

Faculty Name: Dr. Ramgopal Tilakram Sahu

Designation : Assistant Professor

Mail ID : ramgopal.sahu@sitrc.org



BIO

Dr. Ramgopal Tilakram Sahu, is currently working as an Assistant Professor (**Sandip Institute of Technology and Research Center, Nashik**), pursued **PhD** from **National Institute of Technology, Raipur**, India. Received a **bachelor's degree in Civil engineering** from the **Government Engineering College, Surat**, and a **master's degree in Water resources engineering** from **Sardar Vallabhbhai National Institute of Technology, Surat**. Current research interests are Long-distance interaction, Climate Change, Regionalization, Spatiotemporal, and Hydrological modeling.

Qualification:

- B. E. (Civil Engineering)
- M. Tech. (Water Resources Engineering)
- PhD (Civil – Water Resources Engineering)

Experience:

- Teaching experience: 05 Years
- Research experience: 02 Years
- Industry experience: 07 Years

Subjects:

- Fluid Mechanics
- Basics Civil and Environment Engineering
- Dams and Hydraulic Structures
- Remote Sensing and GIS
- Elements of Civil Engineering

CURRICULUM VITAE

PERSONAL INFORMATION:

Name : **Dr. RAMGOPAL SAHU/ डॉ. रामगोपाल साहू**
Father's Name : Mr. TILAKRAM J. SAHU
Mother's Name : Mrs. GANGOTRI T. SAHU
Date of Birth : 15-Sep-1986
Nationality : Indian
Gender : Male
Marital Status : Married
Languages Known : English, Hindi, Gujarati
and Chhattisgarhi.



Permanent Address :

Plot No – 398/1, Samudayik Para, At/Po – Murta,

Tehsil – Nawagarh, Dist. – Bemetara,

State – Chhattisgarh.

Pin Code – 491337,

Phone: +91 9998780784, E-Mail ID: - ramgopal_sahu@yahoo.com

Skills:

RStudio, SWAT, SWIMM, HEC-GeoRAS, ArcGIS, AutoCAD, Climate Long-Distance Interaction,

Educational Credentials:

Sr. No	Degree	University	Year of Passing	Class	Percentage
1.	PhD	NIT Raipur	2024		
2.	M.Tech (Water Resource Eng.)	Sardar Vallabhbhai National Institute of Technology, Surat.	2013	1 st Class	7.37 CGPA
3.	B.E. (Civil)	GEC - Surat, Veer Narmad South Gujarat University.	2011	1 st Class Distinction	68.27%
4.	HSC	Gujarat Secondary and Higher Secondary Examination Board	2007	1 st Class	63.20%
5.	SSC		2005	1 st Class Distinction	72.43%

Certificate Courses:

1. Completed **Microwave Remote Sensing in Hydrology**, from NPTEL (Organizing body – IIT Bombay) on Jan-April-2024.
2. Completed **Global Navigation Satellite System (GNSS)**, from NPTEL (Organizing body – IIT Madras) on Jun-Sept-2024.
3. Completed **ArcGIS 9.3**, from **Continuing Education Cell, NIT Raipur** on December 2018.
4. Completed **AutoCAD 2009**, from **LOGOTECH Academy** on April-2010.

Details of Experience:

Teaching Experience					
Sr. No	Name of the Institute/Organization	Designation	Period		Total Experience
			From	To	
1	Sandip Institute of Technology and Research Center, Nashik	Asst. Professor	28/08/2023	Till Now	
2	Late G. N. Sapkal College of Engineering, Nashik	Asst. Professor	21/12/2017	05/05/2018	6Months
3	Bhagwan Mahavir College of Engineering and Technology, Surat	Asst. Professor	01/07/2013	10/12/2017	4Years 6Months
Research/Entrepreneur/Consultancy/Industry					
4	National Institute of Technology Raipur (NIT – Raipur)	Research Assistant	Nov-2021	Jan-2023	1Years 3Months
5	Simplex Infrastructure Ltd	Entrepreneur/Consultancy	Mar-2015	Oct-2017	2Years 7Months
6	Essar Project (I) Ltd - Hazira	Entrepreneur/Consultancy	June-2009	Mar-2015	4Years 9Months

Industrial Experience:

1. Worked in various units of **Essar Steel Plant (Hazira)**, viz., Conark I and II, Corex Plant, Corex Gas Holder, and High-Temperature Unit.
2. Worked in various units of **Essar Power Plant (Hazira)**, viz., Turbine Generation Building, Forbey, Cooling Tower, ECR Building, Fly Ash Silo, MCR, Softening, Clarifier, and Pumping Unit.
3. Worked for **Simplex Infrastructures Limited** under the MOU project with **Reliance Industries** for the **360 MW coal-based Captive Power Plant (CCPP) in Hazira**.
4. In parallel with Simplex Infrastructure Limited, different companies like MatruKrupa Enterprises, Siddhi Construction, and Siddhi Infra Private Limited worked on different projects for Reliance Industries (Hazira).

Academic Experience:

Courses Taught:

- **At UG Level**
 - Hydrology and Water Resources Engg
 - Remote Sensing & GIS
 - Surveying
 - Irrigation Engineering
 - Dams and Hydraulic Structures
 - Fluid Mechanics
- **At PG level**
 - System Analysis in water resource

Roles and responsibilities at College and University Level:

Sr. No	Roles and Responsibilities
1	NBA and NAAC Accreditation
2	Engaging in lectures and practical's as per the time table.
3	Coordinating for organizing of Expert lectures and seminars.
4	Coordinating techno fest event.
5	Paper evaluation, paper setting for College Examinations
6	External examination invigilator for university exam

Workshop/ Training Program/ STTP/ FDP/Conference Organized:

Sr. No.	Title of Program	Date & duration	Organization & Role
1	FDP on Innovative Invention in Civil Engineering	3-18 May 2024 (6 Day)	Sandip Institute of Technology & Research Centre, Nashik

Workshop/ Training Program/ STTP/ FDP/Conference Attended:

Sr. No	Title of Program	Date/ Duration	Role, Organization & Place
1	Study on Conventional & Hollow Steel Section	Jan - 2011 (1 Day)	TATA STRUCTURA, Mumbai.
2	Study on " Hollow Steel Section "	Jan - 2011 (1 Day)	TATA STRUCTURA, Ahmedabad.
3	Survey on " Rapid Transit System"	Feb - 2011 (1 Day)	Navrangpura, Ahmedabad.
4	Conference on "Hydraulics And Water Resources" HYDRO-2011	29-30 Dec - 2011 (2 Days)	Sardar Vallabhbhai National Institute of Technology - Surat.
5	"Tachometer Contour Survey"	Mar - 2009 (2 Days)	GEC - Surat, Study Tour Saputara, Gujarat.
6	"Tachometer Contour Survey"	Jan - 2014 (2 Days)	Bhagwan Mahavir College of Eng. & Tech, Study tour, Ambaji, Gujarat.
7	"Tachometer Contour Survey"	Feb - 2014 (1 Day)	Mahavir Swami College of Eng. & Tech, Study tour, Saputara, Gujarat.
8	Monsoon School on Urban Floods-2019	5-10 Aug - 2019 (6 Days)	Interdisciplinary Centre for water research Indian Institute of Science - Bangalore
9	From knowledge to action: A vision for resilient rural India	7-9 Jan - 2020 (3 Days)	School of Infrastructure Indian Institute of Technology – Bhubaneswar
10	Seminar on "Rapid Transit System"	March, 2011 (1 Day)	GEC - Surat, "Transportation Fest"
11	FDP (Sustainable Construction Practice)	5-10 Aug – 2024 (6 Days)	KI University, Guntur
12	NPTEL E-Awareness workshop	2 nd July 2024	IIT Madras
13	FDP (Recent Advances in Structural Engineering & Material Science)	25-29 July 2024 (5 Day)	Jorhat Engineering College, Jorhat

Paper/Article Publications*Conference*

1. **Ramgopal Sahu***, Mani Kant Verma, Ishtiyahq Ahmad. (2019). 'Regional Frequency Analysis using L-Moment Methodology - a review'. Springer's International Conference on Recent Trends and Innovations in Civil Engineering. Medi-Caps University, Indore (M.P), 26th – 28th Sept.
2. **Ramgopal Sahu***, Mani Kant Verma, Ishtiyahq Ahmad, B. J. Batliwala. (2019). 'Impact of Coastal Inundation due to rise in sea level: A case study of Surat city'. HYDRO International Conference. Osmania University, Hyderabad. 18th – 20th December.
3. **Ramgopal Sahu***, Mani Kant Verma, Ishtiyahq Ahmad. (2020). 'Testing of Regionalization of precipitation methods to achieve low error quantile estimate for Mahanadi River system'. ASCE India Conference (ASCEIC2020). Kolkata (W.B). 2nd – 4th March.
4. Devashish Pradhan, **Ramgopal Sahu***, Mani Kant Verma. (2021). 'Flood Inundation Mapping using GIS and Hydraulic Model (HEC-RAS): A case study of the Burhi Gandak river, Bihar, India'. SoCTA 2021 International Conference. IIIT Kota (Rajasthan). 17th – 19th December.
5. **Ramgopal Sahu***, Shashikant Verma, Kislay Kumar, Mani Kant Verma, Ishtiyahq Ahmad. (2022).

‘Testing some grouping methods to achieve a low error quantile estimate for high resolution (0.25° x 0.25°) precipitation data’. Applications of Intelligent Computing in Engineering and Science (AICES2022). NIT-Raipur, Chhattisgarh. 12th-13th February.

6. **Ramgopal Sahu***, Mani Kant Verma, Ishtiyah Ahmad. (2022). ‘Interpreting different timeslot precipitation characteristics in the Seonath River basin, Chhattisgarh during 1901-2017’. International Conference on Recent Advances in Sustainable Environment (RAiSE2022). Shobhit University, Meerut, Uttar Pradesh. 25th-26th February.
7. Shashikant Verma* **Ramgopal Sahu**, A D Prasad and Mani Kant Verma. (2022). ‘Development of an optimal operating policy of multi-reservoir systems in Mahanadi Reservoir Project Complex, Chhattisgarh’. An international conference on applications of Intelligent Computing in Engineering and Science (AICES2022). NIT-Raipur, Chhattisgarh. 12th-13th February.
8. Shashikant Verma* **Ramgopal Sahu**, Hrishikesh Singh, A D Prasad and Mani Kant Verma. (2022). ‘A Study of Environmental Impact Due to the Construction and Operation of Polavaram and Tehri Dams: A Case Study’. An international conference on advances in Earth and Environmental Studies (AEES 2022) NIT-Raipur, Chhattisgarh. 25th-26th February.
9. Shashikant Verma* **Ramgopal Sahu**, Kislay Kumar and Mani Kant Verma. (2023). Unveiling the Climate Change Impact and Suitability Assessment of CMIP5 and CMIP6 Emission Scenario for the Mahanadi Reservoir Project Complex, Chhattisgarh. International Conference on Recent Advances in Sustainable Environment (RAiSE2023). Bundelkhand University, Jhansi, Uttar Pradesh. 15th-16th May.

Book Chapter

1. **Sahu R.T.**, Verma M.K., Ahmad I. (2021) Regional Frequency Analysis Using L-Moment Methodology—A Review. In: Pathak K.K., Bandara J.M.S.J., Agrawal R. (eds) *Recent Trends in Civil Engineering. Lecture Notes in Civil Engineering*, vol 77. Springer, Singapore. pp. 811-832. https://doi.org/10.1007/978-981-15-5195-6_60 **Scopus**
2. **Sahu R.T.**, Verma, S., Kumar, K., Verma M.K., Ahmad I. (2022) Testing some grouping methods to achieve a low error quantile estimate for high resolution (0.25° x 0.25°) precipitation data. *J. Phys.: Conf. Ser.* 2273 012017. <https://doi.org/10.1088/1742-6596/2273/1/012017> **Scopus**
3. **Sahu R.T.**, Verma M.K., Ahmad I. (2022) Interpreting different timeslot precipitation characteristics in the Seonath River basin, Chhattisgarh during 1901-2017. In: Reddy K.R., Kalia S., Tengellapalli S., Prakash D. (eds) *Recent Advance in Sustainable Environment. Lecture Notes in Civil Engineering*, vol 285. Springer, Singapore. pp. 21-37. http://dx.doi.org/10.1007/978-981-19-5077-3_3 **Scopus**
4. Pradhan D., **Sahu R.T.***, Verma M.K. (2022) Flood Inundation Mapping Using GIS and Hydraulic Model (HEC-RAS): A Case Study of the Burhi Gandak River, Bihar, India. In: Kumar R., Ahn C.W., Sharma T.K., Verma O.P., Agarwal A. (eds) *Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems*, vol 425. Springer, Singapore. pp. 135-145. https://doi.org/10.1007/978-981-19-0707-4_14 **Scopus**
5. Verma S., **Sahu R.T.**, Prasad A.D., Verma M.K. (2022) Development of an optimal operating policy of multi-reservoir systems in Mahanadi Reservoir Project Complex, Chhattisgarh. *J. Phys.: Conf. Ser.* 2273 012020. <http://dx.doi.org/10.1088/1742-6596/2273/1/012020> **Scopus**
6. Verma S., **Sahu R.T.**, Singh H., Prasad A.D., Verma M.K. (2022) A study of Environmental and Ecological impacts due to Construction and operation of Tehari-Polavaram Dam. *IOP Conf. Ser.: Earth Environ. Sci.* 1032 012020. <http://dx.doi.org/10.1088/1755-1315/1032/1/012020> **Scopus**

Preprints

1. **Sahu, R.T.**, Verma, M.K., and Ahmad, I., 24 August 2021. Segmental variability of precipitation in the Mahanadi River basin during 1901-2017. PREPRINT (Version-1) available at research square. <https://doi.org/10.21203/rs.3.rs-542786/v1>

Journal Paper

1. **Sahu, R.T.**, Verma, M.K., and Ahmad, I. (2023) Impact of long-distance interaction indicator (monsoon indices) on spatio-temporal variability of precipitation over the Mahanadi River basin. *Water Resources Research*, 59(6), e2022WR033805. <https://doi.org/10.1029/2022WR033805> **SCI, Scopus**
2. **Sahu, R.T.**, Verma, M.K., and Ahmad, I., (2021) Some non-uniformity patterns spread over the lower Mahanadi River basin, India. *Geocarto International*, 37(25), pp.8792-8816. <https://doi.org/10.1080/10106049.2021.2005699> **SCIE, Scopus**
3. **Sahu, R.T.**, Verma, M.K., and Ahmad, I. (2022) Segmental variability of precipitation in the Mahanadi River basin from 1901 to 2017. *Geocarto International*, 37(27), pp.14877-14898. <https://doi.org/10.1080/10106049.2022.2091163> **SCIE, Scopus**

4. **Sahu, R.T.**, Verma, M.K., and Ahmad, I. (2023) Density-Based Spatial Clustering of Application with Noise approach for regionalization and its effect on Hierarchical Clustering. *Int. J. Hydrology Science and Technology*, 16(3), pp.240-269. <http://dx.doi.org/10.1504/IJHST.2022.10048476> **ESCI, Scopus**
5. **Sahu, R.T.**, Verma, M.K., and Ahmad, I. (2021) Characterization of precipitation in the sub-divisions of the Mahanadi River basin, India. *Acta Scientific Agriculture*, 5(12), pp.50-61. <http://dx.doi.org/10.31080/ASAG.2021.05.1085>
6. **Sahu, R.T.**, Verma, S., Verma, M.K., and Ahmad, I. (2023) Characterizing the spatio-temporal properties of precipitation in the middle Mahanadi sub-division, India during 1901-2017. *Acta Geophysica*, 72(2), pp.1143-1158. <http://dx.doi.org/10.1007/s11600-023-01085-6> **SCIE, Scopus**
7. Verma, S., **Sahu, R.T.**, Prasad, A.D., and Verma, M.K. (2023) Reservoir operation optimization using Ant Colony Optimization A case study of Mahanadi Reservoir Project Complex, Chhattisgarh – India. *Larhyss Journal*, 53, pp.73-93. <http://larhyss.net/ojs/index.php/larhyss/index> **Scopus**
8. Kumar, K., **Sahu, R.T.**, Verma, S., and Verma, M.K. (2023) Analysis of Rainfall Trend in India over the last 117 years, Incorporating Non-Parametric Tests and Wavelet Synopses. *Journal of Environmental Informatics Letters*. 10(2), 74-88. <http://dx.doi.org/10.3808/jeil.202300117> **Scopus**
9. **Sahu, R.T.**, Mehta D. J. (2024) Impact of Coastal Inundation due to rise in sea level: a case study of Surat City, India. *Water Practice and Technology*, 19 (5): 1753–1768 <https://doi.org/10.2166/wpt.2024.116> **ESCI, Scopus**
10. Turkane, S.D., Chouksey, S.K., Nawale, A.V., **Sahu R.T.**, Gayake, S.B., & Gunjal, S.M. (2024). Utilization of copper slag as fine sand replacement in concrete: a response surface methodology approach. *Discover Civil Engineering*, 1, 129. <https://doi.org/10.1007/s44290-024-00135-2>
11. Manjarwal, S.W., Nayak, J.G., Sunagar, P., Patil, A.S., Turkane, S.D., **Sahu R.T.** (2024). Evaluating the seismic performance of Tall structures through Advanced Bracing Techniques. *Nanotechnology Perceptions*, 20(S10), pp.597-610. <https://doi.org/10.62441/nano-ntp.v20iS10.46>
12. Nayak J.G., Patki, V.K., Nayak, R.J., Sahu R.T., Patil B.M., & Patil, Y. (2024). Adaptive Neuro Fuzzy Inference System based Water Quality for Godavari River (India). *International Journal of Multiphysics*, 18(3), pp.1002-1011. <https://doi.org/10.52783/ijm.v18.1398>
13. **Sahu, R.T.**, Verma, M.K., and Ahmad, I. (2024). Streamflow projections under climate change framework for the Mahanadi River Catchment, India. *Journal of Water and Climate Change, Under Review* **SCIE, Scopus**
14. Nruthya K., Pandey A., Reddy C.R.G., **Sahu R.T.** (2024). Evaluation of SWAT model for Water Balance Components under changing Climate condition in the Mahanadi River Catchment, Chhattisgarh. *Water and Practice Technology, Under Review* **ESCI, Scopus**
15. Reddy, P.K.K., Harikeerthan, M.K., Shilpa, D.N., Joshi, S., Nruthya, K., **Sahu R.T.** (2024). Improvisation in Climate Model Selection and Effective Hydrological Modelling in Face of Climate Change: A case study of Seonath River Basin, India. *Acta Geophysica, Under Review* **SCIE, Scopus**

Patent Publication

1. Title of Invention: Temporal Analysis of Rainfall Variability for Long-Term Planning (Patent Application: 202321072163). **Published**
2. Title of Invention: Sustainable Water Management in Drought-Affected Areas (Design No. 418889-001). **Published**
3. Title of Invention: Impact of long-distance interaction indicators on spatiotemporal variability of precipitation. **Filed**

Projects/Consultancy

1. Climate adaptation in Wetlands along the *Mahanadi River catchment* in Chhattisgarh. Worked under **PI** {Dr. Sameer Bajpai} and **CO-PI** {Dr. Mani Kant Verma and Dr. Ishtiyah Ahmad} funded by state forest department Chhattisgarh.
2. Planning and Designing of Rainwater Harvesting System in *Hira Power and Steel Ltd. Unit-2*, Raipur, Chhattisgarh. Worked under Dr. Mani Kant Verma, Dr. Ishtiyah Ahmad, and Dr. D. C. Jhariya
3. Estimation of Requirement of Water for *Chhattisgarh Distilleries Ltd.* Kumhari, Chhattisgarh. Worked under Dr. Mani Kant Verma and Dr. Sameer Bajpai.

UG/PG/Ph.D. Projects/ Thesis/ Dissertation

- 1) Comparison between Conventional Section and Hollow Section in STEEL STRUCTURE.
- 2) URBAN MASS CHALLENGES (BRTS and METRO) – Suitability study for SURAT.
- 3) Impacts of Climate Change and Sea level rise – A Case study of SURAT Coastal region.
- 4) Regionalization of mean annual precipitation and flood forecasting in the Mahanadi River catchment of Chhattisgarh state.

Peer Recognition (Reviewer)

- 1) IEEE Transactions on Systems, Man, and Cybernetics: Systems
- 2) Journal of Asian Architecture and Building Engineering (Taylor and Francis)
- 3) National Academy Science Letters (Springer)
- 4) Discover Environment (Springer)
- 5) Discover Atmosphere (Springer)
- 6) Discover Geoscience (Springer)
- 7) Discover Applied Science (Springer)
- 8) Theoretical and Applied Climatology (Springer)
- 9) Pure and Applied Geophysics (Springer)
- 10) Ecological Indicators (Elsevier)
- 11) Water Science and Technology
- 12) Water Practice and Technology
- 13) Qeios

Professional Society Administrative member

- 1) IWRS Student Chapter – Raipur division (Joint – Secretary, 2019 - 2023)
- 2) IWRS Student Chapter – Raipur division (Student Member, 2019 - 2023)
- 3) IWRS Student Chapter – Nashik division (Faculty Advisor, 2024 onwards)

Accounts and ID's

- 1) <https://www.researchgate.net/profile/Ramgopal-Sahu>
- 2) <https://scholar.google.com/citations?user=ZWbDcxgAAAAJ&hl=en&oi=ao>
- 3) <https://orcid.org/my-orcid?orcid=0000-0003-2564-3419>
- 4) <https://www.webofscience.com/wos/author/rid/GMX-2768-2022>
- 5) <https://www.scopus.com/authid/detail.uri?authorId=57219312859>
- 6) https://app.dimensions.ai/discover/publication?and_facet_researcher=ur.015310645413.47

I hereby declared that the above information furnished by me is true to the best of my knowledge.

Place: Nashik



Ramgopal Tilakram Sahu