

# Curriculum Vitae: Dr. Sanjaykumar M. Yadav

Professor

Department of Civil Engineering

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## Education

- July 2004–March 2009 : Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat. (INDIA)  
**Ph.D.** in Civil Engineering (Water Resources Engineering)  
**Thesis:** “Study of Ripple factor for Tapi River”  
**Thesis Supervisor:** Dr. B. K. Samtani
- July 1990–May 1992 : SGU, Surat, Gujarat. (INDIA)  
**M.E.** in Civil Engineering (Water Resources Engineering)  
**Thesis:** “Study of drag and lift coefficient for flat plate and artificially roughened plate.”  
**Thesis Supervisor:** Dr. B. K. Samtani
- Sept 1983–June 1987 : SPU, Surat, Gujarat. (INDIA)  
**B.E.** in Civil Engineering

## Professional positions held

Name of Employer & place	Designation or post held	Nature of work	Period		Years and Months
			From	To	
Skylark Builder, Baroda	Site In-Charge	Civil work	Feb.`87	Nov.`87	10 Months
Anvin Construction, Baroda	Site In-Charge	Civil work	Nov.`87	June`88	6 Months
Govt. Engg. College, Modasa.	Lecturer (Adhoc )	Academic	Oct.`88	May `89	8 Months
SVNIT, Surat	Professor	Academic	Aug.`89	Till Date	30 Years

## Courses taught

- Hydraulic Engineering
- Fluid Mechanics
- Water Resources System
- Free Surface Flow
- Hydropower Engineering
- Advanced Hydrology
- Professional Practice
- Estimation Specifications and Valuation

## Research Projects

Sr. No.	Details	Duration
1.	Need for development of water resources and flood management centre, <i>National Co-ordinate project (NCP)</i>	3 years
2	Erosion of non-uniform unimodal and bimodal sediments, <i>Department of science and technology (DST)</i>	3 years
3	Flood modelling in semi-arid regions, <i>TEQIP</i>	2 years

## Teaching experience

### Ph.D. Guidance (Completed including thesis submitted)

Sl. No.	Title of the Thesis	Name of Candidate	Total No. of super visors	Date of award/Subm ission/ Viva voce
1	Performance Evaluation and Ranking of Municipal Solid Waste Management System	Harshul.K.Parekh	2	12/03/2016
2	Evolution of an Index to Measure the Project Development Efficiency	Devanshu.K.Pandit	1	24/11/2015
3	Assessment and Development of Total Sediment Transport Function for Indian Rivers	Mrs.Sahita Waikhom	1	16/09/2019
4	Development of integrated approach for mapping of flood and drought in semi-arid ungauged river basin	Mrs.Preeti Ramkar	1	04/10/2019
5	Single and multi-objective optimization of reservoir operation models using TLBO and Jaya algorithms	Vijendra Kumar	1	11/09/2020
6	Trend analysis and rainfall variability for Tapi basin	Ms.Pareshakumari M Baria	1	19/11/2020
7	Modelling reservoir sedimentation from hydrographic observations using hydrometric data	Yazad C. Jabbar	1	15/01/2021

**PG Dissertation Guided (2010 onwards)**

<b>Sl. No.</b>	<b>Title of the Project</b>	<b>Name of supervisor(s)</b>	<b>Academic session</b>
1	Optimization of Karjan Command Area By Using Linear Programming	Dr. B K Samtani, Dr S M Yadav	2011-12
2	A Case Study on Village Sokhada “Water Distribution Network Design and Analysis”	Dr. B H Pandit, Dr S M Yadav	2011-12
3	Ground Water Analysis: A Case Study of Valsad and Navsari District	Prof. S I Waikhom, Dr. P. R. Mehta, Dr S M Yadav	2012-13
4	Geomorphic Channel Design and Analysis Using HEC-RAS Hydraulic Design Functions	Prof. S I Waikhom, Dr S M Yadav	2012-13
5	Assessing Predictive Capability of Selected Bed Load Equations Using Experimental and Flume Data	Dr S M Yadav, Dr. B K Samtani	2012-13
6	Study of Sukhi Reservoir Storage Using MLR and ANN Techniques	Prof. B M Vadher, Dr S M Yadav	2012-13
7	Analysis of Sediment Trapped By Check Dam of Uchhchhal and Nizar Region	Dr S M Yadav	2012-13
8	Analysis of Sediment Trapped Behind Slit and Beam Type Check Dams: A Case Study of Vandsa Taluka	Dr S M Yadav	2012-13
9	One Dimensional Numerical Modelling of Unsteady Flow and Reservoir Sedimentation: A Case Study of Lower Siang Project	Dr S M Yadav, Dr. P D Porey	2013-14
10	Sea Water Intrusion in the Coastal area of Navsari District and its Control by Surface Spreading Methods.	Dr. B K Samtani, Dr S M Yadav	2013-14
11	One Dimensional numerical Modelling For Flood Events Using HEC-RAS	Dr. R B Khasiya, Dr S M Yadav	2013-14
12	Optimal Crop Panning Using a CCLP Model	Dr. B M Vadher, Dr. S. M. Yadav	2013-14
13	Analysis of Dimensionless Flow Parameters Influencing Sediment Transport Rate	Dr S M Yadav	2014-15
14	Testing of Stream Power Equations for the Computation and Prediction of total Sediment Concentration	Dr S M Yadav	2014-15
15	Simulation and Scenario analysis to Assess future water demands in the South Gujarat region using Wrap model	Dr S M Yadav	2015-16
16	Determination of Roughness Coefficient for Narmada Stream in Gujarat	Prof. B M Vadher , Dr S M Yadav	2015-16
17	Experimental Investigation of the effect of horizontal plates on the reduction of local Scour around a single Bridge Pier	Dr S M Yadav	2015-16
18	Study of Computed Bed Load to suspended Load ration for Narmada River	Dr. B K Samtani, Dr S M Yadav	2016-17

19	Analysis of Bed Load Equations using Measured Bed load and Bed-Material load of Mountainous Stream	Dr S M Yadav	2016-17
20	Measurement of Longitudinal Distribution of Suspended Sediments In Irrigation Canal	Prof. S I Waikhom, Dr S M Yadav	2016-17
21	1D and 2D hydrodynamic modelling of Banas river from downstream of Dantiwada and Sipu dam to Kamalpur using HEC RAS	Dr S M Yadav	2017-18
22	Study of computed Bed load to Suspended load ratio for Narmada river	Dr. B K Samtani, Dr S M Yadav	2017-18
23	Measurement of longitudinal distribution of suspended sediments in irrigation canals	Prof. S I Waikhom, Dr S M Yadav	2017-18
24	Hydrodynamic modelling for Ambika river basin using HEC RAS	Prof. D J Mehta, Dr S M Yadav	2018-19
25	Assessing role of contour canal in flood inundation extent of semi-arid river basin	Dr S M Yadav	2018-19
26	Temporal analysis of rainfall and temperature over a semi-arid state (Gujarat) of India	Prof. V G Yadav, Dr S M Yadav	2018-19
27	Hydraulic and hydrologic modelling of semi-arid river basin	Prof. D J Mehta, Dr S M Yadav	2019-20
28	Dam break analysis: a case study of Ukai dam	Prof. D J Mehta, Dr S M Yadav	2019-20
29	Hydrodynamic modelling of Sukhbhadar River reach	Dr S M Yadav	2020-21
30	Non uniform bedload transport using flume and field data	Dr S M Yadav	2020-21
31	Raingauge network analysis for flood forecasting	Prof. D J Mehta, Dr S M Yadav	2020-21
32	Evaluation of spatial and temporal variation in bed load transport in mountain river through field measurement	Prof. V G Yadav, Dr S M Yadav	2020-21

## **Publications (Google Scholar Citation: 162,h-index 7,i10-index 4)**

<https://scholar.google.co.in/citations?user=TJw0NJIAAAAJ&hl=en>

### **Articles in International Journal**

- [IJ.1] **Sanjaykumar M Yadav**, Shivani Bhagat and VG Yadav"Temporal analysis of precipitation in Saurashtra, Kutch, and Diu sub-division of Western Indian region"**Theoretical and Applied Climatology, Springer 2021**
- [IJ.2] BR Joshi and **SM Yadav**"Effect on sediment delivery ratio by changes in land use land cover and construction of hydraulic structures at sub basin scale" **Journal of Applied Water Engineering and Research 2021**
- [IJ.3] D Mehta and **SM Yadav** "An analysis on rainfall variability and drought over Barmer District of Rajasthan: Northwest India" **Water Supply Water Science and Technology IWA Publications 2021**
- [IJ.4] B Ajudiya, **SM Yadav** and PK Majumdar. "Optimization of cropping patterns in the command area of multiple reservoir system using TLBO algorithm" **ISH Journal of Hydraulic Engineering 2021**

- [IJ.5] DJ Mehta and **SM Yadav** Analysis of scour depth in the case of parallel bridges using HEC-RAS **Water Supply Water Science and Technology IWA Publications 2021**
- [IJ.6] Vijendra kumar<sup>1</sup> and S. M. Yadav<sup>2</sup> "Self-Adaptive Multi-Population based Jaya algorithm for the Optimization of Cropping Pattern under Constraint Environment" **Journal of Hydro-Informatics accepted.**
- [IJ.7] Mehta, Darshan Jayeshbhai, and **Sanjay Madhusudan Yadav**. "Hydrodynamic Simulation of River Ambica for Riverbed Assessment: A Case Study of Navsari Region." *Advances in Water Resources Engineering and Management*. Springer, Singapore, 2020. 127-140.
- [IJ.8] Mehta, D., **Yadav, S. M.**, Waikhom, S., & Prajapati, K. (2020). Stable Channel Design of Tapi River Using HEC-RAS for Surat Region. In *Environmental Processes and Management* (pp. 25-36). Springer, Cham.
- [IJ.9] Kumar, Vijendra, and **S. M. Yadav**. "Optimization of Water Releases from Ukai Reservoir Using Jaya Algorithm." *Advanced Engineering Optimization Through Intelligent Techniques*. Springer, Singapore, 2020. 323-336.
- [IJ.10] Pavan N. Ghumare, K.A. Chauhan, S. M. Yadav "Housing attributes affecting buyers in India" *International Journal of Housing Markets and Analysis*. 2019. DOI: 10.1108/IJHMA-08-2009-0081
- [IJ.11] Pavan N. Ghumare, K.A. Chauhan, S. M. Yadav "Affordable Housing Policies in India: Challenges and Reform" *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 2706-2706, 2019.
- [IJ.12] Madhura Aher, **S.M.Yadav** "Spatio Temporal variation in streamflow and sediment discharge in Middle Godavari basin during 1969-2016" **International Journal of Recent Technology and Engineering (IJRTE)**, 8(4), 2019.
- [IJ.13] Jabbar, Yazad C., and **Sanjay M. Yadav**. "Development of reservoir capacity loss model using bootstrapping of sediment rating curves." *ISH Journal of Hydraulic Engineering* (2019): 1-13.
- [IJ.14] Ramkar P., **Yadav S.M.** (2019) Rainfall Trend Analysis Using Nonparametric Test: A Case Study of Malegaon City. In: Rathinasamy M., Chandramouli S., Phanindra K., Mahesh U. (eds) *Water Resources and Environmental Engineering II*. Springer, Singapore
- [IJ.15] YC Jabbar and **SM Yadav** "Development of a Relationship Between Hydrometer and Hydrographic Observations to Predict Reservoir Capacity Loss." *Acta Geophysica* (2019):1-19.
- [IJ.16] **Yadav, Sanjaykumar Madhusudan**, Vipin Kumar Yadav, and Anurag Gilitwala. "Evaluation of bed load equations using field measured bed load and bed material load." *ISH Journal of Hydraulic Engineering* (2019): 1-11.
- [IJ.17] Baria, Paresha M., and **S. M. Yadav**. "Investigating extreme rainfall non-stationarity of upper Tapi river basin, India." **ISH Journal of Hydraulic Engineering** (2019): 1-9.
- [IJ.18] Kumar, V., and **Yadav, S. M.**, Optimization of Cropping Patterns Using Elitist-Jaya and Elitist-TLBO Algorithms. *Water Resources Management* (2019). <https://doi.org/10.1007/s11269-019-02204-z>
- [IJ.19] Ramkar P. and **Yadav S.M.**, Identification of critical watershed using hydrological model and drought indices: a case study of upper Girna, Maharashtra, India, *ISH Journal of Hydraulic Engineering*, (2019). <https://doi.org/10.1080/09715010.2019.1594416>
- [IJ.20] Ramkar, P., and **Yadav, S. M.** Spatiotemporal drought assessment of a semi-arid part of middle Tapi River Basin, India. *International Journal of Disaster Risk Reduction*, 28 (2018), 414-426. <https://doi.org/10.1016/j.jdr.2018.03.025>
- [IJ.21] Kumar, V. and **Yadav, S.M.**, Optimization of Reservoir Operation with a New Approach in Evolutionary Computation Using TLBO Algorithm and Jaya Algorithm. *Water Resources Management*, 32(13), pp.4375-4391 (2018). <https://doi.org/10.1007/s11269-018-2067-5>.
- [IJ.22] Maroof P. Shaikh, Vipinkumar G. Yadav, Sanjay M. Yadav "Simulation of Rainfall-Runoff Event Using HEC-HMS Model for Rel Sub-Basin, Gujarat, India". *Journal of Emerging Technologies and Innovative Research*, 5(4), 402-407 (2018).
- [IJ.23] Ramkar P. and **Yadav S.M.**, Rainfall Trend Analysis Using Nonparametric Test: A Case Study of Malegaon City. In: Rathinasamy M., Chandramouli S., Phanindra K., Mahesh U. (eds) *Water*

- Resources and Environmental Engineering II. Springer, Singapore 2018.  
[https://doi.org/10.1007/978-981-13-2038-5\\_3](https://doi.org/10.1007/978-981-13-2038-5_3)
- [IJ.24] Waikhom, Sahita Ibopishak, and **Sanjaykumar Madhusudan Yadav**. "A total load approach to predict bed load transport of Indian alluvial river." *ISH Journal of Hydraulic Engineering* (2017): 1-8.
- [IJ.25] Saxena, Surabhi, and **S. M. Yadav**. "Neuro Fuzzy Application in Capacity Prediction and Forecasting Model for Ukai Reservoir." *In Development of Water Resources in India, Springer*, pp. 103-111. Cham, 2017.
- [IJ.26] Waikhom, S. I., and **Yadav, S. M.** Prediction of total load transport of an Indian alluvial river to estimate unmeasured bed load through an alternative approach. *Current Science* (00113891), 113(6), 2017.
- [IJ.27] Parekh, H., Yadav, K., **Yadav, S.**, & Shah, N. Identification and assigning a weight of indicator influencing performance of municipal solid waste management using AHP. *KSCE Journal of Civil Engineering*, 19(1) (2015), 36-45.
- [IJ.28] **Yadav, S. M.**, N. P. Singh, Kalpana A. Shah, and Jigar H. Gamit. "Performance evaluation of water supply services in developing country: A case study of Ahmedabad city." *KSCE Journal of Civil Engineering* 18, no. 7 (2014): 1984-1990.
- [IJ.29] Pandit, Devanshu, and **S. M. Yadav**. "Project control factors at front end: Indian perspective." *American Journal of Civil Engineering and Architecture* 2, no. 2 (2014): 77-82.
- [IJ.30] **S. M. Yadav**, Jayshree Talreja and Sahita Waikhom, Estimating the Sediment Transport Capacity Using HEC-RAS, *Global Research Analysis*, pp.9-14, April-2013.
- [IJ.31] **S. M. Yadav** and Daivakshi Shastri, B.M Vadher, Estimation of Storage of Sukhi Reservoir Using ANN Techniques, *Global Research Analysis*, pp.1-4, April-2013.
- [IJ.32] **S. M. Yadav** and Aarti Avalkar, Sahita Waikhom, Dr. P. R Mehta, A Study of Ground Water Fluctuation in Coastal Region, Valsad and Navsari District, *Global Research Analysis*, pp.81-85, April-2013.
- [IJ.33] H.J.Parekh,K.D.Yadav,**S.M.Yadav**,N.C.Shah, Evaluation of collection and transportation of Municipal Solid Waste Management System in JnNURM cities in Gujarat, India: A Case Study of Ahmedabad, Surat, Vadodara and Rajkot, *International Journal of Scientific Research*, 23/06/2013.
- [IJ.34] **S. M. Yadav**, Darshan Mehta, Sahita Waikhom, Geomorphic Channel Design and Analysis Using HEC-RAS Hydraulic Design Functions, *Global Research Analysis*, pp.5-8, April-2013.
- [IJ.35] **S. M. Yadav** and B. K. Samtani, Evaluation and Improvement of Bed Load Formula Using Tapi River Data, India, *Journal of Water Resource and Protection*, 2(3), pp. 245-250, 2010.
- [IJ.36] **S. M. Yadav** and R. Mishra, Rehabilitation of earthquake affected Chang earthen dam, *International Journal of Research and Reviews in Applied Sciences*, 2(1), pp. 41-46, 2010.
- [IJ.37] **S. M. Yadav** and B. K. Samtani, An exponential equation for predicting bed load transport rate in Tapi River India, *Ultra Scientist of Physical Sciences – International Journal of Physical Sciences*, 20(3), 2009.
- [IJ.38] **S. M. Yadav** and B. K. Samtani, A Case Study of Ripple Factor with Special Reference to Boundary Reynolds number for Tapi River, *World Applied Sciences Journal*, 3(2), , 2008.
- [IJ.39] **S. M. Yadav** and B. K. Samtani, Bed load equation evaluation based on alluvial river data, India, *KSCE Journal of Civil Engineering*, 12(6), 2008.
- [IJ.40] **S. M. Yadav** and B. K. Samtani, High Bed Load Transport in Tapi River, *Global Journal of Environmental Research*, 1(3), 2007.

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### Articles in National Journal

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- [NJ.1] **S. M. Yadav** and B. K. Samtani, An exponential equation for predicting bed load transport rate in sand bed river, *ADIT Journal of Engineering*, 5(1), 2008.
  - [NJ.2] **S. M. Yadav** and B. K. Samtani, Evaluation of Meyer Peters Bed-Load Equation Using Tapi River Data, *Journal of Soil and Water Sciences*, 1(2), 2008.
  - [NJ.3] **S. M. Yadav** and B. K. Samtani, Evaluation of bed load equation using Tapi River data, India, *ISH Journal of Hydraulic Engineering*, 15(1), pp. 1-13, 2009.
  - [NJ.4] **S. M. Yadav**, Estimation of Bed Load by Kalinske's Equation using Tapi River Data, *ISH Journal of Hydraulic Engineering*, 15(3), pp.97-104, 2009.
  - [NJ.5] **S. M. Yadav**, Co-efficient Discharge for Double & Triple Cycle Labyrinth Weir, *Journal of Soil & Water Sciences*, 15(2), pp. 07-15, 2010.
  - [NJ.6] Prof. D.K Pandit and **S.M Yadav**, Efficient Bid Process Management for Project Success, *NICMAR-Journal of Construction Management*, June 2013.
  - [NJ.7] Prof. D.K Pandit and **S.M Yadav**, Need for Better Consultant Selection Procedures, *Civil Engineering & Construction Review*, March 2013.
  - [NJ.8] V.G Yadav, Mrs. S. I. Waikhom, Dr. **S. M. Yadav**. "Total sediment Transport rate of Alluvial rivers for Non-uniform sediments: The state of Art", *Indian journal of Applied Research*, Special Issue Jan-2015, pg 78-80.
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### Articles in International Conference Proceedings( 2010 onwards)

- [IC.1] Rashmi Yadav and **S.M. Yadav** "Assessment of 1D/2D coupled model for prediction of flood inundation" *International Conference on Recent Advances in Civil Engineering for Sustainable Development*, MANIT Bhopal Feb 13-14, 2021.
- [IC.2] Ayushi Panchal and **S.M. Yadav** "Application of rule based fuzzy logic for rainfall runoff modeling" *International Conference on Recent Advances in Civil Engineering for Sustainable Development*, MANIT Bhopal Feb 13-14, 2021.
- [IC.3] Rashmi Yadav and **S.M. Yadav** "Application of ArcGIS in Flood Modelling" *International Conference on Water and Environment*, MANIT Bhopal March 22-23, 2021.
- [IC.4] Ayushi Panchal and **S.M. Yadav** "Introduction to application of ensemble techniques for streamflow forecasting" *International Conference on Water and Environment*, MANIT Bhopal March 22-23, 2021.
- [IC.5] Ankita Patel, Darshan Mehta and **Dr. S.M. Yadav** "A Rainfall- Runoff Simulation Model for estimation of Floods for Purna River Basin Part of Upper Tapi Basin" *25<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, NIT Rourkela, India 26-28 March, 2021
- [IC.6] Mdura Aher and **S.M. Yadav** "Trend Analysis of Annual Rainfall Data for Godavari Basin, India" *24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, Osmania University India 18-20 December, 2019
- [IC.7] V.K. Yadav, **S.M. Yadav** and B.K. Samtani "A Statistical Interpretation of Hydrological data Measured at Stream Gauging Sites of Godavari River Basin, India" *24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, Osmania University India 18-20 December, 2019
- [IC.8] Darshan Mehta and **S.M. Yadav** "Trend Detection in Temperature using Mann-Kendall Test: A Case Study to Assess Climate Change in Rajasthan State" *24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, Osmania University India 18-20 December, 2019
- [IC.9] Jabbar Yazad C. and **Yadav Samjay M.** "Assessment of Sediment Distribution Pattern in the Ukai Reservoir using Landsat-8 Imagery" *24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, Osmania University India 18-20 December, 2019
- [IC.10] Vijendra Kumar and **S.M. Yadav** "Optimal Monthly Reservoir Operation to Minimize the Irrigation Deficiencies using JAYA Algorithm" *24<sup>th</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, Osmania University India 18-20 December, 2019
- [IC.11] Utkarsh Nigam and **S. M. Yadav** "Development of Computational Assessment Model of Fuzzy Rule Based Evaluation of Groundwater Quality Index: Comparison and Analysis with Conventional



## Articles in International Conference Proceedings( 2010 onwards)

- Index”, International Conference on Sustainable Computing in Science, Technology & Management-2019.
- [IC.12] K.B. Patel and **S. M. Yadav** “One Dimensional Unsteady Flow Analysis using HEC-RAS Modelling Approach for Flood in Navsari City” International Conference on “Recent Advances in Interdisciplinary Trends in Engineering & Applications”, IPS Academy, Institute of Engineering & Science, Indore, India 14-15 February, 2019.
- [IC.13] **Sanjay M. Yadav** and Nikunj K. Mangukiya "Semi-arid River Basin Flood: Causes, Damages and Measures", Proceedings of 5th International Conference in Ocean Engineering (ICOE 2019), Mauritius.
- [IC.14] Vijendra kumar<sup>1</sup>, and **S. M. Yadav**<sup>2</sup> “Optimization of Water Releases from Ukai Reservoir using Jaya Algorithm” *International Conference On Advanced Engineering Optimization Through Intelligent Techniques 03- 05 August 2018*.
- [IC.15] Vijendra kumar<sup>1</sup>, and **S. M. Yadav**<sup>2</sup> “Optimization of Water Allocation from Ukai Reservoir using Elitist TLBO” *23<sup>rd</sup> International Conference on Hydraulics, Water Resources and River Engineering*, NIT Patna, India 19-21 December, 2018.
- [IC.16] K.B. Patel and **S.M. Yadav** “Development of 1D Hydraulic Model to assess urban flood: A case study of Purna River” *23<sup>rd</sup> International Conference on Hydraulics, Water Resources and River Engineering*, NIT Patna, India 19-21 December, 2018.
- [IC.17] Darshan Mehta and **Sanjaykumar Yadav** “Analysis of long term rainfall trends in Rajasthan, India” *23<sup>rd</sup> International Conference on Hydraulics, Water Resources and River Engineering*, NIT Patna, India 19-21 December, 2018.
- [IC.18] Madhura Aher and **Sanjay Yadav** “Trend Analysis of Water discharge and sediment discharge of Lower Godavari basin, India” *23<sup>rd</sup> International Conference on Hydraulics, Water Resources and River Engineering*, NIT Patna, India 19-21 December, 2018.
- [IC.19] Yazad Jabbar and **Sanjay Yadav** “Prediction of reservoir submerged sediment density” *23<sup>rd</sup> International Conference on Hydraulics, Water Resources and River Engineering*, NIT Patna, India 19-21 December, 2018.
- [IC.20] Preeti Ramkar and Dr. S.M.Yadav “Rainfall Trend Analysis using Non-Parametric Test: a Case Study of Malegoan City” in International Conference on Emerging Trends in Water Resources and Environmental Engineering, MVGR College of Engineering, Vizianagaram, India 30th March to 1st April 2017.
- [IC.21] Rahul Patel, S I Waikhom, **S M Yadav**. “Estimation of suspended sediment concentration in lined canal”, *International Conference on Research and Innovations in Science, Engineering & Technology (ICRISET)*, 2017.
- [IC.22] Baria P. M. and Yadav S. M. “Evolution of ENSO Related Rainfall Anomalies for Lower Tapi River, India”, ICRISSET, BVM, V.V. Nagar, India, 17-19 February, 2017,
- [IC.23] Darshan Mehta, **S. M. Yadav**, Sahita Waikhom. “HEC-RAS flow analysis in the river Tapi.” *37<sup>th</sup> IAHR World Congress*, Kuala Lumpur, Malaysia, August 2017.
- [IC.24] P. Ramkar and **S.M.Yadav** “Assessment of Land Use Land Cover Changes on Part of Middle Tapi Basin” *22<sup>nd</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, Ahmedabad, India, December 21-23, 2017.
- [IC.25] Y.C. Jabbar, **S.M. Yadav**, “Cumulative monthly averaged data based development of SRC”, *22<sup>nd</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, L.D. College of Engineering Ahmedabad, India, December 21-23, 2017.
- [IC.26] B. Joshi, **S.M. Yadav**, B K Samtani “Estimation of runoff of Manot sub basin of upper Narmada River using geospatial techniques”, *22<sup>nd</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, L.D. College of Engineering Ahmedabad, India, December 21-23, 2017.
- [IC.27] Baria P. M. and **Yadav S. M.** “Investigation of Extreme Rainfall for Middle Tapi Basin, India”. *22<sup>nd</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering*, L.D. College of Engineering Ahmedabad, India, December 21-23, 2017.



### Articles in International Conference Proceedings( 2010 onwards)

- [IC.28] Waikhom S, **Yadav S M**. “Comparative analysis of the applicability of Ackers and White Total sediment transport function for River and Flume data”, *20<sup>th</sup> Congress of IAHR Asia Pacific Division*, Colombo, 29-31 August 2016.
- [IC.30] Waikhom, S. I., and **S. M. Yadav**. "Variation in total sediment rate prediction using different fall velocity methods." *In River Sedimentation: Proceedings of the 13th International Symposium on River Sedimentation*, Stuttgart, Germany, pp. 458. CRC Press, 19-22 September, 2016.
- [IC.31] V. G. Yadav, **S. M. Yadav**, S. I. Waikhom. “A comparison of two total sediment transport models for rivers”, *In River Sedimentation: Proceedings of the 13th International Symposium on River Sedimentation*, Stuttgart, Germany, pp. 458. CRC Press, 19-22 September, 2016.
- [IC.32] K.B. Patel, **S.M. Yadav**, Flood Risk Assessment of Navsari City, South Gujarat, India, *21<sup>st</sup> International Conference on Hydraulics, Water Resources and River Engineering*, CWPRS, Pune, India 08-10 December, 2016.
- [IC.33] Darshan Mehta, **S. M. Yadav**, Sahita Waikhom, Keyur Prajapati. “Stable Channel Design of Tapi River using HEC-RAS for Surat Region.” *21<sup>st</sup> International Conference on Hydraulics, Water Resources and River Engineering*, CWPRS, Pune, India 08-10 December, 2016.
- [IC.34] V.G Yadav, Mrs. S. I. Waikhom,, Dr. S. M. Yadav. “Total sedimenet Transport rate of Alluvial rivers for Non-uniform sediments: The state of Art”, *International Conference on Advances in Engineering*, Saffrony Institute of Technology, Mehsana, Jan 2015.
- [IC.35] V G Yadav, Mrs. S. I. Waikhom, Dr. **S. M. Yadav**. “Evaluation of correlation of dimensionless sediment transport parameters with sediment transport rate”, *36th IAHR World Congress*, The Hague, The Netherlands, 28 June-3 July' 2015.
- [IC.36] Mrs. S. I. Waikhom, Dr. **S. M. Yadav**. “Comparative study of original Ackers & White relation along with modified coefficient for total sediment load prediction”, *36th IAHR World Congress*, The Hague, The Netherlands, 28 June-3 July 2015.
- [IC.37] Mrs. S. I. Waikhom, Manali S Shah, Dr. **S. M. Yadav**. “Analysis of selected microscopic approaches of sediment load transport”, *36th IAHR World Congress*, The Hague, The Netherlands, 28 June-3 July 2015
- [IC.38] Vijendra kumar, **S. M. Yadav** , B. K. Samtani and and Priyanka Zore “Study of Prevention and Control of Seawater Intrusion in the Coastal Areas of Navsari District, Gujarat by Direct Surface Method” *20th International Conference on Hydraulics, Water Resources and River Engineering*, IIT Roorkee, India 17-19 December, 2015.
- [IC.39] Mrs. S. I. Waikhom, Mr. Hilay Prajapati, Dr. **S. M. Yadav**. “Evaluation of unit stream power approach for predicting total load transport rate”, *20th International Conference on Hydraulics, Water Resources and River Engineering*, IIT Roorkee, India 17-19 December, 2015.
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- [IC.42] Mrs. S. I. Waikhom, Dr. S. M. Yadav. “Approaches of Total Sediment Transport of Alluvial River: The State of the Art”, *HYDRO 2014, 19th International Conference on Hydraulics, Water resources & Environmental Engineering Dec. 18-20th , NIT Bhopal India*.
- [IC.43] Priyanka Zore, Vijendra Kumar, **S.M.Yadav** and T.Venkateswarlu “Stage-Discharge Models Based On ANN for Dehli Gauging Station of Kim River” *International Conference on Development, Biodiversity and Climate Change: Issues and Challenges, Chamba Climate Meet, Himachal Pradesh, India 3-5 October, 2014*.
- [IC.44] Vijendra Kumar, S.M.Yadav, Priyanka Zore and T.Venkateswarlu, , “ANN and MLR Based Stage-Discharge Models for Dehli Gauging Station of Kim River, Gujarat”, *3rd International Conference On “Sustainable Innovative Techniques In Architecture, Civil and Environmental Engineering” ISBN: 978-93-83083-77-0 page no (246-253) 2014*.

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- [IC.49] H.J.Parekh, Dr.K.D.Yadav, **S.M.Yadav**, Dr.N.C.Shah, "Comparison of Municipal Solid Waste Management System in Developing Countries: A Case study of Ahmedabad, Surat and Kabul", *International Conference on Civil Engineering and Infrastructural Issues in Emerging Economies*, Sastra University, Thanjavur, Tamil nadu, India Deakin University, Australia, 27 – 28 February 2013.
- [IC.50] **S. M. Yadav**, S. I. Waikhom, Darshan Mehta. "Analysis of flood using HEC-RAS: A Case Study of Surat City." *HYDRO 2013, 18<sup>th</sup> International Conference on Hydraulics, Water Resources & Environmental Engineering* (IIT Madras, Chennai, 4-6 December 2013), 549-555.
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- [IC.52] S. M. Yadav, Study of Particle Reynolds number and Ripple factor for Tapi River, India, *International Conference on Rivers 2011, Penang, Malasiya*, December 09-11, 2011.
- [IC.53] **S. M. Yadav**, Mathematical Relationship between Particle Reynolds Number & Ripple Factor, *3rd International Multi Confrence on Engineering and Technoligical Innovations*, Orlando, Florida,USA, July 29-30, 2010.
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- [NC.1] **Vijendra kumar<sup>1</sup>** and S. M. Yadav<sup>2</sup> (2019) "Optimizing Reservoir Capacity, water allocation & crop yield using Teaching Learning Based Optimization (TLBO) technique", *1<sup>st</sup> National Conference on Emerging Research and Innovations in Civil Engineering*, 15<sup>th</sup>-16<sup>th</sup> February, 2019.
- [NC.2] K.B. Patel and **S. M. Yadav** "Development of 2D Unsteady Hydraulic Model of Purna river basin for flood inundation mapping" *1<sup>st</sup> National Conference on "Emerging Research and Innovations in Civil Engineering"*, GEC, Surat, Gujarat 15-16 February, 2019.
- [NC.3] Zalak Lukhi, Darshan Mehta, and **S M Yadav**. "Dam Break Analysis: A Case Study of Ukai Dam.". *Proceedings in 2nd National Conference on Recent Research and Development in Core Disciplines of Engineering*, VIER, Vadodara 2nd April, 2019.
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- [NC.16] Hilay Prajapati, Mrs. S. I. Waikhom, **S. M. Yadav.** “Assessing the predictability of Total sediment Transport rate for Unit Stream Power Approach”, *National Conference on Recent Research in Engineering and Technology*, Anand, 26-27 Feb 2015.
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- [NC.18] Darshan Mehta, **S. M. Yadav**, Sahita I. Waikhom. “Prediction of Flood for Lower Tapi river using HEC-RAS.” 3<sup>rd</sup> *National Conference on Innovative & Emerging Technologies*. S. R. Patel College of Engineering, Dabhi Unjha, 17-18 April 2015.
- [NC.19] **S.M. Yadav**, S.I. Waikhom, Aarti Aavalkar, Dr. P. R. Mehta, Vipin Kumar Yadav. “Groundwater quality assessment using Water Quality Index (WQI) approach – Case study in a coastal region of South Gujarat, India”, *India Water Week*, New Delhi, 13-17 January 2015.
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- [NC.21] T.Venkateswarlu, **S.M. Yadav**, Vijendra Kumar, Priyanka Zore, P.G.Agnihotri and V.L.Mankar,, “Development Of Stage-Discharge Models For Dehli Gauging Station Of Kim River Using Ann And Mlr Technique”, *Trends and Challenges of Civil Engineering in Today's Transforming World.2014*
- [NC.22] Vijendra Kumar, Utkarsh Nigam, **S. M. Yadav**, B. K. Samtani , “Hydel Energy Potential in India and Introduction to Power Generation using Small Hydel Power Plant” *National conference: recent advances in civil & structural engineering page no(285-290) 2014.*

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- [NC.25] Darshan Mehta, **S. M. Yadav**, Sahita I. Waikhom. "1-D hydrodynamic modeling of flooding in the lower Tapi river basin in Surat, Gujarat." *National Conference on Recent Advances in Civil and Structural Engineering*, A.D.I.T, Vallabh Vidhyanagar, 25-26 April 2014.
- [NC.26] Payal, S I Waikhom, **S. M. Yadav**. "Assessing Bed load formula for Steep Slope channel using Flume Data", *National Conference on Recent Advances in Civil and Structural Engineering*, A.D.I.T, Vallabh Vidhyanagar, 25-26 April 2014.
- [NC.27] D.K Pandit and **S.M. Yadav**, Performance Indicators for Measuring Performance of Construction Projects, *Symposium on Sustainable Infrastructure Development*, IIT Bhubneswar, Orissa, 8-9 February 2013.
- [NC.28] H.J.Parekh, K.D.Yadav, **S.M.Yadav**, N.C.Shah, "Role of Refuse Transfer Station in Modern Solid Waste Transportation Systems", *Workshop and Symposium on sustainable Infrastructure Development (SID)*, IIT Bhubaneswar, Odisha, India, 8-9 February 2013.
- [NC.29] D.K Pandit and **S. M. Yadav**, Consultant Selection in India : Far from Ideal, *Emerging Trends in Contracts and Dispute Resolution*, Indian Institute of Technical Arbitrators, Chennai, 2-3 March 2012.
- [NC.30] **S. M. Yadav**, Solid Waste Management System: A Case Study of Navsari Town, Gujarat, India, *National Conference on New Horizons for Sustainable Tomorrow*, SCET,Surat (Gujarat),India, February 18-19, 2011.
- [NC.31] H.J.Parekh, K.D.Yadav, **S.M.Yadav**, N.C.Shah, Solid Waste Management System: Case study of Navasari town, *National Conference on 'Sustainable Tomorrow'*, SCET , Surat, 19th Feb. 2011
- [NC.32] **S. M. Yadav**, Conservation of fresh water through mixed usage of saline and fresh water –A case study of SVNIT Campus, *National seminar on Water and Sanitation for all, 42nd Annual Convention of IWWA*, Jodhpur, January 29-31, 2010.
- [NC.33] **S. M. Yadav**, Water supply Management in SVNIT campus through mixed usage of fresh and saline water, *National Seminar on Conservation of Lakes and Water Resources: Management Strategies*, Maharana Pratap University of Agriculture and Technology, Udaipur, February 19-20, 2010.
- [NC.34] **S. M. Yadav**, Sea Computation of ripple factor and particle Reynolds number using Tapi river data, India, *Ninth International Conference on Hydro-Science And Engineering*, CED,IIT Madras, Chennai, India, August 02-05, 2010
- [NC.35] **S. M. Yadav**, Case Study: Estimation of probable maximum precipitation for Surat, *National Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering*, M.M.University,Mullana, Ambala, December 16-18, 2010.
- [NC.36] **S. M. Yadav**, Rehabilitation of Butta Dam – A case study, *National Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering*, M.M.University, Mullana, Ambala, December 16-18, 2010.
- [NC.37] **S. M. Yadav**, Estimation of Bed Load by Kalinske's equation using Tapi river data, *Innovation without limits*, Civil engineering Department, Hamirpur, September 18-19, 2009.
- [NC.38] **S. M. Yadav**, Mathematical relationship between ripple factor and boundary Reynolds number for Tapi river, India, *Innovation without limits*, CED, Hamirpur, 18-19, 2009.
- [NC.39] **S. M. Yadav**, Study of Ripple factor and Boundary Reynolds number for Post monsoon, Tapi river, India, *The National Specialty Conference on River Hydraulics*, Mullana and Indian Society for Hydraulics at Maullana, October 29-30, 2009.
- [NC.40] **S. M. Yadav**, Study of Shields Entrainment Function (Monsoon) for river Ambika of South Gujarat, *National Conference on Hydraulics, Water Resources and Environment*, CWPRS, Pune, December 15-16, 2009.

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- [NC.41] **S. M. Yadav**, Estimation of Bed Load by Kalinske's equation using Tapi river data, *Innovation without limits*, Civil engineering Department, Hamirpur, September 18-19, 2009.
- [NC.42] **S. M. Yadav**, Modifying E.Brown's equation and determining Ripple Factor for Pre Monsoon Season, Sarangkhedha Gauging Station of Tapi River, *National Conference on Advances in Civil Engineering organized, Maharashtra Academy of Engineering Education and Research's Institute of Technology, Pune, 2008.*
- [NC.43] **S. M. Yadav**, Evaluation of Kalinske's equation using Tapi river data, *Indian National Conference on Advances in Hydraulic Engineering with specific emphasis on Model-Prototype conformity*, CWPRS, Pune, November 6-7, 2008.
- [NC.44] **S. M. Yadav**, Evaluation of Kalinske's Bedload Equation *National Conference on Integrated Water and Wastewater Management* Jadavpur University, Kolkata, November 20-22, 2008.
- [NC.45] **S. M. Yadav** and B.K.Samtani, Modifying Bagnolds Equation and determining Ripple Factor For Monsoon Season, Savkheda Gauging Station of Tapi River, *2<sup>nd</sup> National Conference on Focusing on Advances in Civil Engineering*, Thangal Kunju Musaliar College of Engineering, Kollam, Kerala, February 21-23, 2008.
- [NC.46] **S. M. Yadav**, Evaluation of Duboy's Bed load equation using Tapi river data, *National Conference on Innovations and Applications of Mathematical Modeling Techniques in Engineering Systems*, ADIT, V V Nagar, December 10, 2008.
- [NC.47] **S. M. Yadav**, Mathematical model for Labyrinth single cycle Trapezoidal weir, *National Conference on Hydraulics, Water Resources and Environment*, MNIT, Jaipur, December 15-16, 2008.
- [NC.48] **S. M. Yadav** and B.K.Samtani, Modifying Bagnolds Equation and determining Ripple Factor for Pre Monsoon Season, Savkheda Gauging Station of Tapi River, *National Seminar on Application of GIS in Civil Engineering*, Karunya University, Coimbaore, TamilNadu, India, February 16, 2008.
- [NC.49] **S. M. Yadav** and B.K.Samtani, Modifying Shields Equation and determining Ripple Factor for Monsoon Season, Savkheda gauging Station of Tapi River, *National Seminar on Integrated Water Management and Sustainable Water Pricing*, Rajasthan Technical University, Kota, February 08-09, 2008.
- [NC.50] **S. M. Yadav** and B.K.Samtani, Modifying E. Browns Equation and Determining Ripple Factor for Monsoon Season, Savkheda Gauging Station of Tapi River, *Hydraulics and Water Resources, National Conference on Hydraulics & Water Resources, SVNIT, Surat, December 21-22, 2007.*

### **Text or Reference book published on relevant subjects from reputed international publishers:**

Sl. No.	Title of the Text/Reference book	Publishers	Year of publication
1	Application of soft computing techniques in civil engineering	Vivo	2018
2	Assessing predictive capability of suspended load formulae	LAMBERT	2018
3	1-D Hydrodynamic Flood Modelling to identify Flood prone areas	LAMBERT	2018

## Workshops

- Coordinator for AICTE Sponsored Staff Development programme on Civil Project: Development and Management during 20-24 July 2009.
- Coordinator for Seminar on Water Resources: Issues and Challenges organized by Institute of Engineers(I), Surat on 30 March 2009
- Coordinator for Seminar on Water Resources Management organized jointly by CWC and CED, SVNIT, Surat on 27 March 2009.
- Coordinator for AICTE Sponsored Staff Development programme on Wind Energy during 19-23 January 2009
- Coordinator for Workshop on Watershed Management organized by CED, SVNIT, Surat on 23 May 2011.
- Coordinator for Seminar on Water Resources Development and Management on the occasion of World Water Day 2011 organized by CED, SVNIT, on 28 March 2011.
- Coordinator for Three-day workshop on Urban Storm Drainage Designing and Modelling organized by CED, SVNIT and Sponsored by BVM, VV Nagar during 7-9 January 2011.
- Coordinator for Workshop on River Hydraulic and management of Indian Rivers by CED, SVNIT, Surat on 2 March 2014.
- Improving Employee Accountability for Achieving Goals in Organization, (23rd January, 2016) Sponsored by TEQIP, Phase II on Saturday 23rd January 2016
- Organized **One week STTP** on 'River Flood Analysis and Modelling' CED SVNIT 19 to 21 Dec 2016.
- 1st **National Conference** on "Recent Advances in Civil Engineering", (RACE- 2016), 5-6 March 2016, Under TEQIP II, CED, SVNIT, Surat.
- Organized **One week STTP** on "Application of Soft Computing Techniques in Civil Engineering' 12<sup>th</sup> to 16<sup>th</sup> March 2018, under TEQIP-III, CED, SVNIT, Surat.
- Organized **Two-day workshop** on "River Basin Planning and Management" 12 and 13 April 2018, SVNIT, Surat.
- Organized **One week STTP** on "Flood Modelling and Analysis' 4<sup>th</sup> to 8<sup>th</sup> June 2018, CED, SVNIT, Surat.
- Organized **Two days' workshop** on "Flooding in cities Warning & Dissemination" 20<sup>th</sup> to 21<sup>st</sup> Aug 2018, in collaboration with DHI India and CED, SVNIT, Surat.
- Organized **One week STTP** on "Recent Advances in Flood Modelling' 3<sup>rd</sup> to 7<sup>th</sup> Dec 2018, CED, SVNIT, Surat.
- **Conducted Workshops/FDP/Short term courses of minimum 05 working days duration offered as coordinator or convener**

Sl. No	Title of the Course	Duration		Co-ordinator (s)/ Convenor
		Starting Date	Ending date	
1	River Flood Analysis and Modelling	19/12/2016	23/12/2016	Co-ordinator
2	Application of Soft Computing Techniques in Civil Engineering	12/03/2018	16/03/2018	Co-ordinator
3	Flood Analysis and Modelling	04/06/2018	08/06/2018	Co-ordinator
4	Recent Advances in Flood Modelling	03/12/2018	07/12/2018	Co-ordinator
5	Advances in flood modelling	09/12/2019	13/12/2019	Co-ordinator
6	Flood Risk Management	01/03/2021	05/03/2021	Co-ordinator

- Organized Session on "Emrging approaches: Hydrologic-hydraulic modelling for urban floods and Thresholds in hydrology" at European Geosciences Unioun ,vEGU,28<sup>th</sup> April 2021, Vienna,Austria.

## Expert lectures Delivered

- Delivered more than **100** expert lectures at workshops, training programmes, webinars etc. at national and international level conferences/training program/institutes/colleges.

## Counsultancy

### MAJOR DESIGN WORKS(SELECTED)

Sr. No	Name of Work	Faculty	Year
1.	Regarding expert opinion about design section of Ayad River, Udaipur, Rajasthan.	Dr. S. M. Yadav	2021
2.	Carrying out 2-D Hydraulic Modeling and impact study of Dredged Channels.	Dr. S. M. Yadav	2021
3.	Design Review and Consultation of Rain Water Disposal System for “Veer Savarkar Heights” Jahangirabad, Surat.	Dr. S. M. Yadav	2021
4.	Impact study of dredged channel and channelization work done at various district of Uttarpradesh for flood mitigation purpose.	Dr. S. M. Yadav	
5.	Hydrodynamic modeling of dredging and channelization works for protection from the erosion in Dubey Chapra village of Dubey Chhapra Dam built on the left bank of river Ganga in district Ballia	Dr. S. M. Yadav	2020
6.	Providing Third Party Inspection(TPI) services for construction of Library building at TPS No.40(Limbayat-Dindoli), F.P. No.88, R-28 in South East Zone (Limbayat), Surat	Dr. S. M. Yadav Dr. K. A. Chauhan Dr. R. M. Tailor	2020
7.	Third Party Inspection (TPI) for the work of Construction of Shahid Smarak/Shaurya Smarak and Peace Center at Draft T.P.S No.29 (Vesu-Rundh-Magdalla), F.P. No. 70, 113 ,118 ,126 ,136, 139 and 143 in Surat Municipal Corporation, Surat (Phase-I)	Dr. R. M. Tailor Dr. S. M. Yadav Dr. K. A. Chauhan Dr. H. R. Jariwala	2019
8.	Third Party Inspection (TPI) for Construction of EWS-II residential flats & Shops including all internal infrastructure service & Area development work at T.P. Scheme No.19 (Parvat-Magob), F.P. No. 110/3 under "Pradhan Mantri Awas Yojana" on Engineering-Designing, Procurment and Construction Basis(EPC Mode)	Dr. R. M. Tailor Dr. S. M. Yadav	2019
9.	Remedial measures and estimate for crack repairing for the work of Four laning of Talaja-Mahuva section of NH-8E from Km.53.585 to Km.100.100 (Design chainage from Km.54.990 to Km.100.450) (Package-II) in the State of Gujarat on Hybrid Annuity Mode.	Dr. S.M.Yadav	2019
10	Hydrodynamic modeling of channelization of various river reaches of Uttarpradesh.	Dr. S.M.Yadav	2019
11	Consultancy Services for the detailed design and study of damaged platforms and Roads of KRIL PFT Hazira.	Dr. S.M.Yadav	2019
12	Regarding Proof Checking of design and drawing of Nursing College and Hostel Building. (Construction of Nursing College and Hostel Building at Govt. Hospital, Nani Daman)	Co-PI	2018-2019
13	Proof Checking of Design and Drawings of Minor Bridge at CH:37+130 for the work of 4-Lane with paved shoulder configuration of Bilaspur-Pathrapali (Km.0+000 to Km.53+300) section of NH-111 (New NH-130) in the State of Chhattisgarh under Bharatmala on Hybrid Annuity basis.	Co-PI	2018-2019



Sr. No	Name of Work	Faculty	Year
14	Hydrodynamic modelling of channelization of Elgin-Charsadi dam on Ghaghra river of Janpad Gonda.	Dr. S.M.Yadav	2018
15	Design and Proof Check of the drawings of RCC weir across River Damanganga at Silvassa.	Dr. S.M.Yadav Dr. R. Kumar	2018
16	Vetting of Structural design and drawings prepared by our consultant for check dam at various places in U.T. of D&NH, Silvassa.	Dr. R. Kumar Dr. A. K. Desai Dr. S. M. Yadav	2018
17	Regarding proof checking of design and drawing of construction of Flexible pavement along the canal, Ratanpur, Panchmahal, Godhra.	Dr. R. Kumar Dr. S.M.Yadav	2018
18.	Design of partial opening of Mota Varachha R.C.C. Intake Well	Dr. S.M.Yadav Dr. A. K.Desai	2018
19.	Vetting of Weir/check dam design and drawings for the work of Construction of weir/check dam on Kalai River, Bamanpuja Moti Daman.	Dr. S.M.Yadav	2017
20.	Survey and design for <b>development of natural kotar</b> from Samarvarni area up to Silvassa Municipal border, Samarvarni	Dr S.M.Yadav	2017
21.	Design of <b>water supply network</b> , Ichhapore-Bhatpore, GIDC, Surat	Dr S.M.Yadav	2016
22.	<b>Design of check dam</b> , Silvassa.	Dr S.M.Yadav	2016
23.	Design of <b>canal water supply based water supply scheme</b> for filling ponds, Hazira	Dr S.M.Yadav	2016
24.	Vetting of hydraulic design and drawings for <b>Storm Water Drain</b> at Silvassa	Dr S.M.Yadav	2016
25.	Vetting/Proof Checked the designing for ‘Augmentation <b>Water Supply Scheme</b> of Moti Daman Based on Bhamti Branch Canal of Madhuban Dam.’	Dr. S.M.Yadav	2016
26.	Design and Proof checking of <b>long distance water supply pipe line</b>	Dr. S.M.Yadav	2015
27.	<b>Storm Water Drainage Network Planning and Design</b> for all residential colonies (Existing) along the road leading to Balaji Temple within Silvassa Municipal Council area	Dr. S.M.Yadav	2012
28.	Design and re-sectioning of Bill Khadi-Vapi	Dr. S.M.Yadav	2010
29.	Contour Mapping and plain table survey and Recommendation for <b>Drainage system</b> and Specification of items for SRU of Hazira Plant of ONGC , Surat	Dr.S.M.Yadav	2006
30.	Design of <b>storm water drainage</b> system for M/s Batliboi Plant Complex at Udhna, Surat	Dr.S.M.Yadav	2005
31.	Design of two layer chain link fencing around Hazira Plant of ONGC, Surat.	Dr.S.M.Yadav	2006
32.	<b>Design construction/strengthening of damaged boundary wall</b> of ONGC plant, Hazira, Surat	Dr.S.M.Yadav	2006
33.	<b>Design of septic tank and seepage pit system</b> for M/s Batliboi Plant Complex at Udhna, Surat	Dr.S.M.Yadav	2006
34.	Estimation and calculation of Built-up area for construction of Family Accommodation for CISF & Railway Personnel-Phase II Colony, ONGC, Hazira	Dr.S.M.Yadav	2004
35.	Preparing estimates for seasoning shed ,furniture shed for Vanil Udyog,Vansada	Dr.S.M.Yadav	2002

### Project Management Counsaltancy (Selected)

Sr. No	Name of Work	Faculty	Year
1.	Appointment as T.P.I. Agency for the work of Development of Integrated Group Housing facilities at Anjana Tenements on F.P. No.98, T.P. Scheme No.7 (Anjana) on PPP basis under Redevelopment of Public Housing Scheme-2016 for total 416 Du's and 06 Shops (PHC) and Construction of 486 Units (AHC).	Co-PI	2018-19
2.	Consultancy service for suggesting soil treatment for water retention, side protection including its design, estimation and supervision for Pal lake at F.P. No.43, T.P. Scheme No.15 (Pal) and Khatodara lake at F. P. No.161, T.P. Scheme No.06 (Majura-Khatodara) within S.M.C. Limit.	Co-PI	2018-2019
3.	Appointment of TPQA agency for Affordable Housing in Partnership (AHP) Component of PMAY (U) for Baldevi site-I and Ambedkar Nagar for Silvassa Municipal Council.	Co-PI	2018-2019
4.	Third Party Inspection (TPI) for the work of Providing and Laying 400mm dia. DI Rising main line from Proposed Magob Sewage Pumping Station to Puna Sewage Pumping Station in South East Zone (Limbayat).	Dr.S.M.Yadav	2018-2019
5.	Third Party Inspection (TPI) for the work of Construction of Elevated Service Reservoir (ESR) and Under Ground Service Reservoir (UGSR) in Central Zone area, under AMRUT & SJMMSVY.	Dr. C. R. Patel Dr. S.M.Yadav	2018
6.	Third Party Inspection (TPI) for the work of Construction of 99 lacs litres capacity New R.C.C. UGSR-4 with Booster House and New Water Testing Laboratory at Khatodara WDS of T. P. Scheme No.06 (Majura-Khatodara), F.P.-146, 147 in Surat.	Dr. C. R. Patel Dr. S.M.Yadav	2017
7.	TPI for the work of Providing, Manufacturing and Supplying of 1118 MM OD 10 MM thick & 1422 MM OD 12.5 MM thick M.S. of Spirally Submerged Arc Wlded M.S. Pipe Conforming to IS:3589:2001 for various rising main Pipeline works under drainage department of SMC	Dr. S.M.Yadav Dr. V.L. Manekar	2017
8.	Third Party Inspection (TPI) for the work of Augmentation of existing Sewerage network by providing and laying drainage line of I.S.I. make R.C.C. Np3/Np4 pipe having spigot and socket rubber ring joint including repairing of existing drainage manhole and/or removing of existing drainage line transferring of existing drainage connection in Old UMARA NORTH SPS area, Surat.	Dr. K.D.Yadav Dr. S.M.Yadav	2017
9.	Providing Third Party Inspection (TPI) for the work of Construction of 25 x 25 mt. size Swimming Pool at T. P. Scheme No.24(Motavarachha-Utran), F. P. No.178 (R-27) in Varachha Zone area, Surat Municipal Corporation, Surat.	Dr. B.N.Tandel Dr. S.M.Yadav	2017
10.	Third Party Inspection (TPI) for the work of construction of Fire Station Building and Staff Quarters at T.P. Scheme No.02 (Vesu-Bharthana-Vesu), F. P. No.219 in South West (Athwa) Zone.	Dr. D.A.Patel Dr. S.M.Yadav	2017
11.	Third Party Inspection (TPI) services for Construction of IT Mac Centre at T. P. Scheme No.36 (Althan), F. P. Plot No.01 in area of South West (Athwa) Zone under Surat Smart City Project.	Dr. S.M.Yadav Dr. R. M. Tailor	2017
12.	TPI for the work of Providing, Laying & Constructing Storm Drainage line from Panvel Point to Golden Chowk, Mota Varachha in East Zone.	Dr. S.M.Yadav	2016
13.	Third Party Inspection (TPI) Services for Construction of R.C.C.Box Culvert at D.T.P.S. 69(Godadara-Dindoli)(four Different Location) in area of South East Zone Limbayat.	Dr. S.M.Yadav	2016
14.	TPI for Providing & Laying of 1219 mm dia. M. S. rising pipe line for Utran Sewage Pumping Station and Kosad Railway Sewage Pumping Station in New North Drainage Zone for augmentation.	Dr. S.M.Yadav	2016

Sr. No	Name of Work	Faculty	Year
15.	TPI for Providing & Laying Storm Drainage pipe line on different roads of T.P.S. No.-66 (Kosad) Under Package outlet-13 in New North Zone (Katargam) at Surat City.	Dr. S.M.Yadav	2016
16.	TPI for Providing & Laying RCC NP3/NP4 class spigot and socket rubber ring joint pipes for sewerage Network augmentation of Anjana Sewage Pumping Station in South East Drainage Zone.	Dr.S.M.Yadav	2015
17.	TPI for Providing erecting commissioning of flood control gates for Outlet-2, at Motavarachha in East Zone.	Dr.S.M.Yadav	2015
18.	Vetting/Proof Checked the designing for 'Augmentation Water Supply Scheme of Moti Daman Based on Bhamti Branch Canal of Madhuban Dam.'	Dr. S.M.Yadav Dr. A.K.Desai	2015
19.	Providing and Laying Drainage lines of R.C.C. NP3/NP4 class in Navagam area in East Drainage Zone Under old City Sewerage Network Augmentation, Surat.	Dr.S.M.Yadav	2015
20.	Proof Checking of Hydraulics for "MNBs & MJB"	Dr. S.M.Yadav	2015
21.	Providing and laying drainage line of R.C.C.Np3/NP4 classs pipe having spigot and socket rubber ring joint in T.P.Scheme No-28(Althan-Bhatar)Azadnagar, Rasulabad in S.W.Z. under area of Surat City.	Dr. S.M.Yadav Dr. J N Patel	2015
22.	Construction of Retaining wall (Wing Wall) for existing R.C.C. Cilvert on Priyanka Khadi in D.T.P.S. No.62 (Dindoli-Bhedwad-Bhestan) in S.E.Z. (Limbayat)	Dr.S.M.Yadav Dr.V.L.Manekar	2015
23.	TPI for Providing erecting commissioning of flood control gates for Outlet-2, at Motavarachha in East Zone.	Dr.S.M.Yadav Dr.V.L.Manekar	2015
24.	Providing Laying and constructing storm drainage R. C. C. pipes of 300mm to 900 mm dia, making inlet chambers and manhole at various areas of South West (Athwa) Zone.	Dr.S.M.Yadav Dr.V.L.Manekar	2015
25.	Providing Third Party Inspection (TPI) for the work of 'Government Boys Dry Hostel, Surat Building Works'	Dr.S.M.Yadav	2015
26.	Providing TPI for laying of 600mm dia pipeline to fill Dindoli pond in South East Zone (Limbayat) Draf T.P. Scheme no.69 (Goddara-Dindoli).	Dr.V.L.Manekar Dr.S.M.Yadav	2014
27.	Providing TPI Service for the work of providing and Constructing R.C.C. Storm Water Line for Remaining Network of Outlet-3 in T.P.S. No.61 (Middle ring road final plot no.176/B to Saint krupa Society final plot no. 189,190 and middle ring road final plot no.121/B?3 to Sai baba nagar final plot number114/A ) in West Zone area of Surat City.	Dr.V.L.Manekar Members Dr.S.M.Yadav Dr.P.G.Agnihotri	2014
28.	TPI for the work of Providing & laying storm drainage line Rcc NP2/NP3 class pipes from Ved main road Viramnagar School to Shivchaya Soc.and till Ved main road Hariom Mill to Shivchaya Society vai Gopinath Society on T.P. road at N.Z. (Katargam).	Dr.V.L.Manekar Dr.S.M.Yadav	2014
29.	TPI for the work of Providing & Laying Drainage main line from Navsari Bazar char Rasta to Salabatpura SPS in Central Zone.	Dr.V.L.Manekar Dr.S.M.Yadav	2014
30.	TPI for Providing and Laying RCC Storm drainage line on various road for Outlet No. 7 (From Godadar khadi to Mansarovar Society railway parallel road) in DTPS. No. 69 (Godadara-Dindloi) in S.E.Z. (Limbayat).	Dr.S.M.Yadav Dr.V.L.Manekar Dr.P.G.Agnihotri	2014
31.	TPI for laying of 600mm dia pipeline on various roads for outlet no. 13 and 14 (omnagar to Ambica park and Umiyanagar) in S.EZ.(Limbayat) Draft T.P. scheme no.69 (Godadara-Dindoli).	Dr.S.M.Yadav Dr.V.L.Manekar	2014
32.	Proof Checking of Hydraulics for "Rural Water Networks Components"	Dr. S.M.Yadav	2014
33.	Providing & Laying R.C.C. NP2/NP3 class pipes for strom water drainage 7 Constructing Manholes & Inlet Chamber at different areas of S. W.Z. (Athawa)	Dr.S.M.Yadav Dr.V.L.Manekar	2014

Sr. No	Name of Work	Faculty	Year
34.	Providing and Laying RCC NP3 class pipes with Spigot socket/rubber ring joint for Sewage Network for remaining area of GODADARA station including Gamtal in S.E.Z	Dr.S.M.Yadav	2013
35.	Verification of estimate prepared for E-Type Servant Quarter (high-rise building) S.V.N.I.T. Campus, Surat	Mr.S.M.Yadav Mr.K.A.Chauha	June 2007

## Professional Affiliations

- Charter Engineer, Institute of Engineers, Calcutta, India.
- Fellow Member, Institute of Engineers, Calcutta, India.
- Fellow Member, Indian Society for Technical Education, New Delhi, India
- Life Member, Indian Society for Technical Education, New Delhi, India
- Life Member, Institute of Engineers, Calcutta, India
- Life Member, Indian Water Works Association, Bombay, India
- Life member, ISH, Pune, India
- Life member, IASWC, Dehradun, India
- Life member, IVS, Delhi, India
- Life member, IUTP, Delhi, India
- Member, World Association of Sedimentation and Erosion Research, Beijing, China.
- Life member, Association of Hydrologists of India, Hyderabad.
- Member, International Association of Hydraulic Engineering and Research (IAHR), Madrid, Spain.
- Life member, Association of Wind Engineering, Roorkee.

## Awards/Honors & Scholarships

- Best paper award for the paper entitled “Evaluation of DuBoy’s Bed Load Equation using Tapi River Data” presented at National Conference on “Innovations and Applications of Mathematical Modelling Techniques in Engineering System”, ADIT, Vallabh Vidya Nagar held on 10th Dec. 2008.
- Best paper award for the paper entitled “Bed load Equation based on Alluvial River Data, India” by “Hari Ohm Ashram Prezit Shri Bhaikaka Inter University Smarak Trust” for the year 2008-2009 in Civil Engineering by Sardar Patel University, Vallabh Vidya Nagar, Gujarat, India.
- Session’s best paper award for the paper entitled “Mathematical Relationship between Particle Reynolds Number and Ripple Factor” using Tapi River Data”, India at 3rd International Multi Conference on Engineering and Technological Innovations held at Orlando, USA during 29-2 July 2010.
- Worked as an Expert appointed by Central Water Commission for Climate Resilient Coastal protection and management project (CRCPMP), funded by Asian development Bank.
- Received fellowship from Aus Aid, Government of Australia to present paper entitled “Performance evaluation of water supply services in developing country”, Rivers in a rapidly urbanizing world at 15th International River Symposium, Melbourne, Australia, 9-11 October 2012.
- Received fellowship from Aus Aid, Government of Australia to present paper entitled “Managing Water through Public Private Partnership”, Rivers: Water-Energy-Food at 16<sup>th</sup> International River Symposium, Brisbane, Australia, 11-14 October 2013.

- Best paper award for the paper entitled “Fuzzy Logic based Operation of Gated Spillway” presented in National conference on "Trends & Challenges of Civil Engineering in Today's Transforming World", at SNPIT & RC, Umrakh, Bardoli, 29th March 2014.
- Appointed as Expert member by central water commission as a panel of member for the ADB project “Climate change adaption guidelines for coastal protection & Management in India” 2016.
- Best paper award for Water Resources Engineering Session for the paper entitled “Prediction of reservoir submerged sediment density” 23<sup>rd</sup> *International Conference on Hydraulics, Water Resources and River Engineering*, NIT Patna, India 19-21 December, 2018.
- Best paper award for Water Resources Engineering Session for the paper entitled “Optimizing Reservoir Capacity, water allocation & crop yield using Teaching Learning Based Optimization (TLBO) technique”, 1<sup>st</sup> *National Conference on Emerging Research and Innovations in Civil Engineering*, 15<sup>th</sup>-16<sup>th</sup> February, 2019.
- Best paper award received for the paper, “Assessment of 1D/2D coupled model for prediction of flood inundation” authored by Rashmi Yadav and S M Yadav in the *International Conference on Recent Advances in Civil Engineering for Sustainable Development* held in online mode at MANIT Bhopal during Feb 13-14, 2021.
- Best paper award received for the “Application of rule based fuzzy logic for rainfall runoff modelling” authored by Ayushi Panchal and Dr. S. M. Yadav, *International conference Recent Advances in Civil Engineering and Sustainable Development (RACESD 2021)*, MANIT-BHOPAL during February 13-14, 2021.
- Best paper award received for the paper “Application of ArcGIS in Flood Modelling” authored by Rashmi Yadav and S. M. Yadav in the *International Conference on Water and Environment on the occasion of World Water Day*, held in MANIT Bhopal during March 22-23, 2021.

## Administrative Duties/Responsibilities Held

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- Senate member
- Dean (AI & RG)
- Head of the Department(HoD)
- Chairman DAAC
- Sectional Head
- PG Incharge
- Lab Incharge
- Chairman- National Board of Accreditation committee for UG and PG Programme.
- Chairman- Magazine committee
- Chairman-Canteen committee
- Chairman-Watersupply committee
- Chairman-Drainage committee
- Security Incharge
- Warden
- Expert member for Climate Resilient Coastal protection and management project (CRCPMP), funded by Asian development Bank.
- Examiner – M.Tech. Dissertation, Ph D Thesis, Professional Bodies

## Reviewer – Journal

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- Acta Geophysica - Springer
- Journal of Hydraulic Engineering, ASCE
- Journal of Applied Fluid Mechanics-
- Indian Society of Hydraulics- Journal of Hydraulic Engineering ,Taylor & Francis
- Indian Journal of Water and Waste Water Association
- International Journal of Sediment Research, China
- Journal of Civil Engineering, ICE, Thomas Telford, London
- KSCE Journal of Civil Engineering – Springer

***Place: SVNIT, Surat***

***Date: 18<sup>th</sup> September 2021***

**(Dr. SANJAYKUMAR M. YADAV)**