

## **Curriculum Vitae**

# Rashmi Gangwar

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## **Objective**

Looking out for new challenges. Searching for a position that will make me a valued member of a team so that I can put my professional skills into practice and make a valuable contribution.

## **Summary**

- PHD Biotechnology from Indian Institute Of Technology Roorkee
- M.Sc. (Agricultural Biotechnology) from SVBPUAT, Meerut (Gold medalist)
- Full exposure to research and development.
- Well acquainted with laboratory equipments and their handling.
- Good communication and presentation skills.

## **Educational Qualifications**

Level of Degree	Year of passing	Board/ University	Percentage	Division	Language, Subjects & Streams* with Specialization
Ph.D.	2021	Indian Institute of Technology, Roorkee	NA	NA	Biotechnology
M.Sc.	2013	Sardar VallabBhai Patel University of Agriculture and Technology Meerut	85.80	First (Gold Medalist)	Agricultural Biotechnology
B.Sc.	2011	Chaudhary Charan Singh University Meerut	68.00	First	Zoology , Botany and Chemistry
Intermediate	2008	CBSE	75.00	First	Physics, chemistry, Biology, English and Biotechnology

High School	2006	CBSE	75.00	First	Science, Social Science, Hindi,
					English and Mathematics

## Fellowship awarded:-

Awarded with DST-INSPIRE Fellowship [DST/INSPIRE/03/2014/001485]

#### Skills Set

- ❖ Fully trained in Recombinant DNA technology with expertise in Cloning, transformation, Antioxidant evaluation, Proteomics techniques (1-D electrophoresis, 2-D electrophoresis), Plant Tissue Culture.
- ❖ Handling of instruments like MALDI-TOF, spectrophotometer, Nano drop, LAF, Simple PCR, RT-PCR, Gel documentation, autoclave, pH meter etc.
- ❖ Platform: Bioinformatics tools like Primer3, BLAST, UNIGENE, ProtParam etc.
- ❖ Other skills: good communication skill and friendly, hardworking and dedicated to work

### **PROJECT DONE**

- Micropropagtion of *Chlorophytum borivilianum* along with its clonal fidelity through RAPD markers" in M.Sc (Ag .Biotechnology).
- Recombinant Thermostable MnSOD from *Nerium oleander* and assessment of its antioxidant potential (PHD Thesis)

### **List of Publications**

- 1. **Rashmi Gangwar**, Poonam Kumari, Apurva Chatrath, & Ramasare Prasad (2020). Characterisation of recombinant thermostable manganese-superoxide dismutase (NeMnSOD) from *Nerium oleander*. *Molecular Biology Reports*, 1-20.
- Kumari, Poonam, Neha Arora, Apurva Chatrath, Rashmi Gangwar, Vikas Pruthi, Krishna Mohan Poluri, and Ramasare Prasad. "Delineating the Biofilm Inhibition Mechanisms of Phenolic and Aldehydic Terpenes against Cryptococcus neoformans." ACS omega 4, no. 18 (2019): 17634-17648.
- 3. Arora, Neha, Poonam Kumari, Amit Kumar, Rashmi Gangwar, Khushboo Gulati, Parul

- A. Pruthi, Ramasare Prasad, Dinesh Kumar, Vikas Pruthi, and Krishna Mohan Poluri. "Delineating the molecular responses of a halotolerant microalga using integrated omics approach to identify genetic engineering targets for enhanced TAG production." *Biotechnology for biofuels* 12, no. 1 (2019): 2.
- 4. Apurva Chatrath, **Rashmi Gangwar**, Poonam Kumari, Ramasare Prasad (2019) In Vitro Anti-Biofilm Activities of Citral and Thymol Against *Candida Tropicalis*. *Journal of Fungi*, 5(1), 13. doi: 10.3390/jof5010013 PMID: 30717454
- 5. Apurva Chatrath, Poonam Kumari, **Rashmi Gangwar**, Ramasare Prasad (2018) Investigation of Differentially Expressed Proteins of *Candida tropicalis* Biofilm in Response to Citral. *Journal of Proteomics and Bioinformatics*, 11(2), 57-61. doi: 10.4172/jpb.1000466 (Invited)
- Poonam Kumari, Rutusmita Mishra, Neha Arora, Apurva Chatrath, Rashmi Gangwar, Partha Roy and Ramasare Prasad (2017) Antifungal and Anti-Biofilm Activity of Essential Oil Active Components against *Cryptococcus neoformans* and *Cryptococcus laurentii*. Frontiers in Microbiology, 8, 2161. doi: 10.3389/fmicb.2017.02161 PMID: 29163441
- Rashmi Gangwar, Apurva Chatrath, Poonam Kumari, & Ramasare Prasad (2020).
   Comparative Insilco functional, structural and phylogenetic characterization of Mn-Superoxide Dismutase from plants. Journal of plant biochemistry and Biotechnology (Communicated).
- 8. **Rashmi Gangwar**, Apurva Chatrath, Poonam Kumari, & Ramasare Prasad (2020).

  Development and Evaluation of topical antioxidant formulations infused with Recombinant Thermostable Mn-Superoxide Dismutase from *Nerium oleander*.(Communicated)

#### **GenBank data Submission**

1. **ACCESSION No. MN365020** (Nerium oleander subsp. oleander MnSOD mRNA, complete cds)

Author: Gangwar, R., Kumari, P., Chatrath, A. and Prasad, R.

 ACCESSION No. MN365020 (Nerium oleander subsp. oleander MnSOD mRNA, complete cds)

Author: **Gangwar, R.**, Kumari, P., Chatrath, A. and Prasad, R.

### **List of conferences**

- Rashmi Gangwar, Apurva Chatrath, Poonam Kumari and Ramasare Prasad. Isolation and characterization of Full-length Mn- superoxide dismutase gene from xerophytic plant NeIITR. 9th International Meeting. NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT) Conference 30th Sep - 2nd Oct 2019, Mumbai, India (POSTER Presentation)
- 2. Apurva Chatrath, Anchal Sharma, Poonam Kumari, **Rashmi Gangwar** and Ramasare Prasad. *In silico* molecular docking studies of azoles against lanosterol-14-α-demethylase protein (Erg11p) from *Candida tropicalis*. International Conference on Advances in Biosciences and Biotechnology, 1-3 February 2018, JIIT Noida. (Poster Presentation)
- 3. Poonam Kumari, Neha Arora, Apurva Chatrath, **Rashmi Gangwar**, Dinesh Kumar, Krishna Mohan Poluri and Ramasare Prasad. Deciphering the Biofilm Eradication Mechanism of Thymol against *Cryptococcus neoformans* Using Multiomics approach. 8th ASM Conference on Biofilms, 7-11 October, 2018, Washington DC, United States. (POSTER Presentation)
- 4. Poonam Kumari, Neha Arora, Apurva Chatrath, Rashmi Gangwar, Vikas Pruthi and Ramasare Prasad. Anti-biofilm activity of Essential oil Active components against *Cryptococcus neoformans* and their safety prospects. American Chemical Society on Campus, 7 February 2018, IIT Roorkee. (Poster Presentation) (BEST POSTER AWARD)
- 5. Poonam Kumari, Neha Arora, Apurva Chatrath, <u>Rashmi Gangwar</u>, Vikas Pruthi and Ramasare Prasad. Alterations of Cell Membrane Integrity and Extracellular Polysaccharides Matrix of *Cryptococcus neoformans* Biofilm on Exposure to Essential Oil Active Components. International Conference on Advances in Biosciences and Biotechnology, 1-3 February 2018, JIIT Noida. (Poster Presentation)
- 6. <u>Rashmi Gangwar</u> 2011. Issues For Climate Change, Land Use Diversification And Biotechnology Tools For Livelihood Security (ICLDBT-2011) (Participated)

### **Training Attended**

 National workshop on NMR by National Magnetic Resonance society 26-28<sup>th</sup> November, 2018 • Workshop on Reference Management using Mendeley by MGCL, IIT Roorkee, 22November 2018.

## **Other Achievements**

- Awarded as DST INSPIRE FELLOW for pursuing Ph.D.
- 2<sup>nd</sup> Prize in Basketball at Annual Games and Sports Meet 2011-12, SVBPUAT Meerut
- 1st Prize in Kho-Kho at Annual Games and Sports Meet 2011-12, SVBPUAT Meerut
- Was Placed top 10 percent category in ANNUAL QUIZ-2006 on INDIA VISION 2020 organized by the Kabir Peace Mission

#### **Personal Details**

Name Rashmi Gangwar
Date of Birth 22/06/1992

Father's name Mr. J.P Gangwar

Permanent Address H.No 40-A Sai Nagar near Chanakyapuri, Meerut-250004

### **Declaration**

I hereby declare that above mentioned information is true and correct to best of my knowledge.

Rashmi Gangwar