CURRICULUM VITAE

Name:	**DR. DURGESHWER SINGH**	
Designation:	**Assistant Professor**	
School:	**Life Sciences**	
Department:	**Botany**	
Specialisation & Research Interests:	Plant-Microbe Interactions; Nanobiotechnology; Radiation Processing	
Email IDs (Official & Personal)	durgeshwersingh@mgcub.ac.in durgeshwer@gmail.com	
Mobile No.:	+91-9472622057 +91-7091605357	
Address:	Department of Botany Mahatma Gandhi Central University Temp Camp. Zila School Campus Motihari, East Chamapran – 845401 Bihar	

2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University / Board
Ph.D.	2013	Jai Narain Vyas University, Jodhpur & Defence Laboratory, DRDO, Jodhpur
M.Phil.	2008	University of Pune, Pune

Degree	Year	University / Board
M.Sc.	2005	Jai Narain Vyas University, Jodhpur
B.Sc.	2003	Maharshi Dayanand Saraswati University, Ajmer

3. ANY OTHER QUALIFICATION:

4. PROFESSIONAL EXPERIENCE:

Organisation/Institute/University	Position Held	Duration
Mahatma Gandhi Central University, Bihar	Assistant Professor	9th November, 2016 to till date
Defence Laboratory (DRDO), Jodhpur	Research Associate (PDF)	12th May, 2014 to 11th May, 2016

5. ADMINISTRATIVE ASSIGNMENTS:

Position Held	Duration	Nature of Work

6. COURSES TAUGHT:

B.Sc. Courses

1. Microbiology, Phycology and Mycology (BOTY3001)
2. Bryophyte, Pteridophyte and Gymnosperms (BOTY3002)
3. Applied Microbiology and Plant Pathology (BOTY3003)
4. Bio-molecules and Cell Biology (BOTY3004)
5. Plant Systematics (BOTY3006)
6. Reproductive Biology of Angiosperm (BOTY3011)
7. Molecular Biology (BOTY3013)
8. Ethnobotany and Human Welfare (BOTY3032)
9. Biodiversity (Microbes, Algae, Fungi & Archaegoniate (BOTY3041)

10. Plant Physiology and Metabolism (BOTY3043)
11. Economic Botany and Biotechnology (BOTY3044)
12. Industrial and Applied Microbiology (BOTY3052)
13. Environmental Science (SWRK3001)

M.Sc. Courses

1. Microbiology and Mycology (BOTY4103)
2. Lower Plants and Gymnosperms (BOTY4104)
3. Botany II Practical (BOTY4106)
4. Developmental and Reproductive Biology (BOTY4201)
5. Botany III Practical (BOTY4205)

Ph.D. / M.Phil Course Work

1. Research Methodology (BOTY5001)
2. Analytical Techniques in Plant Sciences (BOTY5002)

7. RESEARCH SUPERVISION:

Nil

8. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:

Member of various Committees

- Placement Cell (2016-2018)
- Implementation of MPH Programmes with AIIMS Patna (2016-2017)
- Community Engagement Programme (2016-2017)
- Ambience Committee (2016-2017)
- Felt Need Committee (2017)
- Deputy Centre Superintendent for GET/MET -2017
- Member Admission Committee (GET/MET) 2017
- Campus Development Committee (2018)
- Medical Committee (2018)
- Horticulture Ambience Committee (2018)
- Identification and Listing of Plants within University Campus (Chanakya Parishar)
- Member, Departmental Research Committee
- Member, Admission Committee
- Member, Purchase Committee

9. MEMBERSHIP OF SOCIETIES / PROFESSIONAL BODIES:

Nil

10. PUBLICATIONS :

A. BOOKS/MONOGRAPHS:

i. Chitin: Promising biopolymer for biomedical application. In: Recent advances in application of Fungi and fungal metabolites: Applications in Healthcare edited by Praveen Gehlot and Joginder Sing. Elsevier (Accepted)

ii. Cyanobacteria as a source of nanoparticle: Application and future projections. In: advances in cyanobacterial biology edited by Prashant Kumar Singh, Ajay Kumar, Vipin Kumar Singh and Alok Kumar Shrivastava. Elsevier, USA (Accepted)

B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:

i. Shelf Life Extension of Tomatoes by Gamma Radiation. Radiation Science and Technology 2016; 2(2): 17-24. **(ISSN Online: 2575-5943)**

ii. Antimicrobial Evaluation of Silver Nanoparticle-Polymer Composites Prepared by Gamma Radiation. American Journal of Polymer Science and Technology. 2016:2(2): 40-46. **(ISSN Online: 2575-5986)**

iii. Radiation sterilization of tissue allografts: A review. World Journal of Radiology. 2016;8(4):355 **(ISSN Online:** 1949-8470)

iv. Polyvinyl pyrrolidone/carrageenan blend hydrogels with nanosilver prepared by gamma radiation for use as antimicrobial burn wound dressing. Journal of Biomaterials Science, Polymer Edition. 2015; 26: 1269-1285. **(ISSN: 0920-5063; Impact Factor 1.733)**

v. Effect of Gamma Radiation on Chitin-Nanosilver Membranes. Macromolecular Symposia. 2015; 357: 116-123. **(ISSN: 1521-3900; Impact Factor 0.913)**

vi. Gamma radiation synthesis of colloidal AgNPs for its potential application in antimicrobial fabrics. Radiation Physics and Chemistry. 2015; 115: 62-67 **(ISSN: 0969-806X; Impact Factor 1.375)**

vii. Chitin membranes containing silver nanoparticles for wound dressing application. International Wound Journal. 2014; 11: 264-268. **(ISSN 1742-4801; Impact Factor 2.023)**

viii. Use of processed gamma-irradiated amniotic membrane for the healing of split skin graft donor site. Tissue Engineering and

Regenerative Medicine.2013; 10(3): 110-114. **(ISSN: 2212-5469; Impact Factor 0.613)**

ix. Radiation synthesis of PVP/Alginate hydrogel containing nanosilver as wound dressing. Journal of Materials Science: Materials in Medicine. 2012; 23: 2649-2658. **(ISSN 0957-4530; Impact Factor 2.325)**

x. Sterilization of bone allografts by microwave and gamma radiation. International Journal of Radiation Biology. 2012; 88(9): 661-666. **(ISSN 0955-3002; Impact Factor 2.124)**

xi. Papain incorporated chitin dressings for wound debridement sterilized by gamma radiation. Radiation Physics and Chemistry. 2012; 81: 1781-1785. **(ISSN: 0969-806X; Impact Factor 1.375)**

xii. Gamma irradiated bone allografts processed from femoral heads. Frontiers in Science. 2012; 2(5):119-126. **(Online ISSN: 2166-6113)**

xiii. Evaluation of radiation resistance of the bacterial contaminants from femoral heads processed for allogeneic transplantation. Radiation Physics and Chemistry. 2009; 78: 810-817. **(ISSN: 0969-806X; Impact Factor 1.375)**

xiv. Assessment of morphological and genetic diversity in *Gmelina arborea* Roxb. New Forests. 2009; 38: 99-115. **(ISSN 0169-4286; Impact Factor 1.636)**

C. PAPERS IN CONFERENCES PROCEEDINGS:

i. Bioremoval of rare earth elements by bacteria. Radiation Protection and Environment. 2008; 31, 352-354. **(ISSN: 0972-0464)**

ii. Radiation Processing of Biological Tissues – Tissue Banking. NAARRI International Conference on State of the Art Radiation Processing, Mumbai, 04-06 March, 2015

iii. Radiation Processing of Biological Tissues for Nuclear Disaster Management. International Conference on Emerging Frontiers and Challenges in Radiation Biology, Bikner, January 24-25, 2012; p. 55-65

11. Patents/Copyrights /IPR (If Any)

Process of preparing an antimicrobial wound dressing comprising nanosilver in a chitin matrix, and uses thereof. Application No: **201611034535 A** Publication Date: **13/04/2018**

12. INVITED TALKS:

Nil

13. RESEARCH PROJECTS *(COMPLETED / ONGOING)*:

Nil

14. PARTICIPATION & PRESENTATIONS IN SEMINARS/SYMPOSIA/WORKSHOPS/CONFERENCES:

I. Antimicrobial Evaluation of Silver Nanoparticle Synthesized by Gamma Radiation. National Symposium on Recent Trends in Chemical Sciences (RTCS-2019), Mahatma Gandhi Central University, Bihar, Motihari, 01 March, 2019

II. Screening of bacteria isolated from soil and water for biological synthesis of silver nanoparticles. International Conference, NanoSciTech 2016, Panjab University, Chandigarh, 18-20 February, 2016

III. Antimicrobial Evaluation of Silver Nanoparticle-Polymer Composites Prepared by Gamma Radiations. 2nd International Conference on Emerging Technologies: Micro to Nano. Manipal University, Jaipur, 24-25 October, 2015

IV. Processing of Gamma Irradiated Bone Allografts for Treatment of Injuries in a Nuclear Scenario. International Conference on Radiation Biology (ICRB-2014), INMAS, Delhi, November 11-13, 2014

V. Polyvinyl Pyrrolidone/Carrageenan-Nanosilver Composite Hydrogel Wound Dressing Synthesized by Gamma Radiation. International Conference on Polymeric Biomaterials Bioengineering & Biodiagnostics (Biomaterials 2014), IIT, Delhi, October 27-30, 2014.

VI. Preparation and Evaluation of Enzymatic Debriding Dressing for the Treatment of Burn Wounds. 20th Annual Conference of National Academy of Burns, Delhi, February 3-5, 2012; p. 39.

VII. Effect of Gamma Radiation on the Bioburden of Allogenic Tissues for Transplantation. International Conference on Emerging Frontiers & Challenges in Radiation Biology, Bikaner, January 24-25, 2012; p. 114.

VIII. Radiation Synthesis of PVP/Alginate Hydrogel as Wound Dressing. International Conference on Biomaterials and Implants: Prospects and Possibilities in the New Millennium, Kolkata, July 21-23, 2011. p. 114. (PO47)

IX. Gamma Irradiated Bone Allografts Processed from Femoral Heads. International Conference on Biomaterials and Implants: Prospects and Possibilities in the New Millennium, Kolkata, July 21-23, 2011. p. 113.

X. Preparation and Characterization of Chitin Dressings containing Papain for Wound Debridement. 4th World Ayurveda Congress and Arogya Expo 2010, Bengluru December 9-13, 2010

XI. Genetic diversity in different populations of *Gmelina arborea* Roxb. Poster Presented in National Symposium on Plant Biotechnology for Conservation, Characterization and Crop Improvement & 29th Annual Meeting of Plant Tissue Culture Association, Udaipur, 8- 10th Feb, 2008.

15. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

- DRDO Research Associateship
- DRDRO Research Fellowship

- CSIR-NET-2006
- GATE-2006
- Best Publication Award for Research Paper published in International Journal (National Science Day: 2010, 2011, 2013, 2014, 2015 & 2016) (Lab Level)

16. ANY OTHER SIGNIFICANT INFORMATION:

- External examiner at Dr. Rajendra prasad Agriculture University, Pusa, Samastipur, Bihar
- External examiner at Motihari Engineering College, Motihari, Bihar

(Dr. Durgeshwer Singh)

Department of Botany