

DR. NITIKA SINGH

Assistant Professor

Department of Botany

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Academic Qualification

HIERARCHY	YEAR	INSTITUTE
Ph.D.	2014	Jai Narain Vyas University, Jodhpur (India)
M.Sc. Botany	2009	Jai Narain Vyas University, Jodhpur (India) (79.67% with Gold medal)
B.Sc.	2007	Jai Narain Vyas University, Jodhpur (India) (70.91%)
Senior Secondary(Biology)	2003	R.B.S.E. (82.00%)
Secondary Examination	2001	R.B.S.E. (85.17%)

Ph.D. Title: ***IN VITRO AND IN VIVO STUDIES ON C₄ AND C₃-C₄ INTERMEDIATE PLANTS OF ARID REGION***

NET or Equivalent examinations:

EXAM	YEAR	INSTITUTE
NET (JRF)	2009	CSIR, New Delhi (India)
SLET	2010	RPSC, Ajmer
ARS NET	2010	ICAR, New Delhi (India)
GATE	2009	Dept. of Sec. and Higher Education, Ministry of HRD, Govt. of India

List of Publications:

1. Kunal Seth, Geetanjali Kumawat, Mukesh Kumar, Vishambhar Sangala, **Nitika Singh**, Amit Kumar Gupta, Harish (2022) Nitrogen Metabolism in Cyanobacteria in Ecophysiology and biochemistry of cyanobacteria. Springer 255-268.
2. **Singh N** (2021) Contemporary Global issues and challenges in Global warming and plants. Sunrise Publisher 102-107.

3. **Singh S** (2019) Comparative studies of two ecologically important species of genus *Cleome*. International Journal of Scientific Research and Review 7:142-146.
4. **Rathore NS**, Rai MK, Phulwaria M, Rathore N, Shekhawat NS (2013) Genetic stability in micropropagated *Cleome gynandra* revealed by SCoT analysis. Acta Physiol Plant 36:555–559.
5. **Rathore NS**, Rathore N, Shekhawat NS (2013) *In vitro* flowering and seed production in regenerated shoots of *Cleome viscosa*. Indust Crop Prod 50:232-
6. **Rathore NS**, Rathore N, Shekhawat NS (2013) *In vitro* propagation and micromorphological studies of *Cleome gynandra*: a C₄ model plant closely related to *Arabidopsis thaliana*. Acta Physiol Plant 35:2691-2698.
7. Shekhawat NS, Phulwaria M, Harish, Rai MK, Kataria V, Shekhawat S, Gupta AK, **Rathore NS**, Vyas M, Rathore N, JB V, Choudhary SK, Patel AK, Lodha D, Modi R (2012) Bioresearches of Fragile Ecosystem/ Desert. Proceeding of the National Academy of Sciences, India Section B: Biological Sciences 82(S2): 319-334
8. Shekhawat NS, Rathore MS, Shekhawat S, Choudhary SK, Phulwaria M, Harish, Rai MK, Jb V, **Rathore NS**, Patel AK, Kataria V (2012) Micropropagation of *Aloe vera* for improvement and enhanced productivity. Climate change and abiotic stress tolerance. In: Tuteja N (eds.) Wiley – Blackwell, Germany
9. Rathore N, **Rathore NS**, Shekhawat NS (2013) *In Vitro* Plantlet Regeneration from *Alysicarpus monilifer*, a Source of Hepatoprotective Drug. Proc Natl Acad Sci India Sect B Biol Sci 84: 815–822

Participation in Trainings/Seminar/Workshop

1. One week short term programme on Research methodology organized by UGC-Academic Staff College JNVU Jodhpur (Raj.) from 23-7-2012 to 28-7-2012.
2. Six months PhD Course work at J.N.V. University, Jodhpur, Rajasthan.
3. National Symposium on ‘Recent Advances in Plant Tissue Culture and Biotechnological Researches in India’ & XXXII Annual Meet of PTCA (India) organized by M. N. Institute of applied sciences Bikaner, Rajasthan (India) from 4-2-2011 to 6-2-2011.
4. National Symposium on “Impact of Plant Tissue Culture on Advances in Plant Biology” & and XXXIII Annual meet of PTCA (I) (India) organized by Loyola Centre for Research and Development and ST. Xavier’s College, Ahemdabad, Gujarat (India) from 19-1-2012 to 21-1-2012.

5. Workshop on Proteomics-2D PAGE organized by J.N.V.University, Jodhpur, Rajasthan (India) from 21-12-2011 to 23-12-2011.
6. Training programme on Research methodology and instrumentation organized by University Science Instrumentation Centre, JNVU, Jodhpur from 10-2-2010 to 13-2-2010
7. Seminar on Biotechnology-Opportunities and challenges in India in the 21st Century organized by Lachoo memorial college of Science and technology, Jodhpur and DST on 18-3-2008.
8. Microsoft office training from 22nd Oct to 26th Oct 18 at JDB College, Kota.
9. International conference on Mankind at crossroads: challenges and solutions organized by Gov. Bangur PG college, Pali.
10. 14th International Conference on recent trends in engineering science and management held on 16th – 17th February 2019 by Vedant college of technology and engineering, Bundi.
11. 47th National conference on Sustainable desert tourism and environment: Perspective and challenges on 13th -14th September 2019 at Government College Jaisalmer.
12. Recent Trends in environmental sustainability and green practices by Gov College Bundi on 15-16 November 2019.
13. Online training programme (23-24 June 2020) on RTTP Act 2012 and Rules 2013 by government of Rajasthan.
14. Online training (25-26 June 2020) training programme on Good governance by government of Rajasthan.
15. Paper presentation on 'Plants as renewable energy source' in International Conference on 'Environment, Sustainable development and Human Health' on 16-17 December 2022 jointly organized by Seth Rangmal Kothari Government Post Graduate College, Rajsamand, Rajasthan and Maharana Pratap Government Post-Graduate College , Chittorgarh, Rajasthan, India in collaboration with Government Postgraduate Science College, Sikar Rajasthan.
16. Paper presentation on 'Recent Trends of research on plants as source of Biodiesel' in 'National Seminar on Current Trends of Research in Biological Sciences' on 27-28 February 2023 organized by Department of Botany, Janki Devi Bajaj Government Girls College, Kota under the aegis of IQAC and IBS Kota Chapter.
17. Paper presentation on 'Paryavarniya Samsyaon ke Paripekhyā me Hindi Cinema' in International Seminar on Sahitya, Samaj avam Hindi Cinema on 18 January 2023 organized by Government Girls College, Kota, Rajasthan.

Organization of Trainings/Seminar/Workshop

1. Organized 'National Seminar on 'Current Trends of Research in Biological Sciences' as Convener on 27-28 February 2023 organized by Department of Botany, Janki Devi Bajaj Government Girls College, Kota under the aegis of IQAC and IBS Kota Chapter.

Orientation / Refresher/ FDPs

1. UGC sponsored orientation programme from 5th -24th December 2019 at MDS University Ajmer.
2. Faculty Development Programme on 14th -15th February 2020 at Government College Kota.
3. Gyan Ganga state level online Faculty Development Programme on 25th - 31th January 2021 organized by M. S. J. Govt. (P.G.) College Bharatpur.
4. Two weeks online National Interdisciplinary Refresher course on "Research methodology and Data analysis (Sharpening skills through MS Excel, SPSS, MATLAB and R" from 24th March to 7th April 2021 by Teaching Learning Centre, Ramanujan College, University of Delhi.
5. UGC - Approved Short Term Professional Development Programme under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching on 'Implementation of NEP-2020 for University and College Teachers' held from 20-29 January 2023 organized by Indra Gandhi National Open University.
6. Faculty Development Programme on 'Teaching Learning Techniques and Research Ethics' organised by Janki Devi Bajaj Government Girls College Kota, Rajasthan and Jaipuria Institute of Management Jaipur , Rajasthan from 6-11 February 2023.

Other Important Information

Teaching

- Four academic years of teaching experience to Under Graduate Students at J.N.V. University, Jodhpur, Rajasthan (2009-2012).
- From October 2018 working as assistant professor and teaching both UG and PG students at Government College Bundi (From October 2018-August 2022) and Janki Devi Bajaj Government Girls College Kota (From August 2022 to Current).

Research

- Hands on instruments like Electrophoresis (SDS-PAGE, 2D-PAGE and Agarose Gel Electrophoresis), PCR, Gel Documentation System, Fluorescent Microscope, Inverted Microscope, Stereo microscope Spectrophotometer, Refrigerated Centrifuges, Laminar air flow cabinet etc. Well versed with Statistical analysis like ANOVA, using software platform like SPSS, free tree, etc.
- Computer Skills - Word Processing and Documentation: MS-Office. Slide Presentation and Graphics: MS-PowerPoint, Online teaching and learning by You tube, Google Class Room etc.