

Curriculum Vitae

Prof. M. M. Singh

Institute of Earth Sciences

Dean/Director, Faculty of Engineering &

UGC Nodal Officer

Bundelkhand University, Jhansi

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- **Teaching and Research Fields:**
 - ✓ Petrology, Hydrogeology,
 - ✓ Remote Sensing, and
 - ✓ Environmental Geology/Geomorphology
- **Teaching and Research experience: More than 20 Years**
- **Academic Qualification**

Examination	Name of the University/ Board	Year of passing	Division	Subject
B. Sc. (Hon's) Geology	Manipur University	1993	II	Geology (H), Physics, Maths.
M, Sc. Applied Geology	Kurukshetra University	1996	I	Applied Geology
NET (JRF in Dept. of Geology, University of Delhi from 16.10. 1997 to 31.10.1999)	CSIR	1996 December		Earth Sciences
Ph.D.	Bundelkhand University	13-02-2005		Petrology of Supracrustal rocks of Bundelkhand Massif, Babina Mauranipur Transect, U.P.

- **Record of Service in Bundelkhand University**

Lecturer	02-11-1999 to 03-04-2005
Reader	04-04-2005 to 03-04-2008
Associate Prof,	04-04-2008 to 31-03-2012
Professor	01-04-2012 to Continue

- **Personal Information**

Father's Name- M. Ibotombi Singh

Date of Birth- 2nd January, 1971

Marital Status- Married Male

- **Permanent Address:**
Near K.M.C. Kakching, Manipur-795103, India.

- **Co-curricular Extension, Professional development activities**

Students related Co-curricular, extension and field based activities	<ul style="list-style-type: none"> • Coordinator, NSS 2010 to 2014 • Student counseling for admission to various Departmental and other courses. • Member, Youth Festival Organizing Committee. • B. Sc and M.Sc. Field training
Contribution to Corporate life and management of the department and institution through participation in academic and administrative committees.	<ul style="list-style-type: none"> • Dean/Director Faculty of Engineering • Dean Science (October 2018-2021) • UGC Nodal Officer (Since 2018) • Head, Department of Geology (July 2011 to July 2014 and July 2017 - till Date) • Member, Disciplinary Committee • Warden, Samta Boys Hostel (2007-2012) • Estate Officer (2008-2011) • In-charge, University Health Centre, • Member E.C. • Member A.C. • Member, Selection Committees (Teaching and Non-teaching, permanent, SFS, etc) • Member, IQAC • Member, Departmental BOS since November 1999 • Revised the Syllabus of B.Sc. and M.Sc. Geology • Admission Committee • Coordinator, Equal opportunity Cell (March 2016 onwards) • In Charge, Coding and Decoding of Answer Books • 16. In Charge, Innovation Centre (Instrumentation Centre)
Professional Development activities	<ul style="list-style-type: none"> • Life Member of "Indian Society of Remote Sensing" Journal, IIRS Campus, Dehradun, Uttarakhand. • Life Member: Indian Association of Soil and Water Conservationist, Central Soil and Water Conservation Research and Training Institute, Dehradun, Uttarakhand. • Life Member: Indian Geological Congress, Roorkee (LM-895). • Organized and attended International and National level Conferences/Seminars

PUBLICATIONS

Published Book:

- **Supracrustal Rocks of Bundelkhand Massif, India**, 2015, LAP LAMBERT Academic Publishing, Germany, ISBN: 978-3- 659-33471- 9, 240 p.

Published Papers:

1. Adesh Patel, M.M. Singh, Sudhir Kumar Singh, Kamlesh Kushwaha and Rubal Singh, **2022**: AHP and TOPSIS Based Sub-Watershed Prioritization and Tectonic Analysis of Ami River Basin, Uttar Pradesh, Journal of the Geological Society of India, Vol; 98: pp. 429-430.
2. Singh, V.K., Slabunov A.I., Nesterova, N.S., **Singh, M.M.**, Bhatt, S.C. **2021**: Tectonostratigraphic Terranes of the Bundelkhand Craton (Indian Shield,), Geological and Geo-Environmental Processes on Earth, Eds; Shandilya, A. K., Singh, V. K., Bhatt, S. C., Publisher; Springer Nature, pp. 155-164, (Refereed).
3. Bhatt, S. C. Singh Rubal, Singh, Rahul, MohdSaif and **M.M. Singh, 2021**: A GIS-based Approach for Morphometric Analysis of Jamini Basin and Its Subwatersheds: Implication for Conservation of Soil and Water Resources Edited by A K Shandliya, V K Singh, S C Bhatt and C S Dubey, publisher: Springer Nature, pp. 243-257, (Refereed).
4. Kamlesh Kushwaha, **Singh, M.M.**, Sudhir Kumar Singh, Adesh Patel, **2021**: Urban growth modeling using earth observation datasets, Cellular Automata-Markov Chain model and urban metrics to measure urban footprints. Remote Sensing Applications: Society and Environment (Elsevier), Volume 22, 100479, pp.1-18, (Refereed).
5. **Singh, M.M.**, Vinod K. Singh., **2019**: Geochemistry and tectonic setting of the Supacrustal rocks from the central part of the Bundelkhand Craton, India. Journal of Geoscience, Engineering, Environment, and Technology, Special Volume 04 No 02-2, pp 3-10, (Refereed).
6. Shree Ganesh, **Singh, M. M.**, **2019**: Impact of stone crusher on ambient air quality and human health Jhansi region in Bundelkhand UP, International Journal of Scientific & Technology Research, volume 8, issue 08, pp-1165-1167, (Refereed).
7. Prashasti Ashok, **Singh, M. M.**, **2019**: "Analysis of IRS data using GIS for the assessment of relative change percent (RCP) in agriculture" UGC Journal. No. 45489, RESEARCH DIRECTIONS, ISSN NO – 2321-5488, Impact Factor – 5.7 (UIF), Vol: 6, Issue: 8, pp. 238-242, (Refereed).
8. Shree Ganesh, **Singh, M. M.**, **2018**: Status of air quality in and around stone crusher at Jhansi Town, U.P. India. Journal of Emerging Technologies and Innovative Research, Volume 5, Issue 11, pp-593-612, (Refereed).
9. Purushottam Sharma, **Singh M.M.**, Amit Sharma **2018**: Morphometric Analysis of Sukhnai River with the help of Remote Sensing Data and Arc-GIS in Bundelkhand Region, Central India. International Journal of Creative Research Thoughts (IJCRT), Volume 6, Issue 1 (ISSN: 2320-2882), (Refereed).

10. Purushottam Sharma, **Singh, M.M.**, Amit Sharma., **2018**: Morphometric Analysis of Lakhari River. *Quest International Multidisciplinary Research Journal*, Volume 7, Issue 1, pp 129–140 (ISSN: 2278 - 4497), (Refereed).
11. **Singh, M.M.**, Purushottam Sharma., **2017**: Morphodynamics of River Betwa: An Analytical Review of Literature. *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 6, Issue 7, pp. 15150-15155 {ISSN (Print): 2347-6710}, (Refereed).
12. Dubey, P, **Singh, M.M.**, Pandey, H.K. **2014**: Aquifer parameterization in an alluvial area: Varanasi distt., U.P. India- A case stud. *International journal of innovative research in science, engineering and technology*. Vol. 3(1), pp. 9016-9023, (ISSN: 2347-6710, Refereed).
13. Prashasti Ashok, **Singh, M. M.**, Shakti Saxena, Maneesh S., **2014**: “A sustainable land resource utilization plan for rain fed area- A micro level study” *Advances in Economics and Business Management (AEBM)*, Krishi Sanskriti Publications, Volume 1, Number 3; pp. 200-206, (Print ISSN: 2394-1545; Online ISSN: 2394-1553, Refereed).
14. Saurabh K. Yadav, **Singh M.M.**, Vinit Kumar **2013**: Effect of air pollutants in Biochemical parameters of Selected plant Species of Jhansi City (UP). *International Journal of Engineering Technologies In computational and Applied Sciences*. V6 (2), pp. 168-173, (ISSN 2279-0047, Refereed).
15. Yadav, S. K., **Singh, M.M.**, **Kumar, V.**, Pathak, A.K., **2012**: Ambient Air Quality at Granite Mining Site and It’s Adjoining Residential Areas in Jhansi City (Uttar Pradesh) India *International Journal of Current Research*, Vol. 4, Issue, 03, pp. 015-018, (ISSN 0975-833X, Refereed).
16. Yadav, S. K., Kumar, V., and **Singh, M.M.**, **2012**: Assessment of Ambient Air Quality Status in Urban Residential Areas of Jhansi City and Rural Residential Areas of Adjoining Villages of Jhansi City. *International Journal of Advanced Engineering Technology*, Vol.III Issue I/January-March, pp. 280-285, (E-ISSN 0976-3945, Refereed)
17. Yadav, S. K., Kumar, V., and **Singh, M.M.**, **2012**: Determination of Outdoor (Ambient) and Indoor Air Quality Status in the Rural Residential Adjoining Jhansi City, *International Journal of Current Research*, Vol. 4(03), pp. 092-097, (ISSN 0975-833X, Refereed).
18. Pathak, A.K., **Singh, M.M.**, V., Kumar, S. Arya, and A.K., Trivedi, **2012**: Assessment of Physico- chemical properties and microbial community during composting of municipal solid waste (viz. kitchen waste) at Jhansi city, U.P. (India), *Recent Research in Science & Technology*. V. 4(4), pp. 10-14 (ISSN 2076-5061, Refereed).
19. Pathak, A.K. **Singh, M.M.**, Kumar, V. **2012**: Composting of Municipal Solid Waste (Viz. Kitchen Waste): A Tool for improving soil quality in Bundelkhand Region, *International Journal of Current Research*. V.4, Issue 8, pp. 006-011, (ISSN-0975-833X, Refereed).

20. Pathak, A.K., **Singh, M. M.**, Kumar V. **2012:** Growth and yield of *Lycopersicum esculentum* mill grown in municipal solid waste (viz. kitchen waste) compost amended soils, *International Journal of Recent Scientific Research*. V. 3, Issue 2, pp. 75-79, (ISSN 0976-3031, Refereed).
21. Yadav, S. K., **Singh, M.M.**, Kumar, V and Jain, A.K. **2012:** Status of Ambient Air Quality of Residential, Commercial, Heavy Traffic Street and Sensitive Areas of Jhansi City, Bundelkhand (India). *International Journal of Advanced Scientific and Technical Research*. V.2 (3), pp. 132-145, (ISSN 2249-9954, Refereed).
22. Pathak, A.K., **Singh, M.M.**, Kumar, V. **2012:** Performance of *Solanum melongena* L. grown in Municipal Solid waste (viz. kitchen waste) compost amended soil, *Journal of Chemistry and Chemical Sciences*.V.2(4), pp.138-147, (ISSN 2229-760X , Refereed).
23. **Singh, M.M.** and Singh, V K. **2011:** Geochemistry and tectonic setting of the TTG – Gneiss and granite from central part of the Bundelkhand craton, India. In: *Proceedings of the 2nd International Conference Precambrian Continental Growth and Tectonism* (Eds: Singh, V.K. and Chandra R.), pp. 95-102, (ISBN: 978-81-7879-964-3).
24. Pathak, A.K., **Singh, M.M.**, Kumar, V. **2011:** Composting of Municipal Solid Waste: A Sustainable Waste Management Technique in Indian City – A Review, *International Journal of Current Research*, Vol. 3, Issue, 12, pp. 339-346, (ISSN-0975-833X, Refereed).
25. Pathak, A.K., **Singh, M.M.**, Kumar, V. and Trivedi, A.K., **2011:** Phytoremediation of Municipal Solid waste landfill site-A Review, *Journal of Chemistry and Chemical Sciences*. Vol. 2 (1), pp. 77-91 (2012), (ISSN 2229-760X, Refereed).
26. Singh, S.P. and Singh, **M.M.**, **2009:** Geochemistry of Archean Mafic and Ultramafics Rocks from central part of Bundelkhand craton: Implication in the Archean crustal Evolution. *Jour. Economic Geology and Geo-resource Management*, Vol. 8. pp. 1-15, (ISSN: 0973-4384, Refereed and Indexed).
27. Singh, S. P., **Singh, M. M.**, and Srivastava, G. S. and Basu, A. K. **2007:** Crustal evolution in Bundelkhand, Central India. *Himalayan Geol.*, v. 28, pp. 79–101, (ISSN 0971-8966, Refereed).
28. Joshi, B. C., **Singh, M. M.**, and Kumar, K., **2003:** Upgrading of tourism through Geoscientific approach in Himalayan region. In: Ranga, M. and Nigam, D. (Eds.): *New approaches in tourism management*, Abhijit Publication, Delhi, pp. 278-288, (ISBN 81-88683), (Book).
29. Joshi, B. C., Singh, S. P., Kumar, K., and **Singh, M. M.**, **2002:** Geological and Geotechnical Observation on the Chamoli earthquake, Garhwal Himalaya. In: Pant, C. C., and Sharma, A. K. (Eds.): *Aspects of geology and environment of the Himalaya*, Pub. Gyanodaya Prakashan, Nainital, India, pp. 229-248. (Proceeding).

30. **Singh, M. M. & Singh, S. P., 2001:** Mineral resources in Bundelkhand region, Proceeding volume, National Seminar on Natural Resources and Management in U.P. with Special reference to Bundelkhand region, pp. 31-37. (Proceeding).
31. Singh, C. B. and **Singh, M. M., 2001:** Sustainable development of land resources of Bundelkhand region, U.P., Proceeding Volume, National Seminar on Natural Resources and Management in U.P. with Special references to Bundelkhand region, pp. 39-43. (Proceeding)

• **Invited Talk/Chaired Session:**

Title of the paper presented	Title of conference / Seminar	Organized by
Geochemistry of Archaean mafic and ultramafic rocks from central part of Bundelkhand craton: implication for crustal evolution.	International Conference on Precambrian Continental Growth and Tectonism (PGCT). 23 to 26 Nov. 2013	Institute of Earth Sciences, Bundelkhand University Jhansi, UP India
Application of Remote Sensing and GIS in Aquifer Mapping	“Sustainable Development and Management of Ground Water Resources” 26-30 Dec. 2016	Central Ground Water Board, Northern Region, Govt. of India in Dept. of Geology B.U. Jhansi
Aquifer Parameters Determination Pumping Test Methods and Analysis.	do	do
Chaired and presented Paper on Applied RCP method of Landuse/ Landcover changing pattern on river Sind.	Land Resources: Challenges and Remedies (with special reference to Bundelkhand region). 28th Nov. 2014	Institute of Economics and Finance

• **Paper Presented in Seminars/workshop/Symposia etc.**

Sl. No.	Title of the Paper Presented	Title of Conference/Seminar etc.	Organized by
1	Geology and Natural Environment of the Lesser Himalaya: Present Status and Strategy for the next two Decades	National Seminar on Effects of Earthquake on Road, building Structures and Slope Stability in Chamoli Region of Uttaranchal. 23-25 March 2001	Department of Geology, Kumaunm, University, Nainital,
2	Sustainable development of	National Seminar on Natural	Dept. of Banking,

	land resources of Bundelkhand region, UP.	resources and management in UP with special references to Bundelkhand region. 5-16 March 2001	Economics and Finance, Jhansi.
3	Mineral resources in Bundelkhand region.	do	Dept. of Banking, Economics and Finance, Jhansi
4	Crustal evolution in Bundelkhand Massif.	International Conference on Precambrian Continental Growth and Tectonism (PGCT). 22 to 24/02/2005	Institute of Earth Sciences, Bundelkhand University Jhansi, UP India.
5	The role of remote sensing techniques for landuse/landcover studies	National seminar on Internal regional disparities in land-use and remedies for optimum utilization of land. 21 st Nov. 2009	Dept. of Banking, Economics and Finance, Jhansi
6	Composting of Municipal Solid Waste (Viz. Kitchen Waste): A Tool for improving soil quality in Bundelkhand Region	National Symposium on "Sustainable Development: Environment and Socio-Economic Challenges" 14-16 Oct. 2011	Institute of Environmental and Development Studies, BU Jhansi.
7	Physico-chemical and microbial aspects of municipal solid waste compost during composting process at Jhansi city, U.P. (India)	National Conference on Environment and Biodiversity of India. Dec.2011	North East Centre for Environmental Education and Research (NECEER), Imphal
8	Geochemistry of Archaean mafic and ultramafic rocks from central part of Bundelkhand craton: implication for crustal evolution.	International Conference on Precambrian Continental Growth and Tectonism (PGCT). 23 to 26/11/ 2013	Institute of Earth Sciences, Bundelkhand University Jhansi, UP India
9	Applied RCP method of landuse/ Landcover changing pattern on river Sind.	National Seminar on Land Resources: Challenges and Remedies (with special reference to Bundelkhand region). 28 th Nov. 2014	Dept. of Banking, Economics and Finance, Jhansi
10	REE-Geochemistry and origin of Khondalites and Leptynites from Narsipatnam area, Eastern Ghats, India	National Conference and Field Workshop on Precambrians of India. 22-24 Nov. 2016	Institute of Earth Sciences, Bundelkhand University Jhansi, UP India.

11	Delineating of LULC change for improving profitability of farming: using remote sensing and GIS technology in northern part of Raigarh dist., Chhattisgarh, India	do	Institute of Earth Sciences, Bundelkhand University Jhansi, UP India.
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• **Organized International, National, University Level Workshop and Conferences**

- International Conference on Precambrian Continental Growth and Tectonism (PGCT) 2009, 2013.
- Workshop for Program Officers of National Service Scheme (NSS), **2010 and 2012** sponsored by Ministry of Youth Affairs and Sports Govt. of India.
- National Conference and Field Workshop on Precambrians of India. 22-24 Nov. 2016
- Workshop/Training on different Instruments for Teaching Faculty members and Research Scholars from Campus and Colleges at Innovation Centre (2018)

• **Training courses /workshop attended**

Sl. No.	Name of the course and Sponsoring Agency	Place and Duration
1.	Datamine Systems. Datamine International, WELLS, UK	Department of Geology, University of Delhi. 13-15, September 1999
2	Genesis and Evolution of Geothermal Systems with special reference to the mechanics of magma. UNESCO	Department of Geology, University of Delhi. 30 th November to 4 th December 1999.
3	"GIS: Technology and Applications. National Remote Sensing Agency Hyderabad	Indian Institute of Remote sensing, Dehradun. 3 rd January to 10 th March 2000.
4	Training and Orientation for NSS. Ministry of Youth affairs and sports, Govt. of India	TOC, Literacy House, Lucknow. 27 th August to 5 th September 2002
5	Research Methodology. IQAC	Bundelkhand University Jhansi 20-26 February 2014.
6	Aquifer Management through Participatory Approach and Local Ground Water Issue. Central Ground Water Board, Northern Region, Lucknow, Govt. of India.	Museum Hall Jhansi, UP 22-23 January 2015
7	Workshop on "Chiteri Lok Kala"	Dept. of Fine Arts, Bundelkhand

		University Jhansi 10-16 September 2015
8	National Workshop on Photography (Chhaya Abhivyakti)	Dept. of Fine Arts Bundelkhand University Jhansi 4-10 February 2016

• **Research projects**

Title	Agency	Period	Amount	Status
Geodynamics of Precambrian crustal evolution of Bundelkhand and Bastar Craton, Central India.	U.P. Govt	Since 2008 onwards	Rs122 Lakh	On Going
Integrated approach for the sustainable development of geological and natural resources in Bundelkhand region.	Ministry of Mines, Govt. of India	2003- 2009	Rs 285 Lakhs	Completed

• **Research Guidance:**

Ph.D.		M.Sc. Dissertation
Completed	Pursuing	More Than 70
03	04	
Area: Geo-Environmental Science	Area: Geo-Environmental Science & Geomorphology	Area: Hydrogeology, Remote Sensing & Petrology

Date: Jan., 2021

Place: Jhansi

Prof. M.M. Singh