Brief Resume

1.0	**Name, Designation & Date of joining**	Dr. P L Patel, Professor & July 03, 2007
2.0	**Age as on date**	March 20, 1966 (51 years)
3.0	**Name of the Institution**	S V NIT, Surat
4.0	**Department**	Civil Engineering
5.0	**Field of Specialization**	Water Resources Engineering
6.0	**Academic Qualifications**	B E (Civil) Hons., Government Engineering College, Rewa M E (Civil) Hons., University of Roorkee PhD (University of Roorkee, Now IIT Roorkee)
7.0	**Technical Qualifications**	B E (Civil) Hons., Government Engineering College, Rewa M E (Civil) Hons., University of Roorkee PhD (University of Roorkee, Now IIT Roorkee)
8.0	**Previous Experiences**	a) Joined Border Roads organization as Assistant Executive Engineer through Indian Engineering Services (Sep.1995-June 99) b) Served Delhi College of Engineering (Now DTU) from July 99 to Jun 2007 as Reader in Department of Civil Engineering
9.0	**Awards / Prizes/ Certificates etc.**	▪ Recipient of **Visiting International Fellowship (VIF-2017) 2017** for attending **ASCE EWRI Congress-2017** at Sacramento, California, **USA, May 21-25, 2017**. ▪ **The Research paper** 'A 1D-2D coupled Hydrodynamic model for river flood prediction in a coastal urban flood plain', **Journal of Hydrologic Engineering (ASCE)**, Vol. 20(2), pp. 05014017-(1-18), Feb. 2015, by Timbadiya P.V., Patel, P. L. and Porey, P. D. is awarded as **BEST CASE STUDY - 2015** by **ASCE EWRI congress – May 2016, Florida, USA.** ▪ **The Research project** 'Erosion of non-uniform and bimodal sediments' sponsored by Department **of Science and Technology (DST)** was rated under **'Excellent'**

grading during the review and final project completion presentation.

- A guided PhD Thesis titled 'Incipient Motion and Bed Load Transport Characteristics of Unimodal and Bimodal Sediments by (DS08 CE 106) Shaileshkumar B Patel, has been awarded **Professor U C Kothyari Best PhD Thesis award of Indian Society for Hydraulics for year 2012-2013** in HYDRO-2013 at IIT Madras**.**
- The **G M Nawathe Best Paper Puruskar was awarded for best paper**, 'Sustainable Irrigation Planning using two phase Multi- Objective Fuzzy linear programming approach' presented in HYDRO-2012 at IIT Bombay.
- **Invited for the talk** on 'Impact of climate change on fluvial processes' in International workshop on 'Impacts of global warming from hydrological and hydraulic issues**,** March 16, 2010, Uji campus, **Kyoto University, Japan**.
- The **G M Nawathe Best Paper Puruskar was awarded for best paper**, 'Incipient motion conditions of non-uniform sediments' presented in HYDRO-2003 at CWPRS Pune.

10.0 Research projects completed/ongoing as Chief Coordinator:

- **Completed: 04**
- **Ongoing: 01**

Sr. No.	Name of the funding agency	Name of the Scheme	Programme Title	Year of Funding	Duration	Amount Sanctioned (Rs.)	Status: Completed/ Ongoing
1.	DST	**FIST**	Recirculating Sediment Transport Flume	2015	2 year	1.75 Crores	Ongoing
2.	TEQIP-II	**World Bank and MHRD**	Centre for excellence on Water Resources and Flood Management	2013	4 year	4.50 Crores	Completed
3.	MHRD, New Delhi	**ICT**	Development of course on "Hydrology and Flood Control"	2014	1.5 Year	7 Lakhs	Completed
4.	DST	**SERC**	Erosion of Non Uniform Unimodal and Bimodal Sediments	2009	Four years	31.89 Lakhs	Completed
5.	AICTE	**NCP**	Development of Water Resources & Flood Management Centre	2009	Four Years	35 Lakhs	Completed

11.0 Publications (Peer Reviewed Journals and Magazine/Conference Proceedings)

Book Chapter:	**01**
International Journal :	**31**
National Journal :	**02**
International Magazine Articles:	**02**
International Conference :	**48**
National Conference:	**61**
Total:	**145**

BOOK CHAPTER:

Sr. No.	Title of Book Chapter	Author(s)	Name of Book with Year
1	Identification of Causes of Failure of Downstream Block Protection for Singanpore Weir-Cum-Causeway, Surat	Sharma, P. J. Chethan, S. V. Timbadiya, P. V. Patel, P. L.	Development of Water Resources in India, Springer, Cham publisher in June 2017, pp. 355-362.

INTERNATIONAL JOURNAL:

Sr. No.	Title of Research Paper	Author(s)	Name & Vol. of Journal with Year
1	Fractionwise calculation of bed load transport	P. L. Patel Ranga Raju, K. G.	Journal of Hydraulic Research, IAHR, Vol.34, No.3.pp 363-379, 1996.
2	Critical tractive stress of Non-uniform sediments	P. L. Patel Ranga Raju, K. G.	Journal of Hydraulic Research, IAHR, Vol. 37, No.1, pp 39-58, 1999.
3	Critical tractive stress of Non-uniform and Bimodal sediments	P. L. Patel Pati, D. R.	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 12(1). pp 39-51, 2006.
4	Bed load Transport of Bimodal Sediments	P. L. Patel Jain Mayank	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 15(1), pp.14-23, 2009.
5	Critical Tractive Stress of Representative Sizes in Non-uniform Sediments	P. L. Patel, P. D. Porey, S. B. Patel	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 15(3), pp. 41-50, 2009.
6	Entrainment Characteristics of Non-uniform Unimodal and Bimodal sediments	P. L. Patel P. D. Porey A. D. Ghare S. B. Patel	Korean Society of Civil Engineering (KSCE), Springer, Journal of Civil Engineering, Vol. 13, No. 3, pp. 189-194, Feb.2009.
7	Computation of Critical Tractive Stress of Scaling Sizes in Non-uniform Sediment	P. L. Patel, P. D. Porey Shaileshkumar B. Patel	Journal of Hydraulic Research, IAHR, Vol.48 (4), pp. 531-537, 2010.
8	HEC-RAS based Hydrodynamic model in prediction of stages of lower Tapi River	P V Timbadiya P. L. Patel P. D. Porey	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol.17, No.2, pp.110-117, 2011.
9	A Fuzzy Based Optimal Irrigation Planning for Kakrapar Right Bank Canal Command Area, Gujarat, India.	A B Mirajkar P L Patel	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol.17 (1), No.3, pp. 110-117, January 2011.

Sr. No.	Title of Research Paper	Author(s)	Name & Vol. of Journal with Year
10	Calibration of HEC-RAS model on prediction of flood for lower Tapi River	P V Timbadiya P. L. Patel P. D. Porey	Journal of Water Resources and Protection, Scientific Research, Vol. 3, pp. 805-811, 2011.
11	Application of Innovative Trend Analysis Methodology and Distribution Fitting: Study on annual peak inflow into Ukai Dam, Gujarat, India.	P V Timbadiya P L Patel P D Porey	Water & Energy International, CBIP, Vol.69, No.9, pp.40-43, Sep.2012.
12	Prediction of Missing rainfall data using conventional and artificial neural network.	U C Roman P L Patel P D Porey	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, Volume 18(3), pp. 224-231, September 2012.
13	Optimal Irrigation Planning of Kakrapar Right Bank Canal Using Two Phase Fuzzy Multi-objective Linear Programming Model	A B Mirajkar P L Patel	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol.18(3), pp. 232- 240, Sep. 2012.
14	Effect of Silt Erosion on Francis Turbine: A case study of Maneri Bhali Stage-II, Uttarakhand	Mandeep Singh J Banerjee P L Patel Himanshu Tiwari	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK; Vol. 19(1), pp. 1-10, March 2013.
15	Identification of Trend and Probability Distribution for Time Series of Annual Peak Flow in Tapi Basin	P V Timbadiya A B Mirajkar P L Patel P D Porey	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 19 (1), pp. 11-20, March 2013.
16	Threshold for initiation of motion of unimodal and bimodal sediments	S B Patel P L Patel P D Porey	International Journal of Sediment Research (IJSR), Elsevier, Vol. 28(1), pp. 24-33, March 2013
17	Prediction of friction factor and stage-discharge relationship in alluvial streams	B.R. Andharia, P.L. Patel V.L. Manekar P.D. Porey	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 19(1), pp. 49-54, March 2013.
18	Reply to the discussion on the paper: prediction of missing rainfall data using conventional and artificial neural network techniques by ISH Journal of Hydraulic Engineering, 18 (3), 224-231, Sept. 2012	U C Roman P L Patel P D Porey	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 19(2), pp. 78-79, June 2013.
19	Development of sustainable irrigation planning with multiobjective fuzzy linear programming for Ukai – Kakrapar Irrigation Project, Gujarat, India	A B Mirajkar P L Patel	Canadian Journal of Civil Engineering, Vol.40, No.7, pp.663-673, May 2013.
20	Estimation of fractional critical Tractive stress from fractional bed load transport measurements of unimodal and bimodal sediments	S B Patel P L Patel P D Porey	Measurement, Elsevier, Vol. 47, pp. 393-400, January 2014.
21	One-dimensional hydrodynamic modelling of flooding and stage hydrographs in the lower Tapi River in India	P. V. Timbadiya P. L. Patel P. D. Porey	Current Science, Vol. 106(5), pp. 708-716, 10 March 2014.
22	Reply to discussion on paper:	B.R. Andharia,	ISH Journal of Hydraulic Engineering,

Sr. No.	Title of Research Paper	Author(s)	Name & Vol. of Journal with Year
	Prediction of friction factor and stage–discharge relationship in alluvial streams in ISH journal of hydraulic engineering, 19 (1), 49–54, Feb. 2013.	P. L. Patel V. L. Manekar P. D. Porey	Taylor and Francis publisher, UK, Vol. 20(2), pp.188-191, May 2014.
23	Development of Two-layered model for compound open-channel flow	J Sinha S K Das P L Patel B K Samtani	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 20 (3), pp. 250-262, Sep. 2014.
24	Estimation of sediment yield using SWAT model for Upper Tapi basin	Prabhat Chandra P L Patel P D Porey I D Gupta	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 20 (3), pp. 291-300, Sep. 2014.
25	A 1D-2D coupled Hydrodynamic model for river flood prediction in a coastal urban flood plain	P V Timbadiya P L Patel P D Porey	Journal of Hydrologic Engineering (ASCE), Vol. 20(2), pp. 05014017- (1-18), Feb. 2015.
26	Fractional bed load transport model for unimodal and bimodal sediments	S B Patel P L Patel P D Porey	Journal of Hydro-Environment Research, Elsevier, Vol. 9, pp. 104-119, March 2015.
27	Characterization of flow turbulence in mobile boundary channels	Sudhanshu Dixit P L Patel	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 21(2), pp. 179-192, 2015.
28	Lumped conceptual hydrologic model for Purna river basin, India	V D Loliyana P L Patel	Sadhana Journal, Springer, Vol. 40(8), pp. 2411-2428, Dec. 2015.
29	Prediction of sediment erosion pattern in Upper Tapi basin	Prabhat Chandra P L Patel P D Porey	Current Science, Vol. 110(6), pp. 1038-1049, March 2016.
30	Multi-objective two- phase fuzzy compromised approaches in integrated management of water resources	A B Mirajkar P L Patel	Journal of Water Resources and Planning Management, ASCE, Vol. 122 (11), pp. 04016046- 1-16, November 2016.
31	Efficient discretization of state variables in stochastic dynamic programming model of Ukai reservoir, India	Priyank Sharma P L Patel V Jothiprakash	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK, Vol. 22(3), pp. 293-304, 2016.

NATIONAL JOURNAL:

Sr. No.	Title of Research Paper	Author(s)	Name & Vol. of Journal with Year
1	Flood Forecasting in Tapi Basin: A Scope for Improvement	P V Timbadiya P. L. Patel P. D. Porey	Journal of Applied Hydrology, AHI, Vol. XXIII, No.3 & 4, 2010, pp. 44-52.
2	CFD Simulation of Hydro turbine units including tail race channel of Koteshwar Hydro-Electric Project	J Banerjee P L Patel H L Arora	THDC Hydro-Tech Journal, Vol. 4, Issue 2, 2016, pp. 65-76.

INTERNATIONAL MAGAZINE PROCEEDINGS:

Sr. No.	Title of Research Paper	Author(s)	Name & Vol. with Year
1	Fluvial Mechanics: Impact of climate change on sediment yield from river basins	P. L. Patel	IAHR Hydrolink – Climate Change Special Magazine, Vol. 3, pp. 74-75, 2013.
2	Summary of recommendations for policy makers on adaption to climate change in water engineering	P. L. Patel Ramesh Teegavarapu James Ball Eiichi Nakakita Andre Paquier Sang-II Lee Carlos Galvao Gregory De Costa A-A. Ahmed E. Kolokyatha Yangwen Jia Young-Oh Kim	IAHR Hydrolink – SPH (Smoothed Particle Hydrodynamics) in Hydraulics Special Magazine, Vol. 3, pp. 93-95, 2015.

INTERNATIONAL CONFERENCE/SEMINAR/SYMPOSIUM:

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
1	Semi-theoretical approach on transport of coarse sediments	P. L. Patel Durga Sai K.	Proceeding of an International Conference on "Hydraulic Engineering: Research and Practice (ICON-HERP-2004)" held at Department of Civil Engineering, IIT Roorkee, Oct. 26 -28, 2004, pp. 164-175.
2	River stage Simulation using HEC-RAS	P. V. Timbadiya P. L. Patel P. D. Porey	Proceeding of 3rd International Congress on Computational Mechanics and Simulation-2009, at IIT- Bombay during 1-5 December, 2009.
3	Optimization of irrigation area of URBMC – A Linear Programming Approach	Nishi Bhuvandas A. B. Mirajkar P. V. Timbadiya P. L. Patel	AIP conference proceedings Volume-1324, International conference on Methods and Models in Science and Technology (ICM2ST-10) held at Chandigarh on Dec. 25-26, 2010.
4	Optimal Irrigation Planning By Stochastic Linear Programming Approach For Ukai Irrigation Project	A. B. Mirajkar P. L. Patel	Indo-Italian workshop in Hydrology, CWPRS, Pune, Maharashtra, September, 15-16, 2011.
5	Recent Trend Analysis for Annual Peak Flow in Tapi Basin	P V Timbadiya A B Mirajkar P L Patel P D Porey	International conference on "India Water Week-2012", organized by Central Water Commission, held at New Delhi.
6	Geomorphic effectiveness of flood on lower Tapi River, India using 1D hydrodynamic model	P. V. Timbadiya P. L. Patel P. D. Porey	International Conference on Hydro-system and Engineering-2012, Orlando, USA at University of Central Florida (UOCF), Orlando, USA organized by

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
			UOCF in association with EWRI-ASCE, IAHR, IIHR etc. during November 4-7, 2012.
7	Calibration of channel and flood plain roughness using 1D/2D integrated hydrodynamic model : A study of Surat city on lower Tapi River	P. V. Timbadiya P. L. Patel P. D. Porey	International Conference on Hydro-system and Engineering-2012, Orlando, USA at University of Central Florida (UOCF), Orlando, USA organized by UOCF in association with EWRI- ASCE, IAHR, IIHR etc. during November 4-7, 2012.
8	Multi-objective fuzzy linear programming under uncertain resource parameters	A. B. Mirajkar P. L. Patel	International Conference on Hydro-system and Engineering-2012, Orlando, USA at University of Central Florida (UOCF), Orlando, USA organized by UOCF in association with EWRI-ASCE, IAHR, IIHR etc. during November 4-7, 2012.
9	Experimental study on initiation of motion and bed load transport of unimodal and bimodal sediments	S. B. Patel P. L. Patel P. D. Porey	Proceedings of the 35th IAHR World Congress 2013 at Chengdu, China during September 9-13, 2013. Vol. 5(1), paper No. A10517.
10	Analysis of trends and variability in time series of extreme daily rainfall in Tapi basin, India	Nishi Bhuvandas P. V. Timbadiya P. L. Patel P. D. Porey	Proceedings of the 35th IAHR World Congress 2013 at Chengdu, China during September 9-13, 2013. Vol. 8(3), paper No. A11949.
11	Fuzzy Programming Models for Optimal Irrigation Planning Under Uncertain Resource Conditions	Mirajkar, A. B. P. L. Patel.	Proceedings of the 18th HYDRO – 2013 International at IIT Madras, Chennai during Dec. 4-6, 2013.
12	Ukai reservoir operation simulation using HEC-ResSim	P. V. Timbadiya Mirajkar, A. B., P. L. Patel.	Proceedings of the 18th HYDRO – 2013 International at IIT Madras, Chennai during Dec. 4-6, 2013.
13	Conceptual rainfall-runoff model for Gopalkheda sub-catchment (Maharashtra, India) using MIKE11 NAM model	Loliyana, V. D. P. L. Patel.	Proceedings of the 18th HYDRO – 2013 International at IIT Madras, Chennai during Dec. 4-6, 2013.
14	Sediment yield modeling for upper Tapi basin	Prabhat Chandra P. L. Patel. Porey, P. D. Gupta, I. D.	Proceedings of the 18th HYDRO – 2013 International at IIT Madras, Chennai during Dec. 4-6, 2013.
15	Mathematical modeling of aggradation in alluvial channels	Andharia, B. R. P. L. Patel. Manekar, V. L. Porey, P. D.	Proceedings of the 18th HYDRO – 2013 International at IIT Madras, Chennai during Dec. 4-6, 2013.
16	Review of Downscaling Methods in Climate Change and Their Role in Hydrological Studies	Nishi Bhuvandas, P. V. Timbadiya P. L. Patel. Porey, P. D.	International conference on Environmental, Ecological, Geological and Mining Engineering World Academy of Science, Engineering and Technology, held at Dubai, 2014.
17	Calibration and validation of	V. D. Loliyana	Proceedings of the 19th HYDRO –

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
	hydrologic model for Yerli sub-catchment (Maharashtra, India)	P L Patel	2014 International at MANIT Bhopal during Dec. 17-19, 2014.
18	Performance of multi-purpose reservoir using simulation models for different scenarios	P J Sharma P L Patel V Jothiprakash	Proceedings of the 19th HYDRO – 2014 International at MANIT Bhopal during Dec. 17-19, 2014.
19	Characterization of turbulence in mobile boundary channels	Dhvani Patwa P L Patel P V Timbadiya	Proceedings of the 19th HYDRO – 2014 International at MANIT Bhopal during Dec. 17-19, 2014.
20	Development of IDF curve: A study for Dholera region of Gujarat, India	Ankit Patel P V Timbadiya P L Patel	Proceedings of the 19th HYDRO – 2014 International at MANIT Bhopal during Dec. 17-19, 2014.
21	Turbulence characteristics over a fluvial channel bed	Sudhanshu Dixit P L Patel	Proceedings of the 19th HYDRO – 2014 International at MANIT Bhopal during Dec. 17-19, 2014.
22	Trend detection and forecasting of annual precipitation in Tapi basin, India using singular spectrum analysis (SSA)	Nishi Bhuvandas P V Timbadiya P L Patel P D Porey	Proceedings of the 19th HYDRO – 2014 International at MANIT Bhopal during Dec. 17-19, 2014.
23	Experimental and numerical studies on aggradation for alluvial stream bed	Andharia, B. R. P. L. Patel. Manekar, V. L. Porey, P. D.	Proceedings of the 19th HYDRO – 2014 International at MANIT Bhopal during Dec. 17-19, 2014.
24	Contrast in sediment yield patterns of subcatchments of upper Tapi basin	Prabhat Chandra P. L. Patel. Porey, P. D. Gupta, I. D.	Proceedings of the 19th HYDRO – 2014 International at MANIT Bhopal during Dec. 17-19, 2014.
25	Investigation of long-term trends and temporal variability of rainfall in Surat district, Gujarat	P J Sharma V D Loliyana Garima Nagpal P V Timbadiya P L Patel	International conference on "India Water Week-2015", organized by Central Water Commission at New Delhi during Jan. 13-17, 2015.
26	Flood inundation mapping of Surat city using 1D-2D coupled hydrodynamic model	P V Timbadiya P L Patel P D Porey	International conference on "India Water Week-2015", organized by Central Water Commission at New Delhi during Jan. 13-17, 2015.
27	Trend analysis of climate variables and their impact on stream flow using NAM model	V. D. Loliyana P L Patel	Proceedings of the 36th IAHR World Congress 2015 at The Hague, Netherlands during June 28-July 3, 2015.
28	Experimental investigation of turbulent bursting events in weakly mobile channel bed	Dhvani Patwa P L Patel P V Timbadiya	Proceedings of the 36th IAHR World Congress 2015 at The Hague, Netherlands during June 28-July 3, 2015.
29	A simulation – optimization approach in development of operation policy of a multipurpose reservoir	P J Sharma P L Patel V Jothiprakash	Proceedings of the 36th IAHR World Congress 2015 at The Hague, Netherlands during June 28-July 3, 2015.
30	Development of IDF curve under non-stationary meteorological condition	Ankit Patel P V Timbadiya P L Patel	Proceedings of the 36th IAHR World Congress 2015 at The Hague, Netherlands during June 28-July 3, 2015.
31	Distributed surface water flow	V D Loliyana	Proceedings of the 20th HYDRO – 2015 International at IIT Roorkee

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
	model for Gopalkheda sub-catchment, Maharashtra, India	P L Patel	during Dec. 17-19, 2015.
32	Assessment of Regional Flood Frequency Model for the Upper Tapi Basin, India	Resmi S R P L Patel	Proceedings of the 20th HYDRO – 2015 International at IIT Roorkee during Dec. 17-19, 2015.
33	Identification of regional frequency model for rainfall based on spatial clustering in lower Tapi basin, India	Garima Nagpal P L Patel	Proceedings of the 20th HYDRO – 2015 International at IIT Roorkee during Dec. 17-19, 2015.
34	Stochastic Modelling for Inflow Prediction into Ukai Reservoir, India	Priyank Sharma P L Patel V Jothiprakash	Proceedings of the 20th HYDRO – 2015 International at IIT Roorkee during Dec. 17-19, 2015.
35	A 2-D Hydrodynamic Model for Urban Flood Plain of Surat City, India	Apoorv Tripathi P V Timbadiya P L Patel	Proceedings of the 20th HYDRO – 2015 International at IIT Roorkee during Dec. 17-19, 2015.
36	Sediment management modelling in Upper Tapi basin	Prabhat Chandra P L Patel P D Porey	Proceedings of the 20th HYDRO – 2015 International at IIT Roorkee during Dec. 17-19, 2015.
38	Regional flood frequency relationship for the upper tapi basin	Resmi S R P L Patel	Proceedings of International Conference, ICWEES-2016, Bhopal during March 14-18, 2016.
39	Physics based distributed overland flow modeling for Yerli sub-catchment, Maharashtra, India	V D Loliyana P L Patel	Proceedings of the 20th IAHR APD 2016 at Colombo, Sri Lanka during August 28-31, 2016.
40	Seasonal Stochastic Model for Long Term Reservoir Inflow Forecasting for Ukai Reservoir, India	Priyank Sharma P L Patel V Jothiprakash	Proceedings of the 20th IAHR APD 2016 at Colombo, Sri Lanka during August 28-31, 2016.
41	Aggradation in mobile boundary channel due to overloading of sediments	P Laxmi Narayana P V Timbadiya P L Patel	Proceedings of the 20th IAHR APD 2016 at Colombo, Sri Lanka during August 28-31, 2016.
42	At-site flood frequency analysis for Upper Tapi basin, India	Priyank Sharma P L Patel V Jothiprakash	Proceedings of the 21st HYDRO – 2016 International at CWPRS during Dec. 8-10, 2016.
43	Groundwater Flow Estimation using Distributed Hydrologic Model for Yerli sub-catchment, Maharashtra, India	V D Loliyana P L Patel	Proceedings of the 21st HYDRO – 2016 International at CWPRS during Dec. 8-10, 2016.
44	Flow characteristics at horizontal interface of asymmetric compound open channel	J Sinha P L Patel S K Das B K Samtani	Proceedings of the 21st HYDRO – 2016 International at CWPRS during Dec. 8-10, 2016.
45	Morphological study of Upper Tapi river using remote sensing and GIS technique	Resmi S R P L Patel P V Timbadiya	Proceedings of the 21st HYDRO – 2016 International at CWPRS during Dec. 8-10, 2016.
46	A 1D Numerical Model for Prediction of Bed Levels of Aggrading Channels	P. L. Patel. Andharia, B. R. Manekar, V. L.	Proceedings of the World Environment & Water Resources Congress, ASCE – EWRI, 2017 at Sacramento, California during May 21-25, 2017.
47	Post processing of ultrasonic ranging system and acoustic	P Laxmi Narayana P V Timbadiya	Proceedings of 37th IAHR World Congress-2017 at Kuala Lumpur,

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
	doppler velocimeter data for morphological studies	P L Patel	Malaysia during Aug. 13-18, 2017.
48	A 1D numerical model for aggrading channel of nonuniform sediment bed	Andharia, B. R. P. L. Patel. Manekar, V. L. Porey, P. D.	Proceedings of 37th IAHR World Congress-2017 at Kuala Lumpur, Malaysia during Aug. 13-18, 2017.

NATIONAL CONFERENCE/ SYMPOSIUM/ SEMINAR:

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
1	Characteristics of flow past Ski-jump bucket,	P. L. Patel, Asawa, G.L. Ranga Raju, K.G.	NASORT in Design of Hydraulic Structures, Dept. of Civil Engg, University of Roorkee, pp 143-151, 1994.
2	An evaluation of fractionwise calculation of bed load	P. L. Patel, Ranga Raju, K. G	NASORT in Design of Hydraulic Structures, Dept. of Civil Engg, University of Roorkee, pp. 265-272, 1994.
3	Criteria for movement of Non-uniform sediments: An overview	P. L. Patel	HYDRO 2000, Recent Advances in Hydraulic and Water Resources, Deptt. Of Civil Engg., Regional Engineering College, Kurukshetra, pp. 216-223
4	Lift and drag model for transport of coarse sediments	P. L. Patel Ghosh, M. D.	HYDRO 2001, National conference on Hydraulics and Water Resources, CWPRS, Khadakwasla, Pune, pp. 237-283
5	Model study of a ski-jump type energy dissipator	Mazumder, S. K. P. L. Patel	HYDRO 2001, National conference on Hydraulics and Water Resources, CWPRS, Khadakwasla, Pune, pp. 425-432
6	Measures for silt free water in power canal	P. L. Patel	National Workshop on 'Water Quality (Including drinking water)' Feb. 2002 held at Jawahar Lal Nehru University, New Delhi.
7	An evaluation of critical tractive stress of non-uniform sediments	P. L. Patel	National Conference on Advances in Civil Engineering, Dept. of Civil Engg., HBTI, Kanpur, pp. 452-457
8	Incipient motion conditions of Non-uniform sediments	P. L. Patel Sharma A. K.	National Conference on Hydraulics and Water Resources, HYDRO 2003, at Khadakwasla, Pune during December 26-27, 2003, pp 183- 187.
9	Sediment transport concepts in design of power canals and silt exclusion devices	P. L. Patel	Proceedings of a National Seminar on Safety and Quality management in development of Uttaranchal, organized by Institution of Engineers, June 24, 2004, pp.241-245.
10	Prediction of critical tractive stress of non-uniform and bimodal sediments	P. L. Patel	Proceeding of a National Conference HYDRO-2005, Dec. 08-09, SIT Tumkur, pp.668-674.
11	Critical submergence of ski-	P. L. Patel	Proceedings of a National

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
	jump bucket: An analytical approach,	Shrivastava Vishal	Conference HYDRO-2006, Dec.08-09, SIT Tumkur.
12	Probabilistic model in prediction of non-uniform sediment bed surface under equilibrium condition	Goyal Kanhaiya P. L. Patel	Proceedings of a National Conference HYDRO-2006, Dec.08-09, SIT Tumkur.
13	Study of Mobility Index of Sarangkheda gauging station of Tapi River	Anajwala J. Nitisha, P. L. Patel Samtani B K	Proceedings of a National Conference HYDRO-2006, Dec.08-09, SIT Tumkur.
14	Stream flow forecasting using Deterministic approach for Sabarmati River Basin	P. V. Timbadiya A. D. Ghare P. L. Patel P. D. Porey	Proceeding of 13th National Seminar symposium on Hydrology with focal theme on "flow forecasting during Extremes", 28-29, August 2008, IIT-Delhi.
15	Computation of Bed load transport of non-uniform bimodal sediments	P L Patel, P D Porey Jain Mayank	Proceeding of Indian National Conference on Advances in Hydraulic engineering with special emphasis on Model-Prototype Conformity, INCAHE-2008, Nov. 6-7 2008, pp.184-188.
16	Critical Tractive Stress of Representative Sizes in Non-uniform Sediments	P. L. Patel P. D. Porey Shaileshkumar B. Patel	Proceedings of a National Conference HYDRO-2008 at MNIT Jaipur during Dec. 15-16, 2008, pp. 366-374.
17	Stream flow forecasting using ANN approach for Sabarmati River Basin	Timbadiya P V P. L. Patel Porey P D	Proceedings of a National Conference HYDRO-2008 at MNIT Jaipur during Dec. 15-16, 2008, pp.254-263.
18	Flood Forecasting in Tapi Basin : A Scope for Improvement -	P.V.Timbadiya, P.L.Patel P.D.Porey	Proceeding of National Seminar on recent advances in Hydrology for Water Resources Development and Management & xxvii Annual Convention of AHI 21st & 22nd January 2009, Baroda.
19	Need for Water Resources and Flood Management Centre in South Gujarat Region	P. L. Patel B K Samtani	Proceeding of Seminar on Water for Future- Issues and Options organized by CWC during March 4-5, 2009.
20	Simulation of Unsteady flow in Natural channel: A case study of Tapi river using MIKE-11.	P. V. Timbadiya P. L. Patel P. D. Porey	Proceedings of the Civil Engineering Conference Innovation Without Limits (CEC-09) at NIT-Hamirpur during September 18-19, 2009.
21	Simulation o fflow in Tapi river between Ukai Dam and Kakrapar weir using HEC-RAS	P. V. Timbadiya Jaimin Trivedi Niket R Shah P L Patel	Proceedings of the Civil Engineering Conference Innovation Without Limits (CEC-09) at NIT-Hamirpur during September 18-19, 2009.
22	Evaluation of Existing Methods for Computation of Critical Tractive Stress of Bimodal Sediments	P. L. Patel P. D. Porey Shaileshkumar B. Patel	National Specialty Conference on River Hydraulics – 2009, held at MMU- Mullana, Haryana, Oct. 29-30, 2009.
23	Characterization and Computation of Critical Tractive Stress of Bimodal sediments	P. L. Patel P. D. Porey Shaileshkumar B. Patel	Proceedings of a National Conference HYDRO – 2009, held at Khadakwasla, PUNE (INDIA), Dec. 17 -18, 2009.

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
24	Optimal Irrigation Planning in Fuzzy Environment: A Case Study of Kakrapar Canal Command Area, Gujarat	A. B. Mirajkar P. L. Patel	Proceedings of a National Conference HYDRO-2010 at Ambala (Haryana), on 16-18 December, 2010.
25	Simulation of Stages using Hydrodynamic model MIKE 11 : A case study of Lower Tapi river	P. V. Timbadiya P. L. Patel P. D. Porey	14th National Symposium on Hydrology at MNIT- Jaipur during December- 21-22, 2010.
26	Optimal Cropping Pattern for Ukai Command Area, Gujarat.	A. B. Mirajkar P. L. Patel	14th National Symposium on Hydrology at MNIT- Jaipur during December- 21-22, 2010.
27	Optimal Cropping pattern in Command Area Kakrapar Right Bank Main Canal	Nishi Bhuvandas A. B. Mirajkar P. V. Timbadiya P. L. Patel	National Conference on Sustainable Development of Urban Infrastructure, VNIT, Nagpur, pp. 408-413, June 2010.
28	Optimal Irrigation Planning in Fuzzy Environment: A Case Study of Canal Command Area, Gujarat	A. B. Mirajkar P. L. Patel	National Conference on Environment Pollution and Management, GEC Aurangabad, MS, pg. 159-166, Jan-2011.
29	HEC-RAS Model in Prediction of Levees along Lower Tapi River	V. D. Loliyana P. L. Patel P. V. Timbadiya M. Khan K. L. Dave	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
30	One-Dimensional Model in Prediction of Stage-Discharge Curves in Natural Channel	P. V. Timbadiya P. L. Patel P. D. Porey	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
31	Hydrodynamic Simulation of Open Channel Flow using MIKE 11 and its Validation: A Case Study	P. V. Timbadiya Apurva M. Suthar P. L. Patel	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
32	Irrigation Operating Policies using Genetic Algorithm for Ukai Reservoir, India: A Case Study	S. S. Shiyekar P. L. Patel P. D. Porey	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
33	Chance Constraint Linear Programming Model for Optimal Cropping Pattern	A. B. Mirajkar P. L. Patel	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
34	Analysis of Sediment Yield Data in Tapi Basin	Prabhat Chandra P. L. Patel P. D. Porey I. D. Gupta	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
35	Comparative Performance of Critical Tractive Stress Predictors for Bimodal Sediments	Shailesh B. Patel P. L. Patel P. D. Porey	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
36	Estimation of Friction Factor for Alluvial Rivers	B. R. Andharia V. L. Manekar P. L. Patel P. D. Porey	Proceedings of National Conference HYDRO-2011 at SVNIT Surat during December 29-30, 2011.
37	Comparative Prediction of rating curves using 1D and 1D-2D coupled Hydrodynamic models	P. V. Timbadiya P. L. Patel P. D. Porey	Proceedings of National Conference HYDRO-2012 at IIT-Bombay during December 7-8, 2012.

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
38	Sustainable Irrigation Planning using two phase Multi-Objective Fuzzy linear programming approach	A. B. Mirajkar P. L. Patel	Proceedings of National Conference HYDRO-2012 at IIT-Bombay during December 7-8, 2012.
39	Development of two layered model for compound open channel flow	J. Sinha S. K. Das P. L. Patel B. K. Samtani	Proceedings of National Conference HYDRO-2012 at IIT-Bombay during December 7-8, 2012.
40	Experimental investigation on threshold for incipient motion of graded sediments	S. B. Patel P. L. Patel P. D. Porey	Proceedings of National Conference HYDRO-2012 at IIT-Bombay during December 7-8, 2012.
41	Estimation of sediment yield using SWAT model-Generation of input data for Tapi basin	Prabhat Chandra P. L. Patel P. D. Porey I. D. Gupta	Proceedings of National Conference HYDRO-2012 at IIT-Bombay during December 7-8, 2012.7-8, 2012.
42	Calibration and performance of HEC-RAS based hydrodynamic model for stage prediction in lower Tapi river	V. D. Loliyana P. L. Patel	Proceedings of National Conference HYDRO-2012 at IIT-Bombay during December 7-8, 2012.
43	Sustainable Irrigation Planning Management With Multi-Objective Fuzzy Linear Programming	A. B. Mirajkar P. L. Patel	Proceedings of SWRDAM-13 at GEC Aurangabad during Sept 30-Oct 1, 2013.
44	Sustainable Irrigation Planning using Multi Objective Fuzzy Optimization Models	M. S. Mankar A. B. Mirajkar P. L. Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
45	Optimal Irrigation Planning in an Intuitionistic Fuzzy Environment	S. V. Pawar A. B. Mirajkar P. L. Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
46	Hydrodynamic Characteristics of Flows in a Two-Layered Compound Open Channels using Dynamic SGS Model	J. Sinha S. K. Das P. L. Patel B. K. Samtani	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
47	M5 Model Tree Technique in Daily River Flow Forecasting for Purna River in Tapi Basin, India	Priyank Sharma P L Patel V Jothiprakash	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
48	Prediction of Bed Aggradation in Alluvial Streams: Application of Numerical Computations	B. R. Andharia V. L. Manekar P. L. Patel P. D. Porey	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
49	Influence of Turbulence in Aggraded Alluvial Bed in Mobile Boundary Channel	P Laxmi Narayana P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
50	Distributed Hydrological Modelling using MIKE SHE for Gopalkheda Sub-Catchment, Maharashtra, India	V. D. Loliyana P. L. Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
51	Analysis of Rainfall Variability for Middle Tapi Basin, India	Vinay Maurya Priyank Sharma P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
52	Flood Hazard Mapping of Surat City for Different Return Period Floods	Chethan S V Apoorv Tripathi P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
53	Flood and Agricultural Water Management using a Hydrophilic Material	M. S. Bhagat A. D. Ghare R. V. Ralegaonkar P. L. Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
54	Trend Analysis of Water Quality Parameters in Tapi Basin, India	R P Vachhani Y J Lathiya P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
55	Spatio-Temporal Analysis of Changes in Rainfall Pattern over Gujarat State, India	Nirdesh Shah Priyank Sharma V. D. Loliyana P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
56	Investigation of Trends in Extreme Rainfall and Rainy Days over Middle Tapi Basin, India	Vikash Sharma V. D. Loliyana P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
57	Identification of Trend and Change Point in Hydro-Climatic Variables in Tapi Basin, India	Lalit Pal P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
58	Quantification of Bank Erosion and Bankline Migration in Upper Tapi River, India	Resmi S R P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
59	Characterisation of Erosion and Deposition Behaviour of Middle Tapi River, India	Akshay Rajak P V Timbadiya P L Patel	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15, 2016.
60	Morphological Analysis of Lower Tapi River using Remote Sensing and GIS Technique	Kavya Rajendran P L Patel P V Timbadiya	Proceedings of National Conference on Water Resources and Flood Management (WRFM)-2016 at SVNIT Surat during Oct. 14-15,

Sr. No.	Title of Research Paper	Author(s)	Name of Conference with Year
			2016.
61	Investigation of Long-Term Trends and Temporal Variability in Annual Rainfall across Purna River Basin, India	Priyank Sharma V D Loliyana P V Timbadiya P L Patel	Proceedings of 49th IWWA Annual Convention on "Smart Water Management" at VNIT Nagpur, India during Jan. 19-21, 2017.

12.0 Consultancy Projects:

- **No. of consultancy projects completed: 10**
- **No. of consultancy projects ongoing: 01**

Sr. No.	Sponsoring Authority	Type of Work	Sanctioned Amount (Rs.)	Present Status
1	Central Water Commission, New Delhi	Morphological study on Tapi River using Remote sensing technique	72.86 Lakhs	Ongoing
2	Tehri Hydro Development India Corporation Limited (THDICL)-Rishikesh Uttarakhand	CFD Simulations of Hydro Turbines including Tail Race of Koteshwar Hydro Power Project	15.00 Lakhs	Completed 2016
3	Surat Municipal Corporation, Surat	Safety assessment of Singanpore weir-cum- Causeway	15.00 Lakhs	Completed 2016
4	Design Point Consultant Pvt. Ltd. Surat	Design of storm drainage, water supply, sewerage and waste water recycling work of TP4E of DSIR	4.50 Lakhs	Completed 2016
5	Design Point Consultant Pvt. Ltd. Surat	Design of storm drainage, water supply, sewerage and waste water recycling work of TP2E of DSIR	25.00 Lakhs	Completed 2016
6	Narmada, Water Resources Water Supply and Kalpsar Department (NWRWS&KD), Govt. of Gujarat	Design of lining of Vinzol vhela passing through Vatva, GIDC, Ahmedabad and its estimation	10.00 Lakhs	Completed 2015
7	Tehri Hydro Development India Corporation Limited (THDICL)-Rishikesh Uttarakhand	Conducting CFD Simulations of River Pocket in front of Tail Race Tunnels (TR1and TR2) of Tehri HPP CFD	7.75 Lakhs	Completed 2012-13
8	Uttaranchal Jal Vidyut Nigam Limited- Dehradun	Analysis of Maneri Bhali Stage II (Part I&II)	13.40 Lakhs	Completed 2010-11
9	SVNIT-Surat	Design of Water Distribution Network for SVNIT Surat with Revised Demand	Services were provided free of cost being Institute project	Completed 2010
10	Surat Municipal Corporation, Surat	Safety of Weir-cum- Causeway (Singanpur) due to flooding	0.30 Lakhs	Completed 2007
11	Gujarat Water Resources Water Supply and Kalpsar Department	'Damaged Aqueduct at Chainage 7350 m on the Daman-Ganga,	1.12 Lakhs	Completed 2007

13.0 List of Completed/ Ongoing Ph.D. Theses

- **Completed – 07, Ongoing – 10**

Sr. No.	Name of Students	Title of Thesis	Ph.D. Supervisors	Date of Joining	Status
1	**Praful V. Timbadiya**	**Development of 1D-2D Integrated Hydrodynamic Model for River Flood Prediction in Coastal Urban Flood Plain**	**Dr. P L Patel** Dr. P D Porey	**20/07/2007**	**Completed August 2012**
2	**Shailesh B. Patel**	**Incipient Motion and Bed Load Transport Characteristics of Unimodal and Bimodal Sediments**	**Dr. P L Patel** Dr. P D Porey	**27/01/2009**	**Completed June 2013**
3	**Ashwini B. Mirajkar**	**Multiobjective Fuzzy Linear Programming Approaches in Integrated Management of Water Resource System**	**Dr. P L Patel**	**01/01/2010**	**Completed March 2014**
4	**Uday C. Roman**	**Estimation of Missing Rainfall and Prediction of Runoff in Upper Catchment of Tapi Basin**	**Dr. P L Patel** Dr. P D Porey	**27/01/2008**	**Completed May 2015**
5	**Prabhat Chandra**	**Prediction of Sediment Yield and Identification of Erosion Prone Areas for Soil Conservation Measures in Upper Tapi Basin, India**	**Dr. P L Patel Dr. P D Porey**	**27/01/2009**	**Completed May 2016**
6	**Bhoomi R. Andharia**	**Prediction of Bed Level Variation in Alluvial Streams**	**Dr. V L Manekar Dr. P L Patel Dr. P D Porey**	**23/07/2009**	**Completed December 2016**
7	**Jiveswar Sinha**	**Development of 2-Layered 2-D Model for Compound Open Channel Flow**	**Dr. P L Patel Dr. B K Samtani Dr. S K Das**	**20/07/2009**	**Completed December 2016**
8	Viraj D. Loliyana	Development of Distributed Rainfall-Runoff Model	**Dr. P L Patel**	15/07/2011	Pre-synopsis Completed
9	Radhika M. Yagnik	Impact of Climate Change on Water Resources	**Dr. P L Patel**	26/07/2013	Ongoing
10	Soumita Bid	Numerical modeling of environmental flows in Hydraulics	**Dr. P L Patel** Dr. R A Christian	26/07/2013	Ongoing
11	Priyank J. Sharma **DST Inspire Fellow**	Inflow prediction and Real time reservoir operation	**Dr. P L Patel** Dr. V Jothiprakash (IIT Bombay)	31/07/2014	Ongoing
12	Resmi S. R.	Morphological study of Tapi river using Remote sensing Technique	**Dr. P L Patel** Dr. P V Timabadiya	17/07/2015	Ongoing

Sr. No.	Name of Students	Title of Thesis	Ph.D. Supervisors	Date of Joining	Status
13	P. Laxmi Narayana	Experimental investigation of aggradations in mobile boundary channels	Dr. P V Timbadiya **Dr. P L Patel**	17/07/2015	Ongoing
14	Sangita Pawar	Reservoir operation study using Fuzzy Logic	**Dr. P L Patel**	17/07/2015	Ongoing
15	Nishant Sourabh	Numerical modelling of water utility services	Dr. P V Timbadiya **Dr. P L Patel**	21/12/2016	Ongoing
16	Namrata Chandel	Course Work	**Dr. P L Patel**	15/07/2017	Course Work
17	Alka Sharma	Course Work	**Dr. P L Patel**	15/07/2017	Course Work

14.0 List of Completed/ Ongoing M. Tech. Dissertations

- **Completed – 34, Ongoing – 03**

Sr. No.	Name of Students	Title of Dissertation	M. Tech. Supervisors	Year	Status
At Delhi College of Engineering (DCE) – 1999-2006					
1	Megha Datta Ghosh	Transport of coarse sediments	**Dr. P L Patel**	1999-2000	Completed
2	Farhad R M	Model studies of Dissam diversion head works	**Dr. P L Patel**	2001-02	Completed
3	Sunity Choudhary	Computer aided design of sediment excluder	**Dr. P L Patel**	2002-03	Completed
4	Satapati Deba Prakash	Efficient design of flow meter in open channel	**Dr. P L Patel**	2002-03	Completed
5	Anurag Jain	Studies on energy dissipators for circular outlets". Department of Civil Engineering	**Dr. P L Patel**	2002-03	Completed
6	Vishal Srivastava	Design and performance of overflow dams	**Dr. P L Patel**	2002-03	Completed
7	Anil Kumar Sharma	Critical tractive stress of nonuniform sediments	**Dr. P L Patel**	2002-03	Completed
8	Ushakar Jha	Cavitation control measures in tunnel spillways	**Dr. P L Patel**	2003-04	Completed
9	Debesh Rajpati	Criteria for incipient motion of sediment mixtures	**Dr. P L Patel**	2003-04	Completed
10	Saidurga Rao	Semi-theoretical approach for transport of coarse sediments	**Dr. P L Patel**	2003-04	Completed
11	R S Saini	Lift and drag model for bed-load transport of non-uniform sediments	**Dr. P L Patel**	2004-05	Completed
12	Suchitra Rani	Computer aided design of tunnel type silt ejector	**Dr. P L Patel**	2004-05	Completed

Sr. No.	Name of Students	Title of Dissertation	M. Tech. Supervisors	Year	Status
13	Dilip Kumar	Computation of sediment distribution in storage reservoirs	**Dr. P L Patel**	2004-05	Completed
14	Misha Sinha	Prediction of sediment bed surface under equilibrium flow condition	**Dr. P L Patel**	2004-05	Completed
15	Kanhiya Goyal	Probabilistic model in prediction of nonuniform sedimentbed surface under equilibrium condition	**Dr. P L Patel**	2005-06	Completed
16	Mayank Jain	Bed load transport of bimodal sediments	**Dr. P L Patel**	2005-06	Completed
At SVNIT Surat – 2007 onwards					
17	Shailesh B. Patel	Entrainment characteristics of non-uniform unimodal and bimodal sediments	**Dr. P L Patel** Dr. A D Ghare	2007-08	Completed
18	Nishi Bhuvandas	Application of linear programming model in optimization of irrigation benefits of Ukai command area	**Dr. P L Patel** Shri P V Timbadiya	2009-10	Completed
19	Viraj Loliyana	Simulation of flood in open channel using HEC-RAS	**Dr. P L Patel**	2010-11	Completed
20	Sharad Patel	Finite volume technique in numerical modeling of desilting basin	**Dr. P L Patel** Mrs. V V Bhosekar (CWPRS, Pune) Ms. Nishi Bhuvandas	2011-12	Completed
21	Mandeep Singh (M.Tech Research)	Silt erosion in hydro turbines	Dr. J Banerjee (MED, SVNIT Surat) **Dr. P L Patel** Mr. Himanshu Tiwari (RES, MP)	2011-12	Completed
22	Anarghya Jain	Characterization of turbulence events and bed load transport of sediment mixture	**Dr. P L Patel**	2012-13	Completed
23	Dhvani Patwa	Characterization of turbulence events and incipient motion of sediment mixture	**Dr. P L Patel**	2012-13	Completed
24	Priyank Sharma	Stochastic dynamic programming model in development of operation policy for a multipurpose reservoir	**Dr. P L Patel** Dr. V Jothiprakash (IIT Bombay)	2013-14	Completed
25	Sudhanshu Dixit	Characterization of flow turbulence in mobile boundary channels	**Dr. P L Patel**	2013-14	Completed
26	Apoorv Tripathi	Development of 2D hydrodynamic model and flood hazards maps of Surat city, India	**Dr. P L Patel** Dr. P V Timbadiya	2014-15	Completed

Sr. No.	Name of Students	Title of Dissertation	M. Tech. Supervisors	Year	Status
27	Resmi S. R.	L-moment approach in regional flood frequency analysis of upper Tapi basin, India	**Dr. P L Patel**	2014-15	Completed
28	Garima Nagpal	Regional frequency analysis of rainfall using L-moment approach of lower Tapi basin, India	**Dr. P L Patel**	2014-15	Completed
29	P. Laxmi Narayana	Analytical and experimental investigation on bed level variation of alluvial channel due to overloading	Dr. P V Timbadiya **Dr. P L Patel**	2014-15	Completed
30	Chethan S. V.	2D Numerical modeling of river flood in coastal floodplain in lower Tapi basin, India	**Dr. P L Patel**	2015-16	Completed
31	Lalit Pal	Hydrological modeling under impact of climate change in Upper Tapi basin, India	**Dr. P L Patel**	2015-16	Completed
32	Akshay Rajak	Morphological study of middle Tapi river using remote sensing and GIS techniques	**Dr. P L Patel**	2015-16	Completed
33	Chaitanya J C	Experimental Investigation of Turbulent Characteristics Over Uniform and Nonuniform Sediment Beds	**Dr. P L Patel**	2016-17	Completed
34	Neha Manoj	Development of Hydraulic Geometry Equations and Their Relevance with Morphological Changes in Middle Tapi River India	**Dr. P L Patel**	2016-17	Completed
35	**Vishal Kachchhwah**	**Coupling of hydrological – hydraulic modellling**	**Dr. P L Patel**	**2017-18**	**Ongoing**
36	**Suhani Chaudhary**	**Development of Morphological Modelling in Indian river**	**Dr. P L Patel**	**2017-18**	**Ongoing**
37	**Lalit Gehhot**	**Experimental investigation of turbulence characteristics**	**Dr. P L Patel**	**2017-18**	**Ongoing**

15.0 List of B. Tech. Projects

- **Completed – 27**

Sr. No.	Name of Students	Title of Project	Project Supervisors	Academic year	Status
At Delhi College of Engineering (DCE) – 1999-2006					
1	Ashish Saxena	Silting problems in power channels	**Dr. P L Patel**	1999-2000	Completed
2	Sanjeev Kumar Rai	Computer aided design of sediment excluder	**Dr. P L Patel**	2000-2001	Completed

Sr. No.	Name of Students	Title of Project	Project Supervisors	Academic year	Status
	Sunil Varshney Vikas Mittal Vipin Gupta				
3	Neha Mehta Roshan Patnaik Simran Kumar Sudiksha Rani Yamini Malna	Design of spillway and terminal structures	**Dr. P L Patel**	2000-2001	Completed
4	Maitrey Yadava Nitin Prasad Anupam Mehta Ruchir Kalra Kamal Dahal	Design of chute spillway for Dhauliganga hydroelectric project	**Dr. P L Patel**	2001-2002	Completed
5	Sameer Bhalla Sarang Arora Saurabh Jolly Sarvesh Mehrotra Sunil Negi Venu Shankar	Stability analysis of earth Dams – A computer aided approach	**Dr. P L Patel**	2001-2002	Completed
6	Dharmbir Singh Nidhi Anchal Priyanka Srivastava Sandeep Gaur Vinay Sharma	Sedimentation in Indian reservoirs	**Dr. P L Patel**	2001-2002	Completed
7	Arun Sharma Ashish Das Sandeep Dayal Sourabh Singh Sunil Chandra Yavnish Adlakha	Calculation of bed load for nonuniform sediments	**Dr. P L Patel**	2002-2003	Completed
8	Archana Meena Rajshree Meena Suchitra Rani	Hydraulic Design of CHIKKAR DAM	**Dr. P L Patel**	2002-2003	Completed

Sr. No.	Name of Students	Title of Project	Project Supervisors	Academic year	Status
9	Asheesh Gupta Aditya Nikhil Bhupen Khatri Parvinder Singh Srivenkatesh Swapnil Bhatnagar	Hydraulic Design of Spillway and Energy Dissipator	**Dr. P L Patel**	2002-2003	Completed
10	Amarjeet Kumar Deepak Nathani Harish Arora Ropan Bhattacharya Yatin Aggarwal	Design of highway skew bridge over river	**Dr. P L Patel**	2003-2004	Completed
11	Aman Sharma, Ashish Kumar, Ruchir Singh, Wasim Siddiqui	Design of river diversion head works	**Dr. P L Patel**	2003-2004	Completed
12	Sudheer Goel, Sanjeev Kr. Singh, Santanu Biswas, Sudheer Kr. Arya, Vikas Kr. Meena, Virender Singh Mandal	Hydraulic Design of spillways	**Dr. P L Patel**	2003-2004	Completed
13	T. Anant Vaibhav, Gaurav Jaitak, P. Rajesh, Nikhil Kr. Yadava, Surakshit Khullar	Hydraulic design of hydroelectric power components	**Dr. P L Patel**	2004-2005	Completed
14	Chetan Sharma, Ajay Varshney, Amandeep, Gopal Sharma, Praveen Bali	Computer aided design of tunnel type sediment ejector	**Dr. P L Patel**	2004-2005	Completed
15	Neeraj Lohani, Amit kumar Jain, Aman Goel, Amit kumar Bhatia,Bhupesh kumar	Condition assessment and improvement existing roads	**Dr. P L Patel**	2005-2006	Completed

Sr. No.	Name of Students	Title of Project	Project Supervisors	Academic year	Status
16	Sakshi Talwar, Pooja Garg, Priyanka Mittal Neha Gupta	Water hammer analysis and design of surge tank in hydro-power plants	**Dr. P L Patel**	2005-2006	Completed
17	N. Krishnan, Neeraj Gupta, Puneet sharma, Rishikesh Joshi, Tarun Arora	Prediction of ITS benefits on Delhi Roads	**Dr. P L Patel**	2005-2006	Completed
At SVNIT Surat – 2007 onwards					
18	Praveen Arora Prashant Sagar Anand Sonekar	Sediment Transport Concepts in Design of Sediment Excluders	**Dr. P L Patel** Shri G D Kale	2007-08	Completed
19	Neha Agrawal Manish Singh Roshan Barla	Simulation of Unsteady Flow in Open Channel using HEC-RAS	**Dr. P L Patel** Shri G D Kale	2008-09	Completed
20	Ankit Balyan Prem Kumar Alok Yadav	Application of HEC HMS in Rainfall-Runoff and Flood Routing Simulations in Lower Tapi Basin	**Dr. P L Patel** Shri P V Timbadiya	2009-10	Completed
21	Niket Shah Rishabh Shah Jaimin Trivedi Anjali Joseph Aditya Arekar	Application of HEC HMS and GIS Remote Sensing in Prediction of Runoff for Gopalkheda Catchment	**Dr. P L Patel** Dr. S M Yadav	2010-11	Completed
22	Anshuk Garg	Analysis of Water Distribution Network of SVNIT Campus	**Dr. P L Patel** Shri P V Timbadiya	2011-12	Completed
23	Subhash Chandra Jay Tatariya Maheep Saher Mahavir Singh Muddireddy Avinash	Computation of Reservoir Operation Parameters through Simulation using HEC-ResSim	**Dr. P L Patel** Dr. P V Timbadiya	2012-13	Completed
24	Raj Sekhar Shriram Meena Dewashish Rai	Analysis and Computation of Uniform Flow and Gradually Varied Flow	**Dr. P L Patel** Dr. P V Timbadiya	2013-14	Completed

Sr. No.	Name of Students	Title of Project	Project Supervisors	Academic year	Status
	Akshay Jain Ankit Dhake				
25	Pallavi Sirohi Sunil Agarwal Bhavika Parmar Nausad Alam Gurmpreet Lalana Shailendra Singh Dinesh Kumar	Design of Storm Water Network	**Dr. P L Patel** Dr. P V Timbadiya	2014-15	Completed
26	Niraj Kumar Alok Anand Harsh Dalal Pawan Kumar Aakash Kumar	Development of IDF curve and its application in storm water network design	Dr. P V Timbadiya **Dr. P L Patel**	2015-16	Completed
27	Kavisha Panchal Ajit Sahoo Ramkesh Meena	Comparative study of numerical models for hydraulic routing in open channels	**Dr. P L Patel**	2016-17	Completed

16.0 List of Summer Internships

- **Completed – 03**

Sr. No.	Name of Students	Title of Project	Project Supervisors	Academic year	Status
1	Yash Dabhaliya	Trend analysis of rainfall data in Lower Tapi basin	**Dr. P L Patel**	2013	Completed
2	Yaduvansh Sharma	Analysis of Hydraulic Jump for Singanpore Weir	**Dr. P L Patel**	2016	Completed
3	Anav Vora	Comparative Study of Gradually Varied Profiles using HEC-RAS software and MATLAB code	**Dr. P L Patel**	2017	Completed

17.0 Conference/ Workshop/ Seminar/ Symposium/ STTPs organized

SHORT TERM TRAINING PROGRAMME (STTP):

Sr. No.	Name of Short Term Training Programme Course	Duration	Funding Agency	Venue
1	Design of Storm Water Network for Smart City: Theory and Practice - II (Co-Coordinator)	Jan. 2-7, 2017	Self-Financed	Dept. of Civil Engg., SVNIT Surat
2	Computational Mechanics and Modelling (CMM 2016) (Co-Coordinator)	Dec. 26-30, 2016	Self-Financed	Dept. of Civil Engg., SVNIT Surat
3	Fundamentals of Advanced Fluid Mechanics (FAFM 2016) (Co-Coordinator)	Jan. 4-8, 2016	TEQIP-II	Dept. of Civil Engg., SVNIT Surat
4	Design of Storm Water Network for Smart City: Theory and Practice - I (Coordinator)	Dec. 28, 2015- Jan. 01, 2016	Self-Financed	Dept. of Civil Engg., SVNIT Surat
5	Modeling Impact of Climate Change on Water Resources (Co-Coordinator)	Dec. 08-12, 2014	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
6	Hydraulic and Hydrologic Modeling: Concepts and Applications (Coordinator)	July 01-05, 2013	TEQIP-II	Dept. of Civil Engg., SVNIT Surat
7	Effective Teaching; Cooperative Learning; Effective faculty Development, Outcome based education (Coordinator)	Dec.14-18, 2009	AICTE	Dept. of Civil Engg., SVNIT Surat
8	Advances in Water Resources (Co-Coordinator)	Dec.22-26, 2008	AICTE	Dept. of Civil Engg. SVNIT Surat

CONFERENCES/WORKSHOP/ SEMINAR ORGANIZED:

Sr. No.	Name of Conference/ Workshop/ Seminar	Duration	Funding Agency	Venue
1	Workshop on "Morphological study of Tapi river using remote sensing technique (Coordinator)	July. 21, 2017	Centre Water Commission (CWC), Govt. of India	Dept. of Civil Engg., SVNIT Surat
2	National conference on "Water Resources and Flood Management (WRFM) – 2016" with special reference to Flood modeling (Coordinator)	Oct. 14-15, 2016	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
3	Project Appraisal Monitoring Committee (PAMC) meet of Ministry of Earth Sciences (Coordinator)	July 15, 2014	Ministry of Earth Sciences (MoES), Govt. of India	Dept. of Civil Engg., SVNIT Surat

Sr. No.	Name of Conference/ Workshop/ Seminar	Duration	Funding Agency	Venue
4	Workshop on "Avenues for Research in the areas of Hydrology, Water Resources and Climate Change Impacts" (Coordinator)	July 14, 2014	Ministry of Earth Sciences (MoES), Govt. of India	Dept. of Civil Engg., SVNIT Surat
5	Workshop on "River Hydraulics and Management of Indian Rivers" (Coordinator)	March 22, 2014	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
6	Workshop "Objective and Outcome Based Education" (Coordinator)	Dec. 21-22, 2013	TEQIP-II	Dept. of Civil Engg., SVNIT Surat
7	National Seminar on "Climate Change Impacts on Water Resources Systems" (Co-Coordinator)	Nov. 27-29, 2013	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., Parul Institute of Technology & Engg., Vadodara
8	Workshop on 'Preparing action plan for study of effect of climate change on water resources of Tapi Basin'	April 28, 2013	AICTE (NCP Project)	Dept. of Civil Engg., SVNIT Surat
9	National Conference on 'Hydraulics and Water Resources', HYDRO-2011 (Coordinator)	Dec.29-30, 2011	ISH, DST, CSIR, DRDO,MNIT Jaipur, NWRWS&KD	Dept. of Civil Engg., SVNIT Surat
10	National Workshop on 'Flood forecasting and protection measures'-FFPM-2010 (Coordinator)	Aug.28, 2010	NCP (AICTE) Project	Dept. of Civil Engg., SVNIT Surat
11	Dean (Academics) meet of all NITs for foster further academic and research collaborations among the NIT systems (Coordinator)	Jan. 29, 2010	SVNIT Surat	Dept. of Civil Engg., SVNIT Surat
12	Workshop on Course Curriculum for up gradation of PG syllabi of 'Water Resources Engineering' (Coordinator)	June 14, 2008	SVNIT Surat	Dept. of Civil Engg., SVNIT Surat
13	National Conference on 'Hydraulics and Water Resources', HYDRO-2007, (Convener; Editorial Committee)	Dec. 21-22, 2007	ISH, SVNIT Surat	Dept. of Civil Engg., SVNIT Surat
14	National Workshop on ' Vision India: Construction industry and Disaster management (Coordinator)	Nov.19, 2005	Delhi College of Engineering	Dept. of Civil Engg Delhi College of Engineering
15	Awareness Workshop on " Intelligent Transportation Systems" (Coordinator)	April, 05,2005	Delhi College of Engineering	Dept. of Civil Engg Delhi College of Engineering
16	National conference on "Innovative Approaches in the Management of Environment" (Joint Secretary)	Oct.17-18, 2003	Delhi College of Engineering	Dept. of Civil Engg Delhi College of Engineering

SOFTWARE TRAINING PROGRAMME ORGANIZED:

Sr. No.	Name of Software Training Programme	Duration	Funding Agency	Venue
1	Bentley Water GEMS, Sewer GEMS, Storm CAD	June 16-19, 2014	Annual Planned Grant, SVNIT Surat	Dept. of Civil Engg., SVNIT Surat
2	MIKE URBAN	May 19, 2014	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
3	MIKE SHE	Apr. 25, 2014	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
4	MIKE 21 – Flood	Nov. 2, 2010	NCP project, AICTE	Dept. of Civil Engg., SVNIT Surat
5	ERDAS Imagine	Oct. 29-30, 2010	NCP project, AICTE	Dept. of Civil Engg., SVNIT Surat
6	Bentley Water GEMS, Sewer GEMS, Storm CAD	May 11-15, 2010	Annual Plan Grant, SVNIT Surat	Dept. of Civil Engg., SVNIT Surat
7	Arc GIS	Feb. 25-26, 2010	NCP project, AICTE	Dept. of Civil Engg., SVNIT Surat
8	MIKE 11	May 5-10, 2008	Annual Planned Grant, SVNIT Surat	Dept. of Civil Engg., SVNIT Surat

SUMMER / WINTER SCHOOLS:

Sr. No.	Name of Summer/ Winter Schools	Duration	Funding Agency	Venue
1	Hydraulics of Mobile Boundary Channel (Coordinator)	Apr. 18-19, 2014	TEQIP-II	Dept. of Civil Engg., SVNIT Surat
2	Computational Hydraulics (Coordinator)	Oct. 25-26, 2013	TEQIP-II	Dept. of Civil Engg., SVNIT Surat

EXPERT LECTURES ORGANIZED:

Sr. No.	Name of Resource Person and Topic of Expert Lecture	Duration	Funding Agency	Venue
1	Expert Lecture by Dr. P. P. Mujumdar, Prof., IISc Bangalore, on 'Impact of climate change on urban flooding' (Coordinator)	July 19, 2017	SVNIT Surat	Dept. of Civil Engg., SVNIT Surat
2	Expert Lecture by Dr. Vishnu Prasad, Prof., NIT Bhopal, on 'Selection of Pumps: Performance and Tesing' (Coordinator)	August 24, 2016	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat

Sr. No.	Name of Resource Person and Topic of Expert Lecture	Duration	Funding Agency	Venue
3	Expert Lecture by Dr. Vivekanand Singh, Prof., NIT Patna, on 'Numerical modeling for soil moisture prediction in the catchment' (Coordinator)	August 09, 2016	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
4	Expert Lecture by Dr. S K Jain, Scientists G, NIH Roorkee, on 'Environmental flows' (Coordinator)	May 11, 2016	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
5	Expert Lecture by Dr. M L Kansal, Prof., IIT Roorkee, on 'Issues on River Health Monitoring' (Coordinator)	March 21, 2016	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
6	Expert Lecture by Dr. K G Ranga Raju, Emeritus Prof., IIT Roorkee, on 'Rivers and River Control structures' (Coordinator)	Jan. 06, 2016	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
7	Expert Lecture by Dr. Rakesh Mishra, Professor, University of Huddersfield, UK on 'Industrial Applications of Computation Fluid Dynamics' (Coordinator)	Aug. 12, 2015	Centre of Excellence (CoE), TEQIP-II	Dept. of Mechanical Engg., SVNIT Surat
8	Expert Lecture by Dr. B. S. Pani, Emeritus Prof., IIT Bombay, on "Boundary Layer Theory and Turbulent Flow: Concepts" (Coordinator)	Oct. 31-Nov. 1, 2014	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
9	Expert Lecture by Dr. B. S. Pani, Emeritus Prof., IIT Bombay, on "Concepts of open channel flow hydraulics and Resistance to flow in mobile boundary channels" (Coordinator)	Mar. 19-20, 2014	Centre of Excellence (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
10	Expert Lecture by Dr. B S Mazumder, Emeritus Prof., ISI Kolkata, 'Turbulence its measurement and analyses in rigid and mobile boundary channels' (Coordinator)	Mar. 21-22, 2013	TEQIP-II	Dept. of Civil Engg., SVNIT Surat
11	Expert Lecture by Dr. K G Ranga Raju, Emeritus Prof., IIT Roorkee, on 'Rivers and River Control structures' and 'The Baglihar Dam and the Indus Waters Treaty' (Coordinator)	Aug. 19, 2011	TEQIP-II	Dept. of Civil Engg., SVNIT Surat
12	Coordinated Expert Lectures on (a) Stability analysis of gravity dams and (b) Criteria for design of Energy dissipators in Dams	May 12, 2006	Delhi College of Engineering	Dept. of Civil Engineering, Delhi College of Engineering

18.0 Membership of Technical Societies/Expert Committees:

(1) Fellow Member of the Institution of Engineers, India (F-112817-1)
(2) Fellow Member of Indian Society for Hydraulics (ISH) (F-389)
(3) Fellow Member of Indian Water Resources Society (IWRS)
(4) Member of International Association of Hydraulic Research (IAHR)
(5) Life Member Of Indian Society For Technical Education (ISTE) (IM-30011)
(6) Life Member Of Association of Hydrologist of India(AHI), 2009 (AHI-LM-411-703)
(7) Member of Hydrological Data User Group (HDUG), State Water Data Centre (SWDC), Govt of Gujarat, 2008 onwards
(8) Member of working group on climate change '**Fluvial Mechanism Component' of International Association for Hydraulic Research (IAHR)**, 2008 onwards
(9) Member of Interstate Committee on 'Flood Management & Preparedness for Monsoon in Tapi Basin.
(10) A member of working group of IAHR Working on effect of Climate change (Fluvial Mechanism)
(11) Member, Technical Advisory Committee of Central Water & Power Research Station (CWPRS) Pune, Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India.
(12) Member, Expert Committee on Assessment of Flood Situation in Rel River Bank and Dhanera Region of Banaskantha District due to Extreme Rainfall and Suggesting Remedial Measures under Narmada Water Resources, Water Supply and Kalpasar Department (NWRWS&KD), Government of Gujarat.

19.0 International Visits:

- Japan – 2010
- Italy – 2012
- China – 2013
- Netherlands – 2015
- USA – 2012, 2016, 2017

20.0 Administrative responsibility undertaken

Sr. No.	Name of the Assignment	Duration	Name of responsibility shared/ service offered
SVNIT Surat			
1	Sectional Head, Water Resources Engineering	Aug. 09, 2017 to till date	a) Development of facilities in Water Resources Section in Advance Research Building.
2	Dean Academics	Nov.27, 2015 to till date	b) Smooth and efficient conduct of Academic Programs as per the Academic regulations approved by the Institute Senate. c) Conduct of Institute Academic Advisory Committee (IAAC), Senate meetings, and Convocations d) Conduct of Examinations and classes as per the Academic Calendar e) Accreditation of UG and PG Programs
3	Chairman, 14th Convocation of SVNIT Surat	Jan. 22, 2017	a) Smooth and efficient conduct of 14th Convocation of the Institute
4	Head,	July 05, 2013 - July 06, 2015	a) Administrative Head of the department

Sr. No.	Name of the Assignment	Duration	Name of responsibility shared/ service offered
	Department of Civil Engineering		b) Smooth conduct of UG/ PG/ PhD courses in the Department c) Handling the admissions of PG/ PhD students at the Department level d) Taking care of laboratory and class infrastructure of the department e) Looking after administrative needs of faculty, staff and students f) All four eligible PG programmes got Tier I accreditation from National Board of Accreditation (NBA) New Delhi g) The SAR for Accreditation of UG program has been submitted to NBA for accreditation h) The concept of single subject with single teacher, where ever applicable, was introduced first time in the department for ensuring responsibility oriented teaching i) The data base of ongoing consultancy, has been developed first time in the department for better monitoring of the projects j) Organized Departmental Academic Advisory Committee (DAAC) meets time to time to address the academic issues of the department, and bringing the same at Institute Academic Advisory committee (IAAC) and Senate levels for discussions
5	Dean (Research and Consultancy)	i) Aug. 01, 2016 – Jan. 31, 2017 ii) May 09, 2009-Oct. 16, 2010	(a) Revised syllabi for different PG courses were put up to the Institute Senate through BPGS&R (b) Administered smooth admission process of PG and PhD programmes (c) Meetings of BPGS&R were initiated and conducted for discussing the policy matters amongst the members and putting the same to the Institute Senate. MoUs were initiated for collaboration between the SVNIT and Industries; and academic Institutions at National and International level
6	Dean (PG)	July 16, 2007-May 09, 2009	(a) Modified the existing scheme of M Tech (RESEARCH) through a committee and submitted to Senate for their approval through BPGS&R. (b) The SIX PG Programmes were accredited. (c) Admission process of PG Admissions were conducted at the Institute level (d) Revised syllabi for different PG courses and put up to the Institute Senate through BPGS&R (e) Routine administrative components of PG programmes
7	Director-in-charge SVNIT Surat	Apr. 23, 2009-June, 17 2011	The duty of Director-in-charge was assigned as and when regular Director was on official duties/leaves.
8	Water Resources Lab In-charge **(APPENDIX A)**	Aug. 27,2008-Sep. 21, 2011	(a) Strengthened existing experimental and Computational Hydraulics Laboratory in the Department by procuring the new experimental and computational equipments as well as facilities,

Sr. No.	Name of the Assignment	Duration	Name of responsibility shared/ service offered
			(b) Desired facilities for Hydraulics experiments were planned during the construction of new Advanced Hydraulics Laboratory in the Department (c) A new Sediment transport flume was procured as part of DST Project in the Advanced Hydraulics laboratory of the department
9	Departmental Coordinator of UG (accreditation)	March 2013 onwards	The team was formed; and SAR of UG accreditation is submitted to AICTE for accreditation
10	Member of Academic Performance Review Committee (APRC), SVNIT Surat	2007 to Oct. 2010; July 2013 onwards	For discussion of policies related to academic issues
11	Member of Institute Academic Advisory Committee (IAAC), SVNIT Surat	2007 onwards	For discussion of policies related to academic issues
12	Chairman, Institute Canteen Committee	July 2012 – June 2013	Advising the Institute authority for better management of the Institute canteen
13	Chairman, Scrutiny Committee for staff selection at the Institute level	Apr. 2012	List of eligible Administrative officer/ Technical officer (Non-Technical posts) were handed over to the Institute administration. Selection process is over.
14	Member of Central Counselling Board CCB-2009	2009	Conducted admission process of B.Tech students in the Institute through AIEEE-2009
15	Member of Institute level scrutiny committee	April 2008-March 2009	Promotion of faculty members through CAS.
16	Mentor for the employees of Hazira LNG Private Limited, Surat	April 2008-March 2009	Mentor the pursuing their B Tech (Gas engineering) from their organisation
17	Member Institute Disciplinary Committee	Jan 2008-Jan 2010	Advising the Institute administration and students in disciplinary actions at the Institute level
18	Member Institute Purchase Committee	Jan 2008-Jan 2009	Advising the Institute administration in purchases at the Institute level
Delhi College of Engineering (DCE)			

Sr. No.	Name of the Assignment	Duration	Name of responsibility shared/ service offered
19	Lab-in-Charge Hydraulics Lab	July 1999-June 2007	a) Development of basic experimental facilities in Fluid Mechanics Lab, like Flow through Orifice, Discharge measurements through Venturimeter, Calibration of rectangular, triangular notches, minor losses, Metacentric height, free Vortex, forced Vortex etc.
20	Officer-in-charge, Examination Cell	2001-2007	For conducting examination working smoothly at Institute level
21	Coordinator, Water Resources Engineering Section	June 01, 2004-2007	For coordinating and enhancing water resources section at department level
22	Time- Table In-charge, Department of Civil Engineering	Jan 2000 – Jan 2003	For implementing effective time table schedule according to teaching scheme at department level
23	Warden Bhaskaracharya Hostel, vide Admn. letter no. HOO/02/2003/718-727	May 1, 2003 – Apr. 1, 2004	For conducting smooth working at Hostel
24	Dy. Proctor	July 29, 2005	At Institute level
25	Coordinator for Award of PhD. scholarship	Academic Year 2000-2004	At Institute level

APPENDIX A

Certificate

Dr. P. L. Patel, Professor, Department of Civil Engineering was entrusted the responsibility of Lab-In-charge Water Resources Engineering Laboratory, and his lab development activities are summarized as follows:

Office order:

(a) CED/670/2008-09, Aug. 27, 2008
(b) CED/OO/1347/2011-12, Sep. 21, 2011

The following new experiments have been added in the curriculum of PG (Water Resources Engg.) along with related experimental setups in the laboratory;

a) Incipient motion of sediments in mobile boundary channel

- **Experimental Setup**:- A tilting re-circulating sediment transport channel (Size: 15m x 0.90m x 0.60m) with basic accessories, procured from DST project.

- **Brief Procedure**:- Uniform sediment bed is prepared on the channel bed. The discharge is allowed slowly from the upstream and uniform flow condition is maintained for each discharge. At low discharge, the sediments are at rest. The water discharge is increased in small increments, and uniform flow conditions are maintained while using the tail gate. The sediments are observed from the side walls; and a condition of flow is achieved in the channel at which sediments are just in the verge of movement. The shear stress at which sediments are just in the verge of movement is estimated from known depth of flow, and longitudinal slope. The dimensionless critical shear stress is plotted on Shield's curve to compare the correctness of observations in the flume.

- **Significance**:- The students will have understanding of Incipient motion conditions of sediments in the mobile boundary channel which may help them in tackling the morphological processes of natural rivers.

b) Measurement of velocity distribution in open channel flume using Pitot tube, Current meter and ADV, plotting Isovels and computation of α and β

- **Experimental Setup**:- A tilting re-circulating open channel flume (Size: 15m x 0.90 m x 0.60m) with basic accessories procured from DST project; Current meter and Pitot tube from Institute planned grant; and Acoustic Doppler Velocimeter (ADV) from TEQIP-II.

- **Brief Procedure**:- The velocity distributions in the open channel are obtained using Pitot tube, Current meter and Acoustic Doppler Velocimeter (ADV) for a given flow condition in the channel. Using Reynolds averaging rule, average velocity distribution in the open channel are obtained for ADV observations. The velocity distributions in the open channel are integrated to obtain average flow velocity, kinetic energy correction factor (α) and momentum correction factor (β) in the open channel.

- **Significance**:- The measurement of velocity distributions and computation of average velocity, α and β, help the students in understanding the complexity of flow and estimation of discharge from measured data.

c) Study of submergence characteristics and measurement of discharge using (i) Critical Venturiflume and (ii) Broad crested weir

- **Experimental Setup**:- Multipurpose flume (Size: 5m x 0.07m x 0.14m) with basic accessories procured from Annual planned grant of the Institute.

- **Brief Procedure**:- The known discharge is allowed to flow in the flume while the accessory (Venturiflume or Broad crested weir) placed across the channel. The head at upstream of the Venturiflume/ Broad crested weir is measured for different discharges. The coefficient of discharge for the measuring setup (Venturiflume/ Broad crested weir) is calibrated for different flow conditions. Finally the water level in the downstream of the Venturiflume/ Broad crested weir is increased, and its affect on the upstream water levels are observed to understand the submergence characteristics of measuring setups.

- **Significance:**- The observations and analysis of data helps the students in understanding the calibration procedure of Venturiflume and Broad crested weir and also understanding their submergence characteristics.

d) Establishment of subcritical, critical and supercritical flow in open channel, plotting specific energy diagram

- **Experimental Setup**:- Multipurpose flume (Size: 5m x 0.07m x 0.14m), pointer gauge, etc. was procured from Annual planned grant of the Institute.

- **Brief Procedure**:- A discharge of significant quantum is allowed into the flume and uniform flow condition is maintained. The longitudinal slope of the channel is increased in increments, and depth of flow is measured for each such increments. The depth corresponding to unstable flow condition is observed which corresponds to critical condition. The slopes of the channel are increased further to obtain supercritical flow conditions. Finally, the specific energy diagram is plotted and critical depth obtained from specific energy diagram is compared with observed critical depth.

- **Significance:**- The students are able to understand the concepts of subcritical, critical and supercritical flow in open channel.

e) Measurement and computation of gradually varied flow profiles in open channel flows

- **Experimental Setup**:- Multipurpose flume (Size: 5m x 0.07m x 0.14m), pointer gauge, etc. was procured from Annual planned grant of the Institute.

- **Brief Procedure**:- A discharge of significant quantum is allowed into the channel and uniform flow condition is maintained. The downstream tail gate is raised to maintain M1 profile in the channel. The pointer gauge is used to measure the depth of flow. The observed M1 profile is compared with computed profile for the given discharge and channel geometry.

- **Significance:**- The students are able to understand the concepts of gradually varied flow and its computation in open channel.

Apart from additions of aforesaid experiments/ experimental setups, following equipments have been added in the Experimental Laboratory as In-charge of Water Resources Laboratory:-

i) Groundwater flow unit

ii) Water Hammer pressure analysis and Surge tank
iii) Cavitation demonstration setup
iv) Tensiometer for measurement of moisture

The related experiments are also included in the curriculum of PG programme in Water Resources Engg.

The following softwares are added in the Computational Hydraulics Laboratory as part of **Nationally Coordinated Project (NCP) on Water Resources and Flood Management**:-

Sr. No.	Name of Software	Purpose	Funding Source
1	MIKE 11	Modelling of Flood	Annual Planned Grant
2	MIKE Flood	Modelling of Flood	NCP Project
3	MIKE 11 GIS, FF	Modelling of Flood	NCP Project
2	RIVER CAD Professional	Modelling of Hydrodynamic Flow	Annual Planned Grant
3	ERDAS Imagine	Image processing	NCP Project
4	ARC GIS 10	Analysis of Topographical data of River Basin	NCP Project
5	HEC RAS	Hydrodynamic analysis of River	Annual Planned Grant
6	HEC HMS	Hydrological modelling system of catchment	Annual Planned Grant
7	HEC-2	Morphological of River	Annual Planned Grant
8	STATISTICA	Statistical analysis of hydrological data	Annual Planned Grant
9	MIKE 11 Lab kit	Modelling of Flood	Annual Planned Grant
10	MIKE SHE	Hydrological Modelling	Centre of Excellence, TEQIP-II
11	MIKE URBAN	Urban Flooding	Centre of Excellence, TEQIP-II
12	Bentley WaterGems, SewerGems & StormCAD (Academic Version)	Water distribution, Storm and Sewer network modelling	Annual Planned Grant
13	Bentley WaterGems, SewerGems & StormCAD (Commercial Version)	Water distribution, Storm and Sewer network modelling	Annual Planned Grant

(Dr. P L Patel)