Dr. Sarita Gajbhiye Meshram, Ph.D, DSKPRF

Inspire Fellow, Kothari Fellow

Dr. Sarita Gajbhiye Meshram (Director & CEO)

Water Resources & Applied Mathematics Research Lab,

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1. PERSONAL INFORMATION

a. Application Name

First Name: Sarita Gajbhiye

Family Name: Meshram

DOB: 08/06/1986

b. Web-Sites

WRAM Research Lab: https://wramrl.com/

Google scholar:http://scholar.google.co.in/citations?user=UggcdGoAAAAJ&hl=en

Academia: https://iitr.academia.edu/SaritaGajbhiye

Linkedin: https://www.linkedin.com/pub/sarita-gajbhiye/34/118/129

Researcher Id: H-2504-2013, Orcid Id: 0000-0001-5453-3791

Scopus Author ID: 57190754999

c. Contact Information

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2. LANGUAGES

1. English (Fluent)
2. Hindi (Basic)
3. Marathi (Mother Tongue)

3. EDUCATIONS AND CERTIFICATES

1. Postdoctoral Fellow (Dr. DS Kothari PDF), Department of Mathematics and Computer Science, RD University, Jabalpur (M.P.) (5 Feb, 2016-5 Feb 2019)
2. Postdoctoral Fellow (UGC-PDF-Women), Department of Atmospheric and Ocean Studies, Central University of Allahabad, Allahabad (4 Nov, 2015-4 Feb, 2016)
3. Doctor of Philosophy, Department of Water Resource Development and Management, Indian Institute of Technology (IIT), Roorkee (2015).
4. Master of Technology, Soil Water Engineering, College of Agricultural Engineering, JNKVV, Jabalpur (M.P) (2009).
5. Bachelor of Technology, Agricultural Engineering, College of Agricultural Engineering, JNKVV, Jabalpur (M.P) (2007).
    - PDF Research Title (Dr. DS Kothari): An application of Spline approximation function to soil erosion modelling for a part of Narmada Basin, India.
    - PDF Research Title (UGC-PDF-Women): Impact of Climate Change on Water Resources and Future Soil Erosion.
    - Ph.D. thesis title: Investigation of Some Critical Aspects of Rainfall-Runoff-Sediment Yield Modelling. (PhD vivo-voce date 6 April 2015)
    - M. Tech. thesis title: Assessment of Ground Water Quality at Some Selected Waste Water Irrigated Sites.

4. PROFESSIONAL EXPERIENCE

- Research Faculty (TDTU, Vietnam), Department for Management of Science and Technology Development, Vietnam (2019-till).
- Project Officer (Soil and water conservation applications) with BAIF Foundation Bhopal, M.P., India (Aug. 2009 to Dec. 2009).

5. RESEARCH INTERESTS

- Application of RS and GIS in Hydrology and Water Resources
- Water quality management
- Soil and Water Conservation Engineering

- Hydrological Modelling of Watershed
- Rainfall-runoff-sediment yield modelling
- Morphometric analysis/Geohydrology
- Trend Analysis/Time Series Analysis
- Drought/Flood Analysis
- Spline Approximation
- Multi-Criteria Decision Making (MCDM) Methods
- Artificial Intelligence technique
- Probability analysis
- Big Data Analysis

6. EDITORIAL

a. Editor

1. International Conference on Mechanics, Civil Engineering and Building Material, MCEBM-2017 (Editor)
2. SDRP Journal of Earth Sciences & Environmental Studies (Editor)
3. International journal of Applied Science (Editorial board member)
4. International journal of Recent Technology & Engineering (Editorial board member)
5. International journal of Inventive Engineering & Sciences (Editorial board member)
6. International Journal of Engineering Trends and Technology (Editorial board member)
7. Academic journal online (Editorial Board member of management)
8. Blue Eyes Intelligence Engineering & Sciences Publication all journal (Editorial board member previous)
9. International Journal of Engineering and Advanced Technology(TM) (Editorial board member)
10. International Conference on Advanced Computation and Telecommunication-2018 (Editorial board member)

b. Reviewer of International Journal:

1. International Journal of Remote Sensing (Taylor and Francis)
2. Frontiers of Earth Science (Springer)

3. Theoretical and Applied Climatology (Springer)
4. Natural Resources Research (Springer)
5. Natural Hazards(Springer)
6. Bulletin of environment Science
7. International Journal of Global Warming (Inderscience)
8. Int. J. of Agricultural Resources, Governance and Ecology (Inderscience)
9. Sky Journal of Journal of Soil Sciences and Environmental Management
10. Environmental Engineering Science
11. Environmental Development and Sustainability
12. Water Resource Management (Springer)
13. Indian Association of Hydrologists (IAH Journal)
14. Journal of Water Resource and Protection (Scientific Research)
15. International Journal of Scientific Engineering and Technology
16. International association civil, agricultural and environmental engineering researcher
17. Publicon international publication
18. International Journal of Scientific Engineering and Technology
19. Water conservation science and engineering (Springer)
20. Hydrological Sciences Journal (Taylor and Francis)
21. Applied Water Science (Springer)
22. Mathematical Problems in Engineering (Hindawi)
23. Catena (Elesvier)
24. Geological Society of India (Springer)
25. Indian Society of Remote sensing (Springer)
26. Arabian Journal of Geosciences (Springer)
27. Soft Computing (Springer)
28. Applied Soft Computing (Elesvier)
29. Hydrology Research (IWA Publishing)
30. Journal of Hydrologic Engineering (ASCE Library)
31. Environmental Processes (Springer)
32. Information processing in agriculture (Elesvier)

c. Reviewer of International Conferences

1. International Conference on Water Resource and Environment (WRE2015)

2. International Conference on Civil, Architecture And Transportation Engineering (CATE-16)
3. International Conference on Civil, Agricultural And Environmental Engineering (CAGEE-16)
4. Bangkok International Conference on Civil, Architectural And Environmental Engineering (CAEE-16)
5. International Conference on Civil, Environment And Waste Management (CEWM-16)
6. International Conference on Agricultural, Civil and Environmental Engineering (ACEE-16)
7. International Conference on Transportation, Civil and Architectural Engineering (TCAE-16)
8. International Conference on Research in Civil, Ecology and Environmental Engineering (RCEEE-2016)
9. 3rd International Conference on Computing, Engineering and Technologies (ICCET 2016)
10. 2nd International Conference on Sustainable Energy and Environmental Engineering (SEEE·16)
11. International Conference on Agriculture Forest Food Sciences and Technologies (ICAFOF 2017)
12. 3rd International Congress on Technology - Engineering & Science (ICTES 2017)
13. International Conference on Mechanics, Civil Engineering and Building Material (MCEBM-2017)
14. 2nd International Conference on Sustainable Computing Techniques in Engineering, Science and Management (SCESM 2017)
15. 2nd International Conference on Environmental Science and Energy Engineering (ICESEE2017)
16. International Conference on Nanotechnology, Environmental and Civil Engineering (ICNECE-2016)
17. 4th International Conference on Computing, Engineering and Technologies (ICCET 2017)
18. 5th International Conference on Advanced Computing, Engineering & Technology (ICACET 2017)

19. International Conference on Energy and Environmental Science (ICEES 2017)
20. International Conference on Civil, Architectural and Structural Engineering (ICCASE-2016)
21. 4th International Congress On Technology - Engineering & Science (ICONTES-2017)
22. 4th International Conference on Advances in Computer Science and Engineering (ICACSE 2017)
23. International Conference on Advanced Computation and Telecommunication (ICACT-2018)
24. International Conference on Agriculture Forest Food Sciences and Technologies (ICAFOF 2018)
25. International Association of Civil, Agricultural & Environmental Engineering Researchers

d. International Member of Program Committee

1. International Conference on Environment, Climate Change and Sustainable Development(ECCSD2016)
2. Agricultural and Bio systems Engineering WASET
3. CAEER Committee (http://uruae.org/single_committee.php?committee=CAEER)
4. 3rd International Conference on Computing, Engineering and Technologies (ICCET 2016)
5. 2nd International Conference on Sustainable Energy and Environmental Engineering (SEEE·16)
6. International Conference on Agriculture Forest Food Sciences and Technologies (ICAFOF 2017)
7. 3rd International Congress on Technology - Engineering & Science (ICTES 2017)
8. International Conference on Mechanics, Civil Engineering and Building Material (MCEBM-2017)
9. 2nd International Conference on Sustainable Computing Techniques in Engineering, Science and Management (SCESM 2017)
10. 2nd International Conference on Environmental Science and Energy Engineering (ICESEE2017)

11. International Conference on Nanotechnology, Environmental and Civil Engineering (ICNECE-2016)
12. 4th International Conference on Computing, Engineering and Technologies (ICCET 2017)
13. 5th International Conference on Advanced Computing, Engineering & Technology (ICACET 2017)
14. 4th International Congress on Technology - Engineering & Science (ICONTES-2017)
15. 4th International Conference on Advances in Computer Science and Engineering (ICACSE 2017)
16. International Conference on Advanced Computation and Telecommunication (ICACT-2018)
17. International Conference on Agriculture Forest Food Sciences and Technologies (ICAFOF 2018)
18. International Congress on Agriculture and Animal Science (ICAGAS 2018)
19. 7th International Conference on Advanced Computing, Engineering and Technology (ICACET 2019)
20. 10th International Conference on Computing, Engineering and Communication Technologies (ICCECT 2019)
21. 6th International Conference on Advances in Computer Science, Engineering and Technology(ICACSET 2019)
22. 7th International Congress on Technology - Engineering & Science (ICONTES 2019)

e. Member of International Association and Society

1. Student Member, American Society of Civil Engineers (ASCE): http://www.asce.org
2. International Association of Engineers (IAENG), Hong Kong
3. World Academy of Science, Engineering and Technology (WASET), New Zealand.
4. Science and Engineering Institute (SCIEI)
5. Asian Association for Agricultural Engineering (AAAE)
6. A Water and Enviro Modelling Group (AWEM)
7. International Society for Agricultural Meteorology: http://www.agrometeorology.org
8. International Association of Hydrological Sciences :http://iahs.info/
9. International Commission on Statistical Hydrology:http://www.stahy.org/ICSH/tabid/36/Default.aspx

10. International Society for Development and Sustainability (ISDS) (Associate member)

7. HONORS AND AWARDS

1. M.P. state scholarship for graduation (Rs 1000/- pm), during 2003-2007.
2. UGC Fellowship for Post-Graduation (Rs. 5000/= pm.), University Grant Commission, 2007-2009.
3. M. Tech Gold Medal award (2012).
4. DST-Inspire fellowship (18000/= pm), Department of Science and Technology, 2011-2014.
5. UGC-PDF Women Fellowship (38800+HRA per month), University Grant Commission, New Delhi, Nov, 2015-Feb, 2016.
6. Dr. DS Kothari PDF Fellowship (43400+HRA per month), University Grant Commission, New Delhi, Feb, 2016-FEB, 2019.

8. INTERNATIONAL RESEARCH PROJECT AWARDED (02)

1. Title : Forecasting and modelling for soil erosion (FOSTECH.2020.27)
   Funding Agency: FOSTECH, Vietnam
   Fund allotment: 440 million Vietnamese dong
   Duration: June 2020- May 2022
   Role: Principal Investigator (PI) (2 total)

2. Title: Sustainable Management of urban waste, energy and water (RGP.1/174/42)
   Funding Agency: Deanship of Scientific Research, King Khalid University, Abha, KSA,
   Fund allotment: 1 Lac Saudi Rial
   Duration: Jan 2021- December 2021
   Role: Co-Principal Investigator (Co-PI) (6 total)

9. KEYNOTE SPEAKER

1. Keynote Speaker, International Virtual Conference on Interdisciplinary Development in

Science Technology and Humanities, August 5-6, 2020.

10. PUBLICATIONS

a. Books/Chapters

1. Balram Ambade, Basant Shubhankar, Sudarshan Kurwadkar, Amit Kumar, Santosh Kumar Verma**, Sarita Gajbhiye Meshram**, Chandrashekhar Meshram, Sonu Kumar Goyal (2020). Polychlorinated biphenyl in sediments of Subarnarekha River: Levels, temporal and spatial distribution, feasible sources, and inventory. Dioxin: Environmental Fate, Human Health, and Ecological Consequences (book), pp 1-22 (Taylor & Francis).
2. **Sarita Gajbhiye Meshram** and Vijay P. Singh (2018). Probabilistic Estimation of Design Daily Runoff from Bamhani Watershed, India. In: Singh V., Yadav S., Yadava R. (eds) Hydrologic Modelling. Water Science and Technology Library, vol 81. Pp 37-51 Springer, Singapore, ISBN978-981-10-5800-4.
3. **Sarita Gajbhiye Meshram** and Sharma SK (2018). Application of Principal Component Analysis for Grouping of Morphometric Parameters and Prioritization of Watershed. In: Singh V., Yadav S., Yadava R. (eds) Hydrologic Modelling. Water Science and Technology Library, vol 81. Pp 447-458 Springer, Singapore, ISBN 978-981-10-5800-4.
4. SK Sharma, **Sarita Gajbhiye**, S. Tignath and RJ Patil (2018). Hypsometric Analysis for Assessing Erosion Status of Watershed Using Geographical Information System. In: Singh V., Yadav S., Yadava R. (eds) Hydrologic Modelling. Water Science and Technology Library, vol 81. Pp 263-276 Springer, Singapore, ISBN 978-981-10-5800-4.
5. **Sarita Gajbhiye**, M.K. Awasthi and S.K. Sharma (2014)"Assessment of Ground WaterQuality".LAMBERT Academic Publishing, Germany, ISBN 978-3-659-53985-5.
6. S.K. Sharma, A. Yadav and **Sarita Gajbhiye** (2014) "Remote Sensing and GIS Approach for Prioritization of Watershed". LAMBERT Academic Publishing, Germany, ISBN 978-3-659-53529-1.
7. **Sarita Gajbhiye** (2014). "Estimation of Rainfall generated runoff using RS and GIS" LAMBERT Academic Publishing, Germany, ISBN 978-3-659-61084-4.

b. International Journal Papers

1. **Sarita Gajbhiye Meshram**, VP Singh, E Kahya, M Sepehri, C Meshram, MA Hasan, S Islam, PA Duc (2021). Assessing Erosion Prone Areas in a Watershed Using Interval Rough-Analytical Hierarchy Process (IR-AHP) and Fuzzy Logic (FL). Stochastic Environmental Research and Risk Assessment.

2. **Sarita Gajbhiye Meshram**, C Meshram, FA Pourhosseini, MA Hasan, S Islam (2021). A Multi-Layer Perceptron (MLP)-Fire Fly Algorithm (FFA) Based Model for Sediment Prediction. Soft Computing, https://doi.org/10.1007/s00500-021-06281-4.

3. **Sarita Gajbhiye Meshram**, VP Singh, C Meshram, MA Hasan, S Islam (2021). Simplified Sediment Yield Index incorporating parameter Stream Length. Env. Earth Science, 80, 631. https://doi.org/10.1007/s12665-021-09919-6.

4. Maryam Akbari, **Sarita Gajbhiye Meshram**, R.S Krishna, Biswajeet Pradhan, Sameer Shadeed, Khaled Mohamed Khedher, Mehdi Sepehri, Ali Reza Ildoromi, Fereshteh Alimerzaei, Fariba Darabi (2021). Identification of the Groundwater Potential Recharge Zones using MCDM Models: Full Consistency Method (FUCOM), Best Worst Method (BWM) and Analytic Hierarchy Process (AHP). Water Resource Management, https://doi.org/10.1007/s11269-021-02924-1.

5. Riad Arefin, **Sarita Gajbhiye Meshram**, Celso Augusto Guimarães Santos (2021). Comparison of Land Use/Land Cover change of Fused Image and Multispectral Image of Landsat Mission: a case study of Rajshahi, Bangladesh. Environmental Earth Science, 80, 578. https://doi.org/10.1007/s12665-021-09807-z.

6. Hossein Malekinezhad, Mehdi Sepehri, Seyed Zeynalabedin Hosseini, Celso Augusto Guimarães Santos, Jesús Rodrigo-Comino, **Sarita Gajbhiye Meshram** (2021). Role and Concept of Rooftop Disconnection in Terms of Runof Volume and Flood Peak Quantity. International Journal of Environmental Research, https://doi.org/10.1007/s41742-021-00355-9.

7. **Sarita Gajbhiye Meshram,** Chandrashekhar Meshram, Celso Augusto Guimarães Santos Brahim Benzougagh, Khaled Mohamed Khedher (2021). Stream Flow Prediction Based on Artificial Intelligence Techniques. Iranian Journal of Science and Technology, Transactions of Civil Engineering, https://doi.org/10.1007/s40996-021-00696-7.

8. S.I. Abba, R.A. Abdulkadir, Saad Sh. Sammen, A.G. Usman, **Sarita Gajbhiye Meshram**, Anurag Malik & Shamsuddin Shahid (2021) Comparative implementation between neuro-emotional genetic algorithm and novel ensemble computing techniques for modelling dissolved oxygen concentration. Hydrological Sciences Journal, DOI: 10.1080/02626667.2021.1937179**.**

9. Brahim Benzougagh, Pierre-Louis Frison, **Sarita Gajbhiye Meshram**, Larbi Boudad, Abdallah Dridri, Driss Sadkaoui, Khalid Mimich, Khaled Mohamed Khedher (2021). Flood mapping using multi-temporal Sentinel-1 SAR Images: a case study: Inaouene Watershed from Northeast of Morocco. Iranian Journal of Science and Technology, Transactions of Civil Engineering, https://doi.org/10.1007/s40996-021-00683-y**.**

10. **Sarita Gajbhiye Meshram**, Maryam Adhami, Ozgur Kisi, Chandrashekhar Meshram, Pham Anh Duc, Khaled Mohamed Khedher (2021). Identification of critical watershed for soil conservation using Game Theory-based approaches. Water Resource management, https://doi.org/10.1007/s11269-021-02856-w.

11. Ehsan Alvandi, Mojtaba Soleimani-Sardo, **Sarita Gajbhiye Meshram,** Mohammad Reza Dahmardeh Ghaleno (2021). Using Improved TOPSIS and Best Worst Method in prioritizing management scenarios for the watershed management in arid and semi-arid environments. Soft Computing, https://doi.org/10.1007/s00500-021-05933-9.

12. **Sarita Gajbhiye Meshram**, Ali Reza Ilderomi, Mehdi Sepehri, Farshid Jahanbakhshi, Mahboobeh Kiani-Harchegani, Afshin Ghahramani, Jesús Rodrigo-Comino (2021). Impact of roof rain water harvesting of runoff capture and household consumption. Environmental Science and Pollution Research, http://dx.doi.org/10.1007/s11356-021-14098-9.

13. **Sarita Gajbhiye Meshram**, Vijay P. Singh, Ozgur Kisi, Chandrashekhar Meshram (2021). Soil Erosion Modeling of Watershed using Cubic, Quadratic and Quintic Splines. Natural Hazards, https://doi.org/10.1007/s11069-021-04796-5.

14. **Sarita Gajbhiye Meshram**, Hamid Reza Pourghasemi, S.I. Abba, Ehsan Alvandi, Chandrashekhar Meshram, Khaled Mohamed Khedher (2021). A comparative study between dynamic and soft computing models for sediment forecasting. Soft computing, https://doi.org/10.1007/s00500-021-05834-x.

15. Hossein Malekinezhad, Mehdi Sepehri, Quoc Bao Pham, Seyed Zeynalabedin Hosseini, **Sarita Gajbhiye Meshram**, Matej Vojtek, Jana Vojteková (2021). Application of entropy weighting method for urban flood hazard mapping. Acta Geophysica, https://doi.org/10.1007/s11600-021-00586-6.

16. **Sarita Gajbhiye Meshram**, Mir Jafar Safari, Khabat Khosravi, Chandrashekhar Meshram (2021). Iterative classifier optimizer-based pace regression and random forest hybrid models for suspended sediment load prediction. Environmental Science and Pollution Research, 28 (1), 11637–11649, DOI: 10.1007/s11356-020-11335-5, ISSN: 1614-7499.

17. Riad Arefin, **Sarita Gajbhiye Meshram**, Dursun Zafer Seker (2021). River Channel Migration and Land Use/ Land Cover Change for Padma River at Bangladesh: RS/GIS based Approach. International Journal of Environmental Science and Technology, https://doi.org/10.1007/s13762-020-03063-7.

18. **Sarita Gajbhiye Meshram**, Chandrashekhar Meshram (2020). An Effective Dynamic Runoff-Sediment Yield Modelling for Shakkar Watershed, Central India. Arabian Journal of Geosciences, 13, 1248. https://doi.org/10.1007/s12517-020-06162-4.

19. Benzougagh Brahim, **Sarita Gajbhiye Meshram**, Dridri Abdallah, Boudad Larbi, Sadkaoui Drisss, Mimich Khalid, Khaled Mohamed Khedher (2020). Mapping of Soil Sensitivity to Water Erosion by RUSLE Model: Case of the Inaouene Watershed (Northeast Morocco). Arabian J of Geoscience, **13,** 1153. DOI: 10.1007/s12517-020-06079-y.

20. **Sarita Gajbhiye Meshram**, Vijay P. Singh, Ercan Kahya, Ehsan Alvandi, Chandrashekhar Meshram, Shailesh Sharma (2020). The feasibility of Multi-Criteria Decision Making Approach for Prioritization of Sensitive Area at Risk of Water Erosion. Water Resource Management. DOI: 10.1007/s11269-020-02681-7.

21. **Sarita Gajbhiye Meshram**, Vijay P. Singh, Ozgur Kisi, Vahid Karimi, Chandrashekhar Meshram (2020). Application of Artificial Neural Networks, Support Vector Machine and Multiple Model- ANN to Sediment Yield Prediction. Water Resource Management, DOI: 10.1007/s11269-020-02672-8.

22. Arefin R, **Sarita Gajbhiye Meshram**, Celso Augusto Guimarães Santos, Richarde Marques da Silva, Jagalingam Pushparaj (2020). Hybrid modelling approach for water body change detection at Chalan Beel area in northern Bangladesh. Environmental Earth Science, **79,** 442 DOI: 10.1007/s12665-020-09185-y.

23. Hadi Iraji, Mirali Mohammadi, Behzad Shakouri, **Sarita Gajbhiye Meshram** (2020). Predicting Reservoirs Volume Reduction using Artificial Neural Network. Arabian Journal of Geosciences, 13:835, DOI: 10.1007/s12517-020-05772-2.

24. Mahtab Forootan Danesh, Mohammad Reza Dahmardeh Ghaleno, Ehsan Alvandi, **Sarita Gajbhiye Meshram,** Ercan Kahya (2020). Predicting the impacts of optimal residential development scenario on soil loss caused by surface runoff and raindrops using TOPSIS and WetSpa models. Water Resource Management, **34,** 3257–3277 DOI: 10.1007/s11269-020-02611-7.

25. Brahim Benzougagh, **Sarita Gajbhiye Meshram**, Brahim Baamar, Abdallah Dridri, Larbi Boudad, Driss Sadkaoui, Khalid Mimich (2020). Relationship between landslide and morpho-structural analysis: a case study in northeast of Morocco. Applied Water Science, **10,** 175, 10.1007/s13201-020-01258-4.
26. **Sarita Gajbhiye Meshram**, Ercan Kahya, Chandrashekhar Meshram, Mohammad Ali Ghorbani, Balram Ambade, Rasoul Mirabbasi (2020). Long Term Temperature Trend Analysis Associated with Agriculture Crops. Theoretical and Applied Climatology, **140,** 1139–1159, DOI: 10.1007/s00704-020-03137-z.
27. Mohammad Reza Dahmardeh Ghaleno, **Sarita Gajbhiye Meshram**, Ehsan Alvandi (2020). Pragmatic approach for prioritization of flood and sedimentation hazard potential of watersheds. Soft Computing, **24,** 15701–15714, https://doi.org/10.1007/s00500-020-04899-4.
28. **Sarita Gajbhiye Meshram**, C.S Meshram (2020). Probabilistic Estimation of Design Runoff Curve Number: A Case Study for Shakkar River Watershed, India. International Journal of Hydrology Science and Technology (Inderscience), Vol. 10, No. 3,pp 302-313.
29. **Sarita Gajbhiye Meshram,** Ehsan Alvandi, Chandrashekhar Meshram, Ercan Kahya, Ayad M. Fadhil Al-Quraishi (2020). Application of SAW and TOPSIS in Prioritizing Watersheds. Water Resource Management. **34,** 715–732. DOI: 10.1007/s11269-019-02470-x.

30. **Sarita Gajbhiye Meshram,** M. A. Ghorbani, Ravinesh C. Deo, Mahsa H. Kashani, Chandrashekhar Meshram, Vahid Karimi (2019). New Approach for Sediment Yield Forecasting with a Two-Phase Feed forward Neuron Network-Particle Swarm Optimization Model Integrated with the Gravitational Search Algorithm, Water Resource Management,Volume 33, Issue 7, pp 2335–2356 (DOI: 10.1007/s11269-019-02265-0)
31. **Sarita Gajbhiye Meshram,** Ehsan Alvandi, Vijay P. Singh, Chandrashekhar Meshram (2019). Comparison of AHP and fuzzy AHP models for prioritization of watersheds. Soft Computing, Volume 23, Issue 24, pp 13615–13625. https://doi.org/10.1007/s00500-019-03900-z.
32. **Sarita Gajbhiye Meshram**, Mohmmmad Ali Ghorbani, Shahaboddin Shamshirband, Vahid Karimi, Chandrashekhar Meshram (2019). River flow prediction using hybrid PSOGSA algorithm based on feed-forward neural network. Soft Computing, Volume 23, Issue 20, pp 10429–10438,https://doi.org/10.1007/s00500-018-3598-7.
33. Rasoul Mirabbasi, Ozgur Kisi, Hadi Sanikhani, **Sarita Gajbhiye Meshram (2019)**. Monthly long-term rainfall estimation in Central India using M5Tree, MARS, LSSVR, ANN and GEP models. Neural Computing & Applications, 31: 6843–6862.
34. **Sarita Gajbhiye Meshram**, P. L. Powar, C.S Meshram (2018). Comparasion of Cubic, Quadratic and Quintic Splines for Soil Erosion Modelling. Applied Water Science, 8: 173, 10.1007/s13201-018-0807-6.
35. H.Tao, S.O.Sulaiman, Z.M. Yaseen, H. Asadi, **Sarita Gajbhiye Meshram,** M.A. Ghorbani (2018).What Is the Potential of Integrating Phase Space Reconstruction with SVM-FFA Data-Intelligence Model? Application of Rainfall Forecasting over Regional Scale. Water Resour Manage 32: 3935. https://doi.org/10.1007/s11269-018-2028-z.
36. Hadi Sanikhani, Ozgur Kisi, Rasoul Mirabbasi**, Sarita Gajbhiye Meshram** (2018).Trend analysis of rainfall pattern over the Central India during 1901–2010. Arabian Journal of Geoscience,11:437 (10.1007/s12517-018-3800-3).
37. **Sarita Gajbhiye Meshram**, P. L. Powar, Vijay P. Singh, C. S Meshram (2018). Application of cubic spline in soil erosion modelling from Narmada Watersheds, India. Arabian Journal of Geoscience, 11:362, (10.1007/s12517-018-3699-8).
38. **Sarita Gajbhiye Meshram**, P.L. Powar, Chandrashekhar Meshram (2018). Quintic Spline Method for Computing Sediment Yield Index: A Case Study. International Journal of Hybrid Information Technology, Accepted (**Scopus**).

39. **Sarita Gajbhiye Meshram**, Sudhir Kumar Singh, Chandrashekhar Meshram, RC Deo, Balram Ambade (2018). Statistical Evaluation of Long Term Time Series of Rainfall in Concurrence with Agriculture and Water Resources of Ken River Basin, Central India. Theoretical and Applied Climatology, vol. 134: 3-4, pp 1231–1243.https://doi.org/10.1007/s00704-017-2335-y.
40. R Zamani, R Mirabbasi, M Nazeri, **Sarita Gajbhiye Meshram**, F Ahmadi (2018). Spatio-Temporal Analysis of Daily, Seasonal and Annual Precipitation Concentration in Jharkhand State, India. Stochastic Environmental Research and Risk Assessment, Volume 32, Issue 4, pp 1085–1097.DOI 10.1007/s00477-017-1447-3.
41. **Sarita Gajbhiye** and S. K. Sharma (2017). Prioritization of Watershed through Morphometric Parameters: A PCA Based Approach. Applied Water Science, 7:1505–1519, DOI: 10.1007/s13201-015-0332-9 (SCIE).
42. **Sarita Gajbhiye Meshram**, Randhir Gautam, Ercan Kahya (2017). Drought Analysis in the Tons River Basin, India during 1969-2008, Theoretical and Applied Climatology, Volume 132, Issue 3-4 pp 939-951 (Springer) (DOI: 10.1007/s00704-017-2129-2).
43. **Sarita Gajbhiye Meshram**, P. L. Powar, Vijay P. Singh (2017). Modelling soil erosion from a watershed using cubic splines. Arabian Journal of Geosciences, 10:155-168, DOI. 10.1007/s12517-017-2908-1.
44. **Sarita Gajbhiye Meshram** and P.L. Powar (2017). Piecewise Regression Using Cubic Spline-A Case Study. International Journal of Hybrid Information Technology, 10 (1): 75-84, http://dx.doi.org/10.14257/ijhit.2017.10.1.07, Science & Engineering Research Support Society, Korea.
45. S.K. Chandniha, **Sarita Gajbhiye Meshram**, J.F. Adamowski and C. Meshram (2017). Trend Analysis of Precipitation in Jharkhand State, India. Theoretical and Applied Climatology, 130:261-274. DOI: 10.1007/s00704-016-1875-x.
46. **Sarita Gajbhiye Meshram,** V. P. Singh and C. Meshram (2017). Long-Term Trend and Variability of Precipitation in Chhattisgarh State, India. Theoretical and Applied Climatology, 129:729-744, DOI: 10.1007/s00704-016-1804-z.
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c. International Conference Papers:

1. S.K. Sharma, R.K. Nema, S. Tignath, **S. Gajbhiye** (2012). Application of Principal Component Analysis in Grouping Geomorphic parameters of watershed for Hydrological modelling. Paper presented and Abstracted (online) in International Conference on Science and Innovative Engineering, organized by International Journal of Science and Innovative Engineering, Chennai., pp-167
2. **S. Gajbhiye,** S.K. Sharma (2011). Interpretation of Water Quality parameters by Using Principal Components Analysis. Abstracted in 1st world congress for man and nature "global climate change and biodiversity conservation" Haridwar, 11-13 Nov., pp-11
3. **Sarita Gajbhiye,** S.K. Mishra (2012) Application of NRSC-SCS Curve Number Model in RunoffEstimation Using RS & GIS. IEEE-International Conference on Advances in Engineering Science and Management (ICAESM -2012) Nagapattinam, Tamil Nadu, March 30-31, pp 346-352, ISBN: 978-81-909042-2-3.
4. **Sarita Gajbhiye,** S.K.Mishra, Ashish Pandey (2013), A procedure for determination of design runoff curve number for Bamhani Watershed. IEEE-International Conference on Advances in Technology and Engineering (ICATE), Bombay, 23-25 Jan. 2013,1(9):23-25, ISBN:978-1-4673-5618-3.
5. **Sarita Gajbhiye**, S.K. Mishra, Ashish Pandey (2013). Prioritization of Shakkar River catchment through Morphometric Analysis using Remote Sensing and GIS techniques. IEEE-International Conference on Global Challenges, Strategies and Solutions in Engineering, Business & Disaster Management (ICBDM-2013), March 8-9, Kanyakumari. Presented and published national journal.
6. **Sarita Gajbhiye,** S.K. Sharma (2016). Application of Principal Component Analysis For Grouping of Morphometric Parameters And Prioritization Of Watershed, International Conference on Water Environment, Energy & Society-2016, 15-18 March, Bhopal (Attainted/presented).

7. **Sarita Gajbhiye Meshram**, V.P. Singh (2016). Probabilistic Estimation Of Design Daily Runoff From Bamhani Watershed, India, International Conference on Water Environment, Energy & Society-2016, 15-18 March, Bhopal (Attainted/presented).
8. SK Sharma, **S Gajbhiye**, S Tignath, RJ Patil (2016).Hypsometric Analysis for Assessing Erosion Status of Watershed using Geographical Information System. International Conference on Water Environment, Energy & Society-2016, 15-18 March, Bhopal.

d. National Journal Papers:

1. **S. Gajbhiye,** S.K. Sharma, M. Jha (2010). Application of Principal Component Analysis in the assessment of water quality parameters. Sci-fronts A Journal of Multiple Science. Vol IV, (4):67-72.
2. S. Sharma, **S. Gajbhiye**, T. Prasad (2009). Identification of influential geomorphological parameters for hydrologic modelling. Sci-fronts A Journal of Multiple Science. Vol III, (3):9-16.
3. **S. Gajbhiye,** S.K. Mishra, Ashish Pandey (2013). Prioritization of Shakkar River catchment through Morphometric Analysis using Remote Sensing and GIS techniques. Journal of emerging technology in mechanical science and engineering. Vol 4, special issue 2, March 2013, PP 129-142. ISSN0976-2558.

e. National Conference Papers:

1. **Sarita Gajbhiye,** S.K. Mishra, S.K. Sharma, S. Tignath (2011). Generation of Curve Number using Remote Sensing and Geographical Information System. Proceedings of National Seminar on "Restructuring of Irrigated Agriculture – Status and Strategies" held at College of Agricultural Engineering, J.N.K.V.V., Jabalpur (M.P.) during 15-17 March 2011, pp-145-151.
2. **S. Gajbhiye,** S.K. Sharma (2011). Application of Principal Component Analysis in the assessment of water quality parameters. Abstract published in National Seminar on "Water and Environment" held at RCVP naronha academy of administration, Bhopal during 12-13 march 2011, pp-3.
3. S.K. Sharma, **S. Gajbhiye** (2011). Morphometric analysis and prioritization of gusuru river watershed using RS and GIS. Abstract published in National Seminar on water and environment, held at RCVP naronha academy of administration, Bhopal during 12-13

march 2011, pp- 12.

4. S.K. Sharma, S. Tignath and **S. Gajbhiye** (2011). Hypsometric analysis of Kanhiya Nala watershed using Geographical Information System. Paper Presented and Abstracted in Proceedings of Annual National Convention of Indian Society of Remote sensing, Bhopal; 09-11 November 2011 held at M.P., pp-102.
5. **Sarita Gajbhiye,** S.K. Sharma (2011). Estimation of Surface Runoff Using Remote Sensing and Geographical Information. Paper Abstracted in Proceedings of Annual National Convention of Indian Society of Remote Sensing, 09-11 November 2011 held at M.P. Council of Science and Technology, Bhopal, pp—281.

11. TRAINING/ SEMINAR/ CONFERENCES ATTENDED

- Ag. Machinery Training and Testing Institute, Tractor Nagar, Anantpur (A.P.) (Summer Training) (1.6.2005-29.6.2005)
- Central Institute of Agricultural Engg. (Bhopal) (Summer Training) (1.6.2006-30.6.2006)
- Central Soil Salinity Research Institute, Karnal (Summer Training) (1.6.2008-30.6.2008)
- Jawahar Lal Nehru Krishi Vishwa Vidyalaya Jabalpur (National Seminar) (15.3.2011-17.3.2011)
- Indian Society of Remote Sensing, Bhopal (National Symposium) (9.11.2011-11.11.2011)
- Deptt. of Geology, Govt. MVM, Bhopal (M.P.) (National Seminar) (12.3.2011-13.3.2011)
- Noorulislam University, Kumarcoil, Tamilnadu (International Conference-IEEE) (8.3.2011-9.3.2011)
- Organization of Science and Innovative Engg. & Technology, Chennai (International Conference) (15.3.2015)
- AISECT University Bhopal(International Conference) (15.3.2016-18.3.2016)

12. SUMMARY OF RESEARCH TRACK RECORD

- Google Scholar Citation: 1712
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DECLARATION

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

Date: 1/10/2021

Place: Nagpur **(SARITA GAJBHIYE MESHRAM)**