN, and Rangasamy T, Investigating The Role of Nrf2 in MSC Survival and Functions. *Am. J. Respir. Crit. Care Med*.**2010**; 181: A6603.

49. **Packirisamy G**, Hai T, Tuder RM, Bhatt S, Mitzner W, Georas SN, Rangasamy T. ATF3 Protects Against Elastase-Induced Pulmonary Emphysema In Mice. *Am. J. Respir. Crit. Care Med*.**2010**; 181: A2908.

50. Rangasamy T, **Packirisamy G**, Tuder RM, Bhatt S, Mitzner W, and Georas SN. Disruption of p50 Subunit of NF-κB Enhances Susceptibility To Pulmonary Emphysema In Mice. *Am. J. Respir. Crit. Care Med*.**2010**; 181: A2924.

51. Rangasamy T, Bhatt S, **Packirisamy G**, O'Reilly M, Rhonda S, Witsett J, Mitzner W, and Georas SN. Role of P21 Cip1 In Immunedysregulation And Allergic Asthma. *Am. J. Respir. Crit. Care Med*.**2010**; 181: A5604.

52. S.Bhatt, **P.Gopinath**, A. Singh, M. McIntash, S. Biswal, S.N.Georas and T.Rangasamy, Generation of Oxidant-Resistant Nrf2 overexpressing Mesenchymal Stem Cells, *Am J Respir Crit Care Med*.**2009**;179: A2019.

53. T. Rangasamy, S. Bhatt, **P. Gopinath**, D.J. Prockop, R.M. Tuder and S.N. Georas, Effects of Cigarette Smoke Condensate on Mouse Mesenchymal Stem Cells, *Am J Respir Crit Care Med*.**2009**;179: A4174.

54. **P. Gopinath** and S.S.Ghosh, A comparative study of 5-flurocytosine/ cytosine deaminase and bifunctional cytosine deaminase-uracil phosphoribosyl transferase suicide gene therapy system in presence of curcumin, presented in the international conference on new horizons in biotechnology (NHBT 2007), Trivandrum, India. November 2007. Abstract No.MB-075. Page No. 298-299.

55. **P. Gopinath** and S.S.Ghosh, Cytosine deaminase as a prodrug/suicidal gene therapy system, presented in the 26th annual convention of Indian association for cancer research and international symposium on translational research in cancer (IACR 2007), Bhubaneswar, India. January 2007. Abstract No. A15. Page No. 95.

Invited lectures delivered

1. Delivered two online lectures as a resource person in the "UGC-Sponsored Online Refresher Course in Physical Science (Interdisciplinary)" organized by Human Resource Development Centre (HRDC), Bharathidasan University, Tamil Nadu on 03.08.2023.
2. Delivered an invited lecture in the online session on "Concept of antibiotic resistant markers, insertional inactivation, PCR, RNA interference" for the teachers of the Delhi Public Schools teaching Biology in Classes 9-12 on 01 December 2022.

3. Delivered an invited lecture in the online one week Short Term Course through 'Google Meet' on "Smart Materials and Nanotechnology" for faculty members from engineering colleges and polytechnics at remote locations during 17 to 21 Oct 2022 organized by the Electronics and Communication Engineering Department of National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh.
4. Delivered two online lectures as a resource person in the "UGC-Sponsored Online Refresher Course in Biochemistry & Biotechnology" organized by Human Resource Development Centre (HRDC), Bharathidasan University, Tamil Nadu on 10.10.2022
5. Delivered invited online lecture in the one week Faculty Development Program/Short-Term Course (FDP/STC) on "Recent Progresses in Biomaterials and their Applications" held during 10th to 14th October 2022 in Department of Biotechnology, Dr B R Ambedkar National Institute of Technology Jalandhar, India.
6. Delivered an invited lecture in the 2nd Annual Meeting of the Chemical Biology Unit of INST (Nano@ChemBio 2022), Institute of Nano Science and Technology (INST), Mohali, on 17 September 2022
7. Delivered an invited lecture in the Centre for Nanotechnology, IIT Guwahati on 09 September 2022
8. Delivered an invited online lecture in the Faculty Development Program on "Nanotechnology in Health, Food and Environment" organized by Department of Biotechnology, Kumaraguru College of Technology, Tamil Nadu India, held during 9th -13th May 2022
9. Delivered an invited lecture in the webinar series on "Current Research Trends in Biological Science" organized by Srimad Andavan Arts and Science College, Tiruchirappalli, Tamil Nadu on 04 May 2022
10. Delivered an invited lecture in the popular lecture series on "Applications of biomaterials in healthcare" organized by Department of Biomedical Engineering, Karpaga Vinayaga College of Engineering and Technology on 27th April 2022.
11. Delivered an invited lecture on Current Developments in Nanofibers for Biomedical Applications, in MHRD-SPARC, Govt. of India., sponsored International Workshop (Online) on Nanofibers Based Biomedical Healthcare Materials For Infection Control organized by Department of Fashion Technology & Biotechnology, KCT and in association with National University of Singapore, Singapore and Singapore Eye research Institute, Singapore, and Anna University Chennai, India., on 20th April 2022 through virtual mode (MS Teams).
12. Delivered an invited online lecture in NIPER-Raebareli, India, under "Azadi Ka Amrit Mahotsav" celebration on 03 Feb 2022.
13. Delivered an invited online lecture in the Faculty Development Program on "Nanotechnology: Present Advancements and Future Prospects" organized by Amity Institute of Nanotechnology, Amity University, Noida, Uttar Pradesh, India, held during 18-22nd, Jan 2022.
14. Delivered an invited online lecture in the International workshop on "Convergence of Photonics, Biology and Nanomedicine to transform Healthcare" Organized by IIT Delhi, India, held during 9-10th January 2022.
15. Delivered an invited online lecture in the 7th International Conference on Advanced Nanomaterial and Nanotechnology (ICANN2021) Organized by IIT Guwahati, Assam, India, held during 14 to 17th December 2021.
16. Delivered an invited lecture in the 3 Day Online Workshop on "Recent trends of Biotechnology in Engineering" sponsored by Department of Biotechnology (DBT),Govt. of India Organized by G.H.Raisoni College of Engineering (GHRCE) Nagpur, India, held during 15 to 18th December 2021.
17. Delivered an invited lecture in the National Level Faculty Development Programme on "Synthesis and characterization of Nanomaterials" Organized by Department of Physics, St. Mary's College (Autonomous), Thoothukudi, Tamil Nadu, held during 23rd to 26th November 2021.
18. Delivered an invited lecture in an online three days FDP on "Recent Advancement in Nanomaterial and Green Technology for Sustainable Engineering" Organized by Department of Applied Science & Humanities, MCT's

Rajiv Gandhi Institute of Technology, Mumbai, India, held during 6th to 8th October 2021. https://www.youtube.com/watch?v=Be6Wf6DhVig

19. Delivered an invited lecture in the online short-term certificate course on "Nanoinformatics for Biomedical Applications (NBA-2021)" Organized by Indian Institute of Information Technology Allahabad (IIIT-Allahabad), held during 27-29th August, 2021.
20. Delivered a lecture in the AICTE Training and Learning [ATAL] Academy Sponsored one-week online Faculty Development Program [FDP] on "Electrospinning Nanofibers: Science, Technology, and Applications" Organized by Department of Basic Sciences,IIIT Nagpur,India, held during 12th July – 16th July 2021. https://drive.google.com/drive/folders/1Mjz1aVv4Ijlxksl-A7qo4muk53ikyDw6?usp=sharing
21. Delivered a guest lecture in the SERB sponsored VRITIKA programme on 'Nanotechnology" organized by IIT Dhanbad, held during June 28th – July 2nd, 2021.
22. Delivered an invited lecture in an online lecture series organized by the Walchand College of Arts and Science, Solapur, India on 29th May 2021.
23. Delivered a keynote lecture in an "International Conference on Sustainable Materials and Technologies for Energy and Bio Applications (SMTBEA -2021)" Organized by Department of Electronics and Communication,SSN College of Engineering, SSN Research Centre, (An Autonomous Institution, Affiliated to Anna University, Chennai)Kalavakkam-603110 Chennai, Tamilnadu, India, held during 19 – 21 May2021.
24. Delivered an invited lecture in an online lecture series organized by the Department of Chemistry, IGNTU, Amarkantak, India on 14th May 2021.
25. Delivered an invited lecture in a Webinar on "3D Printing of Human Organs" organized by the Department of Electronics and Communication Engineering & School of Bioengineering Sciences (Dept. of BioTechnology & Dept. of Biomedical Engineering) Muthayammal Engineering College (Autonomous) Rasipuram, Tamilnadu & IEEE Madras Section Nanotechnology Council, on 27th April 2021.
26. Delivered an invited online lecture in TEQIP-III Sponsored "One Day National Webinar on Nano Bioengineering" organized by the Department of Chemistry, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu on 24th March 2021.
27. Delivered an invited online lecture in the "International virtual conference on Frontiers in Biological research" organized by St. Joseph's college ,Tiruchirappalli, Tamil Nadu on 15.02.2021 https://www.youtube.com/watch?v=SMo_RKTwhX0&feature=share&fbclid=IwAR2Oro7YioLVC9Q1n0tYjKfqbppXhGD1a060pKNcEO6oW7HLW9QtM7IpKq8
28. Delivered two online lectures as a resource person in the "Refresher Course in Bio-Sciences" organized by Human Resource Development Centre (HRDC), Bharathidasan University, Tamil Nadu on 21.12.2020
29. Delivered an invited online lecture in SRIGEN-Society of Biotechnologists, organized by Department of Biotechnology, Ramaiah Institute of Technology, Bangalore on 18.12.2020
30. Delivered an invited online lecture in the Faculty Development Programme (FDP) on "Contemporary Advances in Bionanotechnology (CAB 2020)" organized by Department of Biotechnology, National Institute of Technology Andhra Pradesh, held from 2nd to 6th November 2020.
31. Delivered an invited online lecture in "GENECHEM"(An *Association of Department of Chemistry and Biosciences)* organized by SASTRA Deemed University, Srinivasa Ramanujan Centre, Kumbakonam, Tamil Nadu on 17th October, 2020. https://www.youtube.com/watch?v=VJjT1MSUMWQ
32. Delivered an invited online lecture in a one-week Faculty Development Program on "Advancements in Biotechnology and Nanotechnology" jointly organized by UIET, Panjab University and GCET Jammu from 21st Sept to 26th Sept 2020.

33. Delivered an invited online lecture in two day National Webinar on- "Frontiers in Biosciences", under DBT STAR COLLEGE SCHEME Organised by St. Ann's College for Women, Mehdipatnam, Hyderabad from 11th-12th September 2020
34. Delivered an invited online lecture in The Biomics on 5 Sept 2020. https://www.youtube.com/watch?v=eIbTsUGu5FA&t=4319s
35. Delivered an invited online lecture in TEQIP-III Sponsored Three days Online Faculty Development Programme on "Real Time Applications in Nanotechnology" organized by Department of Industrial Biotechnology, Government College of Technology, Coimbatore, Tamil Nadu jointly with NIT, Arunachal Pradesh under twinning activity from 19th to 21st August, 2020.
36. Delivered an invited online lecture in "Nanoparticles for biomedical applications" organized by Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu on 03 July 2020
37. Delivered an invited online lecture in "The G N Ramachandran Science Club" (affiliated with VIPNET Club of Vigyan Prasar,Govt.of India) Organized by the Mar Athanasios College for Advanced Studies Tiruvalla (MACFAST) affiliated to M.G.University ,Kottayam,India on 17 July 2020
38. Delivered an invited online lecture in a five day faculty development programme on "Emerging Trends in Biotechnological Advancements: Challenges and Prospects in Tackling Human Diseases" Organized by the TLC, NIT Warangal Under PMMMNMTT Scheme of MHRD, Govt. of India which held from 13 to 17 July 2020
39. Delivered an invited online lecture in "Knowledge 4.0 - Technical Webinar series" organised by Chennai Institute of Technology, Chennai, Tamil Nadu on 03 July 2020 https://www.youtube.com/watch?v=D5zRHUwIb6c
40. Delivered an online invited lecture in Virtual Workshop on "Biologically Inspired Nanomaterials" organised by Kalasalingam academy of research and education, Krishnankoil, Tamil Nadu on 30th June 2020
41. Delivered invited online lectures in Online Short Term Course (STC), Jointly Organized by NITTTR Chandigarh and NIT Jalandhar on Nanoscience for Engineering Applications (Oplan No. ICTO-89) (22nd to 26th June 2020)
42. Delivered an invited online lecture in International Online Faculty Development Programme on "Recent Advances in Nanomaterials" organised by St. Joseph's college of engineering, Chennai, Tamil Nadu from June 4, 2020 to June 6, 2020
43. Delivered an invited online lecture in International webinar on "Biotechnology: Application Areas and Development Process" organised by Alagappa University , Directorate of Distance Education – Biotechnology Wing, Karaikudi, Tamilnadu, India (Sponsored RUSA 2.0) on 31st May 2020
44. Delivered an invited online lecture in webinar on "Innovation and Revolution in Process Industries" organised by Guru Gobind Singh Indraprastha University, Delhi on 18th May 2020
45. Delivered an invited online lecture in Online faculty development programme on "Futuristic Perspectives of Nanochemistry in Electrochemical Devices And Biomedical Applications" organised by R.M.D. Engineering College, Chennai, Tamil Nadu on 11th May 2020
46. Delivered Science day lecture at the MIET University, Meerut, February 28,2020
47. Delivered an invited lecture in AICTE sponsored short-term course on "Carbon Nanomaterials-Recent Advances and Functional Applications" which held during: May 20-24, 2019 at IIT Roorkee.
48. Delivered an invited lecture in AICTE sponsored short-term course on "Functional Materials: Recent Trends and Future Prospects" which held during: May 20-24, 2019 at IIT Roorkee.
49. Delivered invited lecture in National Workshop on "Photoluminescence and Functional Materials (NWPFM-2019)" held during 20 –21st June 2019 at University of Madras, Chennai, Tamil Nadu, India.

50. Delivered invited lecture in TEQIP phase-III sponsored one week Faculty Development Program/Short-Term Course (FDP/STC) on "Recent Advancement in Biomaterials and Nanotechnology for Biomedical Applications" held during 24th to 28th May 2019 in Department of Biotechnology, Dr B R Ambedkar National Institute of Technology Jalandhar, India.
51. Delivered invited lecture in International conference on Nanomedicine (ICON-2019) held during February 25 & 26, 2019 at Madurai Kamaraj University, Madurai, Tamil Nadu, India.
52. Delivered invited lecture in "8th Annual meeting of Indian Academy of Biomedical Sciences & Conference on Delibration on Translation of basic scientific insights into affordable heathcare products" held during February 25- 27, 2019 at CSIR-NIIST, Thiruvananthapuram, Kerala, India.
53. Delivered invited lecture in 3rd PAN IIT Biotech Meet-2019 "Cancer precision medicine and personalised therapeutics" held during Jan 31 – Feb 02, 2019 at IIT Madras, Chennai, Tamil Nadu, India.
54. Delivered invited lecture in International Conference on Advances in Therapeutic Molecules and Drug Design (ATMDD, 2019) held during Jan 09 - 11, 2019 at Karpagam Academy of Higher Education (Deemed to be University), Coimbatore, Tamil Nadu, India.
55. Delivered a expert lecture at the Department of Biotechnology, Bharathidasan Univeristy, Tiruchirappali, January 10,2019
56. Delivered a expert lecture at the Srimad Andavan Arts and Science College (Autonomous), Tiruchirappali, January 09,2019
57. Delivered an expert lecture at the Periyar maniammai University, Thanjavur, January 09,2019
58. Delivered an expert lecture at the IFTM University, Moradabad, November 5,2016
59. Delivered invited lectures in TEQIP-II Sponsored workshop on Nanomaterials for Energy & Environment held during June 13 - 18, 2016 at NIT Tiruchirappalli, Tamil Nadu, India.
60. Delivered an invited lecture in BIT's 6th Annual World Congress of Nano Science & Technology-2016 (Nano S&T-2016) Singapore, October 26-28, 2016.
61. Delivered an invited lecture at the "International Conference on Nanotoxicology" (ICNanotox- 2015), SASTRA University, February 13, 2015.
62. Delivered a plenary lecture at the 2nd International Conference on "Challenges in Biotechnology and Food Technology" (ICBF2012), Annamalai University, January 9,2012

Membership of Professional bodies

1. Fellow of Royal Society of Biology(FRSB), UK
2. Fellow of Royal Society of Chemistry(FRSC), UK
3. Fellow of the Academy of Sciences (F.A.Sc), Chennai
4. American Chemical Society (ACS), USA (Member)
5. Association of Microbiologists of India (Life member)
6. Materials Research Society of India (Life member)
7. Chemical Research Society of India (CRSI) (Life member)
8. Indian Nanoscience society (Life member)
9. Society for Biomaterials and Artificial Organs (Life member)
10. Society for Tissue Engineering and Regenerative Medicine (Life member)
11. Indian Science Congress Association (Life member)
12. Indian society of chemists and Biologists (Life member)
13. Indian Academy of Biomedical Sciences (Life member)

Ph.D's Thesis guided: Completed= 12, Ongoing= 08

S.No.	Details of PhD thesis guided
1	S. Uday Kumar Development of Biofunctional Polymeric Nanofibers and Their Therapeutic Implications Registration Year: 2012; Completed on: 25.11.2016 Completed Postdoctoral fellowship from Stanford University, USA Present position: Assistant Professor at IIT Tirupati
2	Bharat Bhushan Development of albumin based nanoparticles for biomedical applications Registration Year: 2011 ; Completed on: 04.03.2016 Present position: Postdoctoral fellow at Newcastle University, United Kingdom
3	Poornima Dubey Silver nanoparticle and graphene oxide based nanocomposites for biomedical applications Registration Year: 2010 ; Completed on: 29. 06. 2016 Completed Postdoctoral fellowship - University College London, London, and University of Cincinnati, USA Present position: Research scientist, Harvard Medical School, USA
4	Abhay Sachdev Development of carbon dots based multifunctional nanomaterials for potential applications Registration Year: 2013 ; Completed on: 08.08.2016 Present position: Scientist at CSIO (CSIR), Chandigarh, India
5	Ishita Matai Poly(amidoamine) Dendrimer Based Nanomaterials for Delivery of Anticancer Agents Registration Year: 2013; Completed on: 29.08.2016 Completed INSPIRE faculty at CSIO (CSIR), Chandigarh, India Present position: HoD, Dept. of Biotechnology, Amity University, Mohali.
6	Deepika Malwal Metal oxide based nanostructures for potential applications in water remediation Registration Year: 2014; Completed on: 17.08.2017 Present position: Research Scientist at Log9 Materials company
7	S. Raj Kumar Development of nanocomposite materials for applications in water remediation Registration Year: 2014; Completed on: 14.09.2018 Present position: Postdoctoral fellow at South Dakota State University, USA
8	Shanid Mohiyuddin Chitosan and Calcium Phosphate Nanoparticles for Delivery of Anticancer Agents Registration Year: 2014; Completed on: 16-04-2021 Present position: Postdoctoral fellow at University of Missouri, USA
9	Ashish Kalkal Nano-enabled biosensors for efficient detection of cancer biomarkers Registration Year: 2017; Completed on: 28-09-2022 Present position: Postdoctoral fellowship - University College London, London
10	Shlok Jindal Development of nanofibers and hydrogel for delivery of anticancer agents Registration Year: 2017; Completed on: 24-09-2022 Present position: Guest lecturer, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut
11	Vinay Kumar Design and development of silk protein-based composite materials for biomedical applications Registration Year: 2015; Completed on: 12-11-2022 Present position: Pursuing Postdoctoral fellowship at Indian Veterinary Research Institute, Izatnagar

12	Priyanka Mishra Light Driven Nanomaterials for Methane Conversion into Value-Added Products Registration Year: 2017; Completed on: 27.04.2023

Master's Thesis guided

- Master of Technology (M.Tech.) : 22 (Completed) Ongoing= 02
- Master of Science (M.Sc.): 15 (Completed) Ongoing= 01

Bachelor's Thesis guided

- Bachelor of Technology (B.Tech.) : 14 (Completed) Ongoing= 2

INSA visiting scientist mentored

Dr. P. Rameshthangam, Assistant Professor, Department of Biomedical Sciences, Alagappa University, Karaikudi– 630003, Tamilnadu has successfully completed his INSA visiting scientist programme under my mentorship from 01-11-2018 to 30-11-2018 in IIT Roorkee sponsored by Indian National Science Academy (INSA),New Delhi.

Courses taught

- Bionanotechnology (IBT-04), Nanoscale materials (NT-501), Supramolecular Chemistry of Nanomaterials (NT-532), Nanobiotechnology (NT-542 & BTN-347), Laboratory methods (NT-562), Nanomedicine (NT-543), Research methods in bionanotechnology (BT-644), Biomedical Nanotechnology (NT-502), Genetically modified organisms (BTN-453), Biotechnology laboratory I (BTN-513), Cell and Tissue Engineering (BTN-345)

Courses developed

- Institute elective course: **Bionanotechnology (IBT-04)**
- Deptt./ Centre elective course: **Nanomedicine (NT-543); Biomedical Nanotechnology (NT-502); Research Methods in Bionanotechnology (BT-644)**

NPTEL online certificate course taught:

Biomedical Nanotechnology (Registered students approx = 5,000 candidates X 6 times) ; YouTube subscribers =8.93K, YouTube Total views (20 lectures) = 580 K

Short term course/ Workshop conducted

1. Conducted Shastri Indo-Canadian Institute sponsored Indo-Canada one-day workshop on **"**Nano-Bioengineering**"** on 13.03.2021 at IIT Roorkee. https://www.youtube.com/watch?v=aiRYnJTaBB4&t=4946s
2. Conducted an AICTE sponsored short term course on "Recent Advances in Biomedical Engineering" from 30.11.2020 to 04.12.2020 at IIT Roorkee.
3. Russia-India Network of Institution of Higher Education (RIN)- Symposium on Nano Materials held on 03 and 05 Nov 2020 (online) was moderated by Prof. A K Dikshit, IIT Bombay and Prof. P Gopinath, IIT Roorkee.
4. Conducted TEQIP sponsored "Hands-on training on Nanobiotechnology (Nanobio: 2019)" from 06.05.2019 to 10.05.2019 at IIT Roorkee.
5. Conducted one day workshop on "Characterization of nanoparticles using Zetasizer: Hands-on training" on 3rd November 2018 at IIT Roorkee.

6. Conducted an AICTE sponsored short term course on "Nanotechnology: Basics and bio-chemical applications" from 21.05.2018 to 25.05.2018 at IIT Roorkee.
7. Conducted a lab session in the AICTE sponsored short term course on "Relevance of Nanotechnology to the Rechargeable Battery Technology" from July 18-22, 2016 at IIT Roorkee.
8. Conducted TEQIP sponsored "International winter school and hands-on training programme on Nano-biotechniques (I WiSH NanoBio: 2016)" from 09.02.2016 to 14.02.2016 at IIT Roorkee.
9. Conducted an AICTE sponsored short term course on "Recent Advances in Nanobiophotonics (From Lab to Clinic)" from 13.07.2015 to 17.07.2015 at IIT Roorkee.
10. Conducted one day workshop on "Nano Drug Delivery Systems *(Industry-Academia Interaction)*" on January 10, 2015 at IIT Roorkee.
11. Conducted one day workshop on "Bionanotechnology: Biological nanostructures and its applications" on March 16, 2013 at IIT Roorkee.
12. Conducted an USBD sponsored "Hands-on Training" on modern techniques in biotechnology (Nano/Structural Biotechnology) from 07.01.2013 to 12.01.2013 at IIT Roorkee.
13. Conducted an AICTE sponsored short term course on "Recent Advances in Nanomedicine (From bench to bedside)" from 04.06.2012 to 08.06.2012 at IIT Roorkee.

Participation in Short term courses

- Participated in three weeks "European School on Nanosciences and nanotechnologies (ESONN 2019)" held at University of Grenoble, France from August 25 to September 14, 2019.
- Participated in two weeks Science Academies' Refresher Course on "Immunology Laboratory Techniques using fish model" held at Vels University, Chennai from 05-17 Dec 2016 Sponsored by Indian Academy of Sciences, Bangalore; Indian National Science Academy, New Delhi; The National Academy of Sciences India, Allahabad.

Administration Responsibilities, IIT Roorkee

(a) Institute level:

- Advisory Committee member -- Dean of international relations,13 June 2022 – till date
- Advisory Committee member -- Dean of Resources & Alumni Affairs (DORA) (October 2021- till date)
- Associate Dean of Academic affairs (Admission) – (26th April 2017- 31st August 2020)
- Advisory Committee member for TIEDS Incubation Centre- Dept. of Biotech.(17 Feb 2017 – 16 Feb 2020)
- Member in Sponsored Research & Industrial Consultancy Committee (SRICC)-Centre for Nanotechnology (Feb 2017 – 16 Feb 2020)
- Member in Institute Research Committee (IRC)- Dept. of Biotech.(March 2016- April 2017)
- Institute bio-safety committee –Member (May 2015- May 2018)
- Faculty-in-charge for Training & Placement –Centre for Nanotechnology (July 2011-April 2015)
- Member in the Board of Research–Centre for Nanotechnology (April 2012 – June 2014)
- Member in the Institute Academic Programme Committee (IAPC) –Centre for Nanotechnology (01.07.2012 to 30.06.2014).

(b) Department level: (Department of Biotechnology)

- Chairperson, Department Academic Programme Committee (DAPC) - (03.08.2023 to 02.08.2025)
- Member in the Department Administrative Committee (16.01.2020 to 16.01.2022)
- Member in the Department Faculty Search Committee (FSC)-(21 September 2016- 20 September 2017)
- Officer-in-charge for timetable (April 2016 – December 2017)
- Faculty-in-charge for M.Sc.,Biotech (II year) and B.Tech Biotech (I year) students.

- Member in the Department Research Committee (DRC) - (December 2015- December 2017)
- Member in the Department Academic Programme Committee (DAPC) - (January 2018- January 2020)
- Member in the Department Research Committee (DRC) - (February 2020- till date)

(c) Center level: (Centre for Nanotechnology)

- Head of the Centre (June 2021-till date)
- Centre Nodal faculty for Alumni-Institute Connect (October 2020-till date)
- Centre Academic Programme Committee (CAPC) - Member (2019-till date)
- Officer-in-charge for administration (June 2011- June 2022)
- Officer-in-charge for Stores & purchase (June 2011- April 2018)
- Officer-in-charge for building (Centre for Nanotechnology) (June 2011- June 2022)
- Officer-in-charge for M.Tech 1& 2 and Biotech. Inst. lab. (Jan 2013—June 2022)
- Officer-in-charge for Health care engineering lab, Nanodevices lab, Nano electronics lab and Nanobiotech lab (Aug 2022- till date)
- Officer-in-charge for Cognizance (Jan 2014 – March 2016)
- Officer-in-charge for timetable (June 2011-June 2015)
- Officer-in-charge for all the laboratories. (June 2011-Dec -2012)
- Centre Faculty Committee (CFC) - Member, Secretary (June 2011-Feb-2014)
- Centre Academic Committee (CAC) - Member, Secretary (June 2011-Feb-2014)
- Centre Research Committee (CRC) - Member, Secretary (June 2011-Feb-2014)

(d) National level:

- Member in International Life Sciences Institute-India (ILSI-India) "Committee on Nanotechnology – ICON"
- Board of studies of Department of Biomedical Sciences, Alagappa University, Karaikudi, ,Tamil Nadu, India
- Board of studies of Department of Biotechnology, Srimad andavan arts and science college, Tiruchirappali ,Tamil Nadu, India
- Department Advisory Board (DAB)- Department of Biotechnology, Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India

(e) International level:

- Served as a member of the program committee of the 7th International Conference on Bioimaging to be held in Valletta-Malta from 24-26 of February 2020
- Served as a member of the program committee of the 6th International Conference on Bioimaging held in Prague, Czech Republic from 22-24 of February 2019
- Served as a member of the program committee of the 5th International Conference on Bioimaging held in Funchal, Madeira- Portugal from 19-21 of January 2018
- Served as a member of the program committee of the 4th International Conference on Bioimaging held in Porto-Portugal from 21-23 of February 2017

Citation indices (http://scholar.google.com/citations?user=AiSVvYsAAAAJ&hl=en**)**

Citations = 6709; h-index = 44; i10- index =115

Research grants received

Sl. No.	Title of Project	Funding Agency	Amount (Rupees)	Duration
1	Chitosan as nanocarrier for gene delivery	MHRD, India	5,00,000.00	3 years (2011-2014) Project Investigator **Completed**
2	*Cancer Nanotheranostics:* Development of Multifunctional Nanocomposite for Tumor Targeted Delivery of Suicide Gene and Imaging Probe	DBT (RGYI -2011-12), India	29,30,000.00	3 years (2012-2015) Project Investigator **Completed**
3	Tumor targeted multifunctional chitosan nanocomposite for cancer theranostic applications	SERB (Fast track scheme for young scientists)	21,90,000.00	3 years (2012-2015) Project Investigator **Completed**
4	Development of Ni-P-ZnO Nanocomposite Coatings for Antibacterial and Anticorrosion Applications	USBD (Novel Research Ideas in Biotechnology), India	6,10,000.00	2 years (2012-2014) Co-Project Investigator **Completed**
5	Low Cost Technology for Purification of Arsenic and Microbes Contaminated Water using Nanotechnology	DST-Water Technology Initiative, India	46,63,875.00	2 years (2013-2016) Project Investigator **Completed**
6	Cloning and targeted delivery of anti-oxidant gene and drug for treatment of Chronic Obstructive Pulmonary Disease (COPD)	DST-RFBR (Indo-Russia)	25,01,840.00	2 years (2016-2018) Project Investigator **Completed**
7	Development of Tumor Targeted Multifunctional Calcium Phosphate Nanocarrier for gene-directed enzyme prodrug therapy (GDEPT)	DST-WOS-A	32,20,000.00	3 years (2016-2019) Mentor --**Completed**
8	Targeted multi-functional microspheres and nanofibers for cartilage regeneration	DBT Biocare	40,00,000.00	3 years (2018-2021) Mentor-- **Completed**
9	Modulation of Connexin-43 and Histone Deacetylase to Comprehend Cancer Therapy	DBT-North East Twinning Program 2017-18	22,79,600.00	3 years (2018-2021) Project Investigator **Completed**

10	Compact Multispectral Ocular in-vivo Imaging System for validating therapeutic drug & lenses for development of diabetic retinopathy imaging biomarkers.	IMPRINT-2	98,61,280.00 + 100,00,000.00 (**Industry partner**) +50,00,000.00 (IIT Roorkee)	3 years (2018-2021) Co-Project Investigator **Ongoing**
11	Magnetic-field actuated hybrid nanofiber scaffold and apparatus for 4D tissue engineering	BIRAC	15,00,000.00	3 years (2019-2022) Mentor-- **Completed**
12	Solar Driven Community Potable Water Purification System	IMPRINT-3	72,09,400.00 + 20,00,000.00 (**Industry partner**)	3 years (2019-2022) Co-Project Investigator **Completed**
13	Testing of nanofiber scaffolded marine active compound on a 3D hyperglycemic cellular wound model	SATU Joint Research Scheme Projects 2019 - **Host:** University of Malaya	5,10,000.00 (approx) (30,000 Malaysian Ringgit)	Co-Project Investigator (2020)-- **Completed**
14	3D Printed Multifunctional Scaffold for Bone Cancer Therapy	SERB-Teachers Associateship for Research Excellence (TARE)	18,30,000.00	3 years (2019-2022) Mentor -- **Completed**
15	Formulation and evaluation of albumin-based inhalable drug carriers for direct pulmonary delivery of anti-cancer agents and imaging agents for lung cancer theranostics	Shastri Institutional Collaborative Research Grant (SICRG), MoE, India	10,00,000.00	2 years (2020-2022) Project Investigator **Completed**
16	Soft hydrogel lens as non-invasive ocular implant for image assisted in vivo drug delivery in diabetic retinopathy	Chellaram Diabetes Research Centre (a unit of Chellaram Foundation)	39,68,000	3 years (2021-2024) Co-Project Investigator **Ongoing**
17	Development of stem cell encapsulated 3D bio printed gels for beta cell replacement therapy in Type I Diabetes Mellitus	Chellaram Diabetes Research Centre (a unit of Chellaram Foundation)	41,87,800	3 years (2023-2026) Project Investigator **Ongoing**

18	Development of wireless portable potentiostat for non-invasive and point-of-care detection of tobacco related cancers	Indian Council of Medical Research (ICMR), New Delhi	1,14,85,078	3 years (2023-2025) Project Investigator **Ongoing**
19	Investigation of therapeutic potential of a novel engineered astrocyte specific ALBUMIN nano-composite in sporadic Alzheimer's Disease model	Ministry of Education (MoE)- SCHEME FOR TRANSFORMATIONAL AND ADVANCED RESEARCH IN SCIENCES (STARS)	48,76,500	3 years (2023-2026) Co-Project Investigator **Approved-yet to receive funds**
20	Regulating the monocyte trafficking through structure guided inhibition of Chemokine-Receptor-Glycosaminoglycan Interactions	Science and Engineering Research Board – Department of Science and Technology (SERB-DST),CRG	50,78,832	3 years (2023-2026) Co-Project Investigator **Ongoing**
21	Development of inhalable theranostic nanoparticles for lung cancer diagnosis and therapy	Ministry of Education (MoE)- Scheme for Promotion of Academic and Research Collaboration (SPARC), India	40,53,740	2 years (2023-2025) Project Investigator **Approved-yet to receive funds**
22	Development of an electrochemical sensor for early diagnosis of lung cancer by the analysis of volatile organic compounds	DBT-Biomedical Engineering (Phase-I)	59,94,780	1.5 years (2023-2025) Project Investigator **Approved-yet to receive funds**

Industry projects

1	Development of non-invasive biosensor for early detection of lung cancer	DST, India. Technology Innovation Hub (TIH), IIT Roorkee [A Section-8 Company: Divyasampark IHub for Devices Materials and Technology Foundation]	86,58,000.00	3 years (2021-2024) Project Investigator **Ongoing**
2	Nanoscale Investigations into the interactions of metal/metal oxides/ceramics/cermets with GAGs for functional applications	ESYANTRA PVT. LTD	33,00,000	5 years (2022-2027) Co-Project Investigator **Ongoing**