

CURRICULUM VITAE

Name *Dr.Nutan Rakeshkumar Shukla*

Born: Pune (India) 14.10.1992



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Academic positions: Academic director and lecturer at Medinova training institute affiliated by paramedical council of government of India (2023)

Education and Degrees:

- 2018~2023 Ph.D. in convergence science (Specialization in Drug delivery using combination therapy incancer and wound) using different nanoscaffold.
- 2015~2017, Master of Science (M.Sc. Medical Biotechnology) RGITBT Bharati Vidyapeeth Pune, India.
- 2011~2014, Bachelor of Science (B.Sc., Microbiology) Modern College Shivajinagar Pune affiliated university

Research sectors: Designing of Drug Delivery System DDSs (Nanoparticles, Nanorods, Nanofibers, Emulsion, Microbubble), Combination Cancer Therapy (Chemotherapy and photothermal therapy), Study of death signaling pathways, synthesis of thiol molecules, Antimicrobial studies, Invitro studies,

Research activity: 2018~2019, Simultaneous Cancer Treatment with Photo Thermal Therapy and Chemotherapy using Gold nanorods Coated with Methotrexate conjugated Hyaluronic acid. • 2018~2019, Prepared sample (immobilization of Thiol ligand onto GNP) for collaboration work (JACS research) Harvard Medical School. • 2020~2022, Targeted Combination Therapy using Paclitaxel encapsulated gold nanoscaffolds. • 2020~2022, Targeted Delivery of hydrophobic drug encapsulated in hyaluronic acid immobilized ontoGNRs. • 2021~2022, Microbubble mediated drug delivery in glioblastoma. • 2021~2023, Drug delivery in chronic wound using NIR controlled release. • 2021~2022, Effective delivery of anticancer drug using nanobubble. • 2021~2022, Invitro analysis of obtained Graphene oxide (GO), reduced graphene(rGO). • 2021~2022, Drug delivery in bacterial pathogen using external stimuli from prepared nano scaffold. • 2021~2022, Biocompatibility assessment of obtained polythene sample (collaboration work). • 2022~2023, Effective delivery of whitening agent in melanocytes (cosmetic project) • 2022~2023, Drug delivery in cancer using electros pinned nanofibers in different cancer and wound. • 2022~2023, IC50 studies of different commercial cancer drugs on different cell line. • 2016~2017, Anti-tuberculosis activity of different herbal plants. • 2015~2016, Activity of probiotics on human pathogens. • 2012~2013, Screening and isolation of cellulose degrading microorganisms. • 2012~2013, Waste decomposition by fungal Trichoderma. V.

Fields of interest

- Designing Drug Delivery System(DDSs) (Nanoparticle, Nano-scaffold, Nano-assembly, Nanocomposite), Targeted and non-targeted drug delivery (using combinational approach such as chemotherapy-photo thermal therapy), surface functionalization of DDSs, Microfluidics, Isolation of circulating tumor cells(CTC), Isolation of bacteriophage, antimicrobial activity, screening of antimicrobial agents extracted from plant and other source.

Methods:

Professional Service

- Collaboration work (2018~2019, Prepared sample (immobilization of Thiol ligand onto GNP) for collaboration work (JACS research) Harvard Medical School).
- Synthesis (Indole and its derivative) and writing Dr Harisingh Gour central university

- Collaboration work: Hanyang University Seoul South Korea.

Short teaching activity abroad: 6 year teaching in India and 3 years in South Korea

Honor awards

- (2023-2024) Shortlisted and current candidate if Post-PhD IAAM Sweden
- (2023) Best paper award National symposium in Contemporary Trends, Tools and Techniques in Pharma Quality by Design (QbD), India.
- (2019) Best Poster award 11th International Conference on Environmental Health, South Korea
- (2019) Young research Scientist Award International Conference on Environmental Health Science South Korea.
- All India topper scored 90% in DMLT
- First in State Level Research (screening of cellulose degrading microbes) organized by COEP, PUNE.
- First in Survey report submission organized by Vermicomposting. of Modern College, Pune – 5
- Second in B-Plan and Treasure Hunt organized by COEP, PUNE. • Third in Poster presentation in IIT Powai. • Best Ambassador in COEP, Pune India 2012.

Scientific publications in referred journals

Monographs, book chapters, papers, etc.

Patents:3(Indian)

Book Chapters:4(National and International)

publications.

- Combinational Chemotherapy and Photothermal Therapy using Gold Nanorod Platform for Cancer Treatment (particle & particle systems) *
- Stimuli Responsive Nanofibers Containing Gold Nanorods for On-Demand Drug Delivery Platforms (MDPI)*
- Effect and application of micro-and nanobubbles in water purification. (TOXEHS)
- On-demand drug delivery platform using electro spun nanofibers by externally triggered glass transition. (ACS)*
- Effects of nanobubbles in dermal delivery of drugs and cosmetics (Nanomaterials). *
- Smart Delivery Platform using Core-Shell Nanofibers for Sequential Drug Release in Wound Healing"(ACS, Biomaterials). *

Supervising of Ph.D. students : 2

Received PhD-1

Under supervision now-1

Consulting Habilitaion Degree-NA

Received -NA

Under supervision now-NA

Attracting of external funding:

International grants:NA

Russian national grants:NA