



Multanimal Modi College

Modinagar-201204 (U.P.)

(Affiliated to Ch. Charan Singh University, Meerut)
(For Teaching Staff)

Title	Dr.	First Name	Poonam	Last Name	Kumari	Photograph
Designation		Assistant Professor				
Department		Department of Zoology				
Address (Campus/Department)		Department of Zoology, 2 nd Floor, Multanimal Modi college, Modinagar, Uttar Pradesh-201204				
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EDUCATIONAL QUALIFICATIONS

Degree	Institution	Year	Details
Doctor of Philosophy (Ph.D)	Indian Institute of Technology, Roorkee	2020	Thesis Title: “Anti-biofilm activity of terpenes and their mechanism against <i>Cryptococcus neoformans</i> using integrated omics approach”
M.Sc. (Life Science) Ed II years integrated	Regional Institute of Education, Bhubaneswar (Utkal University)	2011-2013	Subjects: Cell biology & Genetics, Molecular Biology, Biophysics, Instrumentation, Biotechnology & Genetic Engineering, Microbiology, Endocrinology, Animal physiology, Developmental Biology, Biosystematics & Evolution, Immunology, Environmental Biology and Toxicology, Pedagogy in Life science education Specialization: Biochemistry
B.Sc. B.Ed. IV years integrated	Regional Institute of Education, Ajmer (Maharishi Dayananda Saraswati University)	2010-2013	Subjects: Zoology, Botany, Chemistry, Teaching of Biological sciences, Psychology of learner, Education and Indian Society, Internship & School Management

CAREER PROFILE

Organization / Institution	Designation	Duration	Role(s)
Multanilal Modi College, Modinagar (Affiliated to C.C.S. University, Meerut)	Assistant Professor	Joined on 16 th June 2022	Teaching faculty for Zoology (subjects yet to be decided)
GlaxoSmithKline (GSK) Global India Pvt Ltd	Regulatory Specialist-III (RIM)	1 year (2021-2022)	Cessation of supply project, Data management- DER processing in Regulatory Veeva- Vault, QC procedures, data extraction from RIMS to support KPI generation
Indian Institute of Technology, Roorkee	Senior Research Fellow (SRF)	3 years (2016-2019)	Learnt Proteomics, metabolomics and various biophysical techniques like 1D-SDS PAGE, Two-dimensional gel electrophoresis, Nuclear magnetic resonance, mass spectrometry, gas chromatography/ mass spectrometry, FTIR.

Indian Institute of Technology, Roorkee	Junior Research Fellow (JRF)	2 years (2014-2016)	Learnt basic microbiology and microscopic techniques like culturing, XTT assays, sample preparation for Scanning electron microscopy, Transmission electron microscopy and Confocal microscopy.
Gurukul-The School, Ghaziabad	Teacher	1 year (2010-2011)	Taught Science and Mathematics

Research Interests / Specialization:

Proteomics of fungal pathogen (microbes), protein biochemistry, Metabolomics, Pathway analysis

Workshops attended:

- 5 Days Hands-on Workshop on Molecular Biotechnology and Bioinformatics**, 12 to 16th January, 2015, International Centre of Stem Cells, Cancer and Biotechnology (ICSCCB), Pune.
- Emerging Trends in Target Identification and Drug Design**, 31st January, 2018, IIIT, Noida.
- Workshop on Reference management using Mendeley**, 22 November, 2018, IIT Roorkee.
- Workshop on Basic Aspects of Magnetic Resonance and its applications**, 26-28 November, 2018, Department of Biotechnology, IIT Roorkee

Publications in Indexed/ Peer Reviewed Journals

Year of Publication	Title	Journal/Book(s)	Co-Author(s)
2020	Characterization of recombinant thermostable manganese-superoxide dismutase (NeMnSOD) from <i>Nerium oleander</i>	Molecular Biology Reports	Rashmi Gangwar, Poonam Kumari, Apurva Chatrath, Ramasare Prasad
2019	Delineating Biofilm Inhibition Mechanism of Phenolic/Aldehydic Terpenes against <i>Cryptococcus neoformans</i>	ACS Omega	Poonam Kumari, Neha Arora, Apurva Chatrath, Rashmi Gangwar, Vikas Pruthi, KM Poluri and Ramasare Prasad

2019	Delineating thermotolerant responses of a halotolerant microalgae using integrated omics approach to identify genetic engineering targets for enhanced TAG production	Biotechnology for Biofuels	Neha Arora, Poonam Kumari, Amit Kumar, Rashmi Gangwar, Khushboo Gulati, Parul A. Pruthi, Ramasare Prasad, Dinesh Kumar, Vikas Pruthi and K Mohan Poluri
2019	In Vitro Anti-Biofilm Activities of Citral and Thymol Against <i>Candida Tropicalis</i>	Journal of Fungi	Apurva Chatrath, Rashmi Gangwar, Poonam Kumari, Ramasare Prasad
2018	Investigation of Differentially Expressed Proteins of <i>Candida tropicalis</i> Biofilm in Response to Citral	Journal of Proteomics and Bioinformatics	Apurva Chatrath, Poonam Kumari, Rashmi Gangwar and Ramasare Prasad
2017	Antifungal and Anti-Biofilm Activity of Essential Oil Active Components against <i>Cryptococcus neoformans</i> and <i>Cryptococcus laurentii</i>	Frontiers in Microbiology	Poonam Kumari, Rutusmita Mishra, Neha Arora, Apurva Chatrath, Rashmi Gangwar, Partha Roy and Ramasare Prasad
2017	Synergistic effects of <i>Woodfordia fruticosa</i> gold nanoparticles in preventing microbial adhesion and accelerating wound healing in Wistar albino rats in vivo	Material Science and Engineering C	Navdeep Raghuwanshi, Poonam Kumari, Amit Kumar Srivastava, Priya Vashisth, Tara Chand Yadav, Ramasare Prasad, Vikas Pruthi
2015	Exploring the Effectiveness of Constructivist Approach on Academic Achievement in Biology at Higher Secondary Level	epiSTEME6	Animesh Kumar Mohapatra & Poonam Kumari
2013	Genotoxic and Histopathological effects of Cadmium in Male Swiss Albino Mice, <i>Mus musculus</i>	The Bioscan	Animesh Kumar Mohapatra, Shivika Datta and Poonam Kumari
2009	Cadmium induced histopathological changes in the stomach and small intestine of Swiss albino mice <i>Mus musculus</i>	Journal of Applied and Natural Science	Animesh Kumar Mohapatra, Poonam Kumari and Shivika Datta

Conference Presentations: International/National

1.	Alterations of Cell Membrane Integrity and Extracellular Polysaccharides Matrix of <i>Cryptococcus neoformans</i> Biofilm on Exposure to Essential Oil Active Components	“International Conference on Advances in Biosciences and Biotechnology”	Jaypee Institute of Information Technology, Noida	01-03 February, 2018	International
2.	Antibiofilm activity of Essential oil Active components against <i>Cryptococcus neoformans</i> and their safety prospects	“American Chemical Society on Campus”	Indian Institute of Technology, Roorkee	07 th February, 2018	International
3.	Delineating the halotolerance mechanism of <i>Scenedesmus</i> sp. By integrated omics approach: Potential implications for biofuel production	“26 th European Biomass Conference and Exhibition”	Copenhagen, Denmark	14 th -17 th , May 2018	International
4.	Deciphering the Biofilm Eradication Mechanism of Thymol against <i>Cryptococcus neoformans</i> Using Multi-omics approach	“8 th ASM Conference on Biofilms”	Washington DC, United States	07 th -11 th October, 2018	International
5.	In-silico studies and functional validation of salt inducible S6PDH gene in rice using RNAi technology	“International Conference on Molecular Signaling: Recent Trends in Biomedical and Translational Research” (ICMS:RT BTR-2014)	Indian Institute of Technology, Roorkee	17 th -19 th October, 2014	International
6.	Cadmium induced histopathological changes in stomach and small intestine of swiss albino mice, <i>Mus musculus</i>	“5 th National Teachers Science Congress”	Regional Institute of Education, Bhubaneswar	1 st to 4 th October 2009	National
7.	Histotoxicity of cadmium in liver, kidney and testis of swiss albino mice, <i>Mus musculus</i>	“99 th Indian Science Congress”	Kalinga Institute of Industrial Technology, Bhubaneswar	3 rd to 7 th January, 2012	National

Books/Reports/Chapters/Generalarticle

S.No.	Title	Author'sname	Publisher	Year ofpublicati on
1.	Vitiligo: TheWhitening SkinDisorder	Animesh K.Mohapatra& PoonamKumari	Emerging Science	2012
2.	Bioluminescence: TheColdLight	AnimeshK. Mohapatra &PoonamKuma ri	ScienceHorizon	2014

Patentsoradditionalinformation

- ❖ Submitted *Neriumoleandersubsp.oleander* methyltransferase mRNA, partial cDNA sequence with accession no. MH504111 in NCBI gene bank database.

A handwritten signature in black ink that reads "Poonam Kumari". The signature is written in a cursive style and is underlined with a single horizontal line.

(Signature of Faculty Member)

(Signature & Stamp of Teacher In-Charge/Principal)