#### **Brief Resume**



1.0	Name, Designation &	Dr. P L Patel,
	Date of joining	Professor
		Department of Civil Engineering
		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	<b>Academic Qualifications</b>	B E (Civil)Hons.,
		M E (Civil)Hons., PhD
		(University of Roorkee, Now IIT Roorkee)
7.0	<b>Technical Qualifications</b>	B E (Civil)Hons.,
		M E (Civil)Hons., PhD
		(University of Roorkee, Now IIT Roorkee)
8.0	<b>Previous Experiences</b>	Joined Border Roads organization as Assistant Executive
		Engineer through Indian Engineering Services
		(Sep.1995- June 99)
		Served Delhi College of Engineering (Now DTU) from July 99
		to Jun 2007 as Reader in Department of Civil Engineering
9.0	Awards / Prizes /	The Research paper 'A 1D-2D coupled Hydrodynamic model for
	Certificates etc	river flood prediction in a coastal urban flood plain', <b>Journal of</b>

2016 ASCE, Florida, USA.

Certificates etc.

❖ 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

**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 **EWRI congress – May** 

- ❖ A guided PhD Thesis titled 'Incipient Motion and Bed Load Transport Characteristics of Unimodal and Bimodal Sediments by (DS08 CE 106) Shaileahkumar 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 nonuniform sediments' presented in HYDRO-2003 at CWPRS Pune.
- ❖ Recipient of Visiting International Fellowship (VIF-2017) 2017 for attending ASCE EWRI Congress-2017 at Sacromento, California, USA, May 21-25, 2017.

#### 10.0 Research projects completed/ongoing as Chief Coordinator:

Research projects completed: 03
Research projects ongoing: 02

Sr. No.	Name of the funding agency	Name of the Scheme	Programme Title	Year of Funding	Duration	Amount Sanctioned (Rs.)	Status: Completed/ Ongoing
1.0	DST	FIST	Recirculating sediment transport flume	2015	2 year	1.75 Crores	Ongoing
2.0	TEQIP-II	World Bank and MHRD	Centre for excellence on Water Resources and Flood Management	2013	4 year	4.20Crores	Completed
3.0	MHRD New Delhi	ICT	Development of course on "Hydrology and Flood Control"	2014	1.5 Year	7 Lakhs	Completed
4.0	DST	SERC	Erosion of Non uniform unimodal and bimodal sediments	2009	Four years	31.89 Lakhs	Completed
5.0	AICTE	NCP	Development of water resources and flood management centre	2009	Four Years	35 Lakhs	Completed

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

International Journal: 15
National Journal: 17
International Magazine Articles: 02
International Conference: 41
National Conference: 43
Total: 118

	Total.	110	
Sr. No.	Title of Research Paper	Author(s)	Name & Vol. of Journal with Year
Refe	reed Journal :		
1	Fractionwise calculation of bed load transport	Patel, P. L. and Ranga Raju, K. G.	Journal of Hydraulic Research, IAHR, Vol.34, No.3.pp 363-379
2	Critical tractive stress of nonuniform sediments	Patel, P. L. and Ranga Raju, K. G.	Journal of Hydraulic Research, IAHR, Vol. 37, No.1, pp 39-58
3	Entrainment Characteristics of Nonuniform Unimodal and Bimodal sediments	P. L. Patel, P. D. Porey, A. D. Ghare and S. B. Patel	Korean Society of Civil Engineering (KSCE), Springer, Journal of Civil Engineering, Vol. 13, No.3. Feb.2009, pp189- 194.
4	Computation of Critical Tractive Stress of Scaling Sizes in Nonuniform Sediment	P. L. Patel, P. D. Porey, and Shaileshkumar B. Patel	Journal of Hydraulic Research, IAHR, Vol.48 (4), pp. 531-537, 2010.
5	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,
6	Application of Innovative Trend Analysis Methodology and Distribution Fitting: Study on annual peak inflow into	P V Timbadiya P L Patel P D Porey	Water & Energy International, CBIP, Vol.69, No.9, pp.40-43, Sep.2012.
7	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
8	Development of sustainable irrigation planning with multiobjective fuzzy linear programming for Ukai –	A B Mirajkar P L Patel	Canadian Journal of Civil Engineering, Vol.40, No.7, pp.663-673, May 2013
9	Estimation of fractional critical Tractive stress from fractional bed load transport measurements of unimodal and	S B Patel P L Patel P D Porey	Measurement, Elsevier, Vol. 47, January 2014, Pages 393-400.
10	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

11	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.
12	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
13	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
14	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.
15	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.
16	Critical tractive stress of nonuniform and Bimodal sediments	Patel, P. L. and Pati, D. R.	Journal of Hydraulic Engineering, ISH, Taylor and Francis, Vol. 12(1). pp 39-51, 2006.
17	Bed load Transport of Bimodal Sediments	Patel, P L and Jain, Mayank	Journal of Hydraulic Engineering, ISH, Taylor and Francis, Vol. 15(1), pp.14-23, 2009.
18	Critical Tractive Stress of Representative Sizes in Nonuniform Sediments	P. L. Patel, P. D. Porey, and S. B. Patel	Journal of Hydraulic Engineering, ISH, Vol. 15(3), pp. 41-50, 2009.
19	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
20	HEC-RAS based Hydrodynamic model in prediction of stages of lower Tapi River	P V Timbadiya P. L. Patel, P. D. Porey	Journal of Hydraulic Engineering, Indian Society (ISH), Vol.17, No.2, pp.110-117, 2011.
21	A Fuzzy Based Optimal Irrigation Planning for Kakrapar Right Bank Canal Command Area, Gujarat, India	A B Mirajkar P L Patel	Journal of Hydraulic Engineering, Indian Society (ISH), Vol.17 (1), No.3, pp. 110-117, January 2011.
22	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.
23	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.

24	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
25	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.
26	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.
27	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.
28	Reply to discussion on paper: Prediction of friction factor and stage—discharge relationship in alluvial streams in ISH journal of hydraulic engineering, 19 (1), 49–54, Feb. 2013	B.R. Andharia, P.L. Patel, V.L. Manekar & P.D. Porey	ISH Journal of Hydraulic Engineering, Taylor and Francis publisher, UK Vol. 20(2), pp.188-191, May 2014.
29	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.
30	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.
31	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.
32	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.
Inter	national Magazine proceedings:		
1	Fluvial Mechanics: Impact of climate change on sediment yield from river basins	P. L. Patel	IAHR Hydrolink – Climate Change Special Magazine, Vol. 3, 2013, pp. 74-75.

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, 2015, pp. 93-95.

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Inte	rnational Conference/Seminar/S	ymposium:	
1	Semi-theoretical approach on transport of coarse sediments	Patel P L Durga Sai K.	Proceeding of an International Conference on "Hydraulic Engineering: Research and Practice (ICON-HERP-2004)"
2	River stage Simulation using HEC-RAS	P. V. Timbadiya P. L. Patel P. D. Porey	Proceeding of 3 <sup>rd</sup> 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 procedeeing 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 UOCF in association with EWRI-ASCE, IAHR, IIHR etc. during November 4-7, 2012.
7	Calibration of channel and	P. V. Timbadiya	International Conference on

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 Hydro-system and Engineering-2012, Orlando, USA at University of Central Florida (UOCF), Orlando, **USA** organised 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 35 <sup>th</sup> 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 35 <sup>th</sup> 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. Patel, P. L.	Proceedings of the 18 <sup>th</sup> HYDRO – 2013 International held at IIT Madras, Chennai, during Dec. 4-6, 2013.
12	Ukai reservoir operation simulation using HEC- ResSim	Timbadiya, P. V., Mirajkar, A. B., Patel, P. L.	Proceedings of the 18 <sup>th</sup> HYDRO – 2013 International held at IIT Madras, Chennai, during Dec. 4-6, 2013.
13	Conceptual Rainfall-Runoff Model for Gopalkheda subcatchment (Maharashtra, India) using MIKE11 NAM	Loliyana, V. D., and Patel, P. L.	Proceedings of the 18 <sup>th</sup> HYDRO – 2013 International held at IIT Madras, Chennai, during Dec. 4-6, 2013.
14	Model Sediment yield modeling for upper Tapi basin	Prabhat Chandra, Patel, P. L., Porey, P. D., and Gupta, I. D.	Proceedings of the 18 <sup>th</sup> HYDRO – 2013 International held at IIT Madras, Chennai, during Dec. 4-6, 2013.
15	Mathematical modeling of aggradation in alluvial channels	Andharia, B. R., Patel, P. L., Manekar, V. L., and Porey, P. D.	Proceedings of the 18 <sup>th</sup> HYDRO – 2013 International held 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, Timbadiya, P. V., Patel, P. L., and 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 hydrologic model for Yerli sub-catchment (Maharashtra, India)	V. D. Loliyana P L Patel	Proceedings of the 19 <sup>th</sup> HYDRO – 2014 International held 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 19 <sup>th</sup> HYDRO – 2014 International held 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 19 <sup>th</sup> HYDRO – 2014 International held 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 19 <sup>th</sup> HYDRO – 2014 International held at MANIT Bhopal, during Dec. 17-19, 2014.
21	Turbulence characteristics over a fluvial channel bed	Sudhanshu Dixit P L Patel	Proceedings of the 19 <sup>th</sup> HYDRO – 2014 International held 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 19 <sup>th</sup> HYDRO – 2014 International held at MANIT Bhopal, during Dec. 17-19, 2014.
23	Experimental and numerical studies on aggradation for alluvial stream bed	Andharia, B. R., Patel, P. L., Manekar, V. L., and Porey, P. D.	Proceedings of the 19 <sup>th</sup> HYDRO – 2014 International held at MANIT Bhopal, during Dec. 17-19, 2014.
24	Contrast in sediment yield patterns of subcatchments of upper Tapi basin	Prabhat Chandra, Patel, P. L., Porey, P. D., and Gupta, I. D.	Proceedings of the 19 <sup>th</sup> HYDRO – 2014 International held 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 Resmi S R Apoorv Tripathi Garima Nagpal	International conference on "India Water Week-2015", organized by Central Water Commission, held 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, held 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 36 <sup>th</sup> 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 36 <sup>th</sup> 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 36 <sup>th</sup> 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 36 <sup>th</sup> IAHR world congress 2015 at The Hague, Netherlands, during June 28-July 3, 2015.
31	Distributed surface water flow model for Gopalkheda sub- catchment, Maharashtra, India	V D Loliyana P L Patel	Proceedings of the 20 <sup>th</sup> HYDRO – 2015 International held at IIT Roorkee, during Dec. 17-19, 2015.

32	Assessment of Regional Flood Frequency Model for the Upper Tapi Basin, India		Proceedings of the 20 <sup>th</sup> HYDRO – 2015 International held 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 20 <sup>th</sup> HYDRO – 2015 International held 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 20 <sup>th</sup> HYDRO – 2015 International held 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 held 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 held 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 20 <sup>th</sup> IAHR IAHR APD 2016 at The Colombo, Sri Lanka, during August 28-31, 2016.
40	Seasonal Stochastic Model for Long Term Reservoir Inflow Forecasting for Ukai Reservoir,	Priyank Sharma P L Patel V Jothiprakash	Proceedings of the 20 <sup>th</sup> IAHR IAHR APD 2016 at The Colombo, Sri Lanka, during August
41	India Aggradation in mobile boundary channel due to overloading of sediments	P Laxmi Narayana P V Timbadiya P L Patel	28-31, 2016. Proceedings of the 20 <sup>th</sup> IAHR IAHR APD 2016 at The Colombo, Sri Lanka, during August
Natio	onal Conference/ Symposium/ S	Seminar:	28-31, 2016.
1	Characteristics of flow past	Patel, P. L.,	NASORT in Design of Hydraulic
	Ski-jump bucket,	Asawa, G.L., and Ranga Raju, K.G.	Structures, Deptt. of Civil Engg, University of Roorkee, pp 143- 151, 1994
2	An evaluation of fractionwise calculation of bed load	Patel, P. L., Ranga Raju, K. G	NASORT in Design of Hydraulic Structures, Deptt. of Civil Engg, University of Roorkee, pp265- 272, 1994
3	Criteria for movement of nonuniform sediments-An overview	Patel P L	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	Patel P. L. 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. Patel, P. L	HYDRO 2001, National conference on Hydraulics and Water Resources, CWPRS, Khadakwasla, Pune, pp 425-432

6	Measures for silt free water in power canal	Patel, P. L.	National Workshop on 'Water Quality (Including drinking water)' Feb. 2002 held at Jawahar
7	An evaluation of critical tractive stress of nonuniform sediments	Patel, P. L	Lal Nehru University, New Delhi. National Conference on Advances in Civil Engineering, Deptt of Civil Engg., HBTI, Kanpur, pp 452-457
8	Incipient motion conditions of nonuniform sediments	Patel, P. L., Sharma A. K.	National Conference on Hydraulics and Water Resources, HYDRO 2003, December 26-27,
9	Sediment transport concepts in design of power canals and silt exclusion devices	Patel, P. L.	2003, Khadakwasla, Pune, pp 183-Proceeding of a National Seminar on Safety and Quality management in development of Uttranchal, organized by Institution of Engineers, June 24, 2004, pp.241-245.
10	Prediction of critical tractive stress of nonuniform and bimodal sediments	Patel, P. L.	Proceeding of a National Conference HYDRO-2005, Dec. 08-09, SIT Tumkur, pp.668-674.
11	Critical submergence of ski- jump bucket: An analytical approach,	Patel P L and Shrivastava Vishal	Proceeding of a National Conference HYDRO-2006, Dec. 08-09, SIT Tumkur.
12	Probabilistic model in prediction of nonuniform sediment bed surface under equilibrium condition	Goyal Kanhaiya and Patel P L	Proceeding of a National Conference HYDRO-2007, Dec. 21 -22, SVNIT Surat, pp 297-305.
13	Study of Mobility Index of Sarangkheda gauging station of Tapi River	Anajwala J. Nitisha, Patel P L and Samtani B K	Proceeding of a National Conference HYDRO-2007, Dec. 21 -22, SVNIT.
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 nonuniform 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 Nonuniform Sediments	P. L. Patel, P. D. Porey, and Shaileshkumar B. Patel	Proceeding of a National Conference HYDRO - 2008, MNIT, JAIPUR (INDIA), pp. 366-374. Dec. 15 -16, 2008.
17	Stream flow forecasting using ANN approach for Sabarmati River Basin	Timbadiya P V Patel P L Porey P D	Proceeding of a National Conference HYDRO-2008, Dec. 15-16, 2008 held at MNIT Jaipur, pp.254-263.

18	Flood Forecasting in Tapi Basin: A Scope for Improvement -	P.V.Timbadiya, P.L.Patel and 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- Ussues and Options organized by CWC on 4 <sup>th</sup> -5 <sup>th</sup> March-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	Proceeding of the Civil Engineering Conference- Innovation Without Limits (CEC- 09) at NIT-Hamirpur during
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	Proceeding of the Civil Engineering Conference- Innovation Without Limits (CEC- 09) at NIT-Hamirpur during
22	Evaluation of Existing Methods for Computation of Critical Tractive Stress of Bimodal Sediments	P. L. Patel, P. D. Porey, and Shaileshkumar B. Patel	National Specialty Conference on River Hydraulics - 2009, held at MMU- Mullana, Hariyana, Oct. 29-30, 2009.
23	Characterization and Computation of Critical Tractive Stress of Bimodal sediments	P. L. Patel, P. D. Porey, and Shaileshkumar B. Patel	Proceeding of a National Conference HYDRO - 2009, held at Khadakwasla, PUNE (INDIA), Dec. 17 -18, 2009.
24	Optimal Irrigation Planning in Fuzzy Environment: A Case Study of Kakrapar Canal Command Area, Gujarat	A. B. Mirajkar, Dr. P. L. Patel	HYDRO-2010, At Ambala (Haryana), on 16-18 December, 2010.
25	Simulation of Stages using Hydrodynamic model MIKE 11: A case study of Lower	P. V. Timbadiya P. L. Patel P. D. Porey	14 <sup>th</sup> National Symposium on Hydrology at MNIT- Jaipur during December- 21-22, 2010.
26	Tapi river Optimal Cropping Pattern for Ukai Command Area, Gujarat.	A. B. Mirajkar, Dr. P. L. Patel	14 <sup>th</sup> National Symposium on Hydrology, at MNIT, Jaipur, on 21-22, December, 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	Viraj D. Loliyana Dr. P. L. Patel P. V. Timbadiya M. Khan K. L. Dave	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.
30	One-Dimensional Model in Prediction of Stage-Discharge Curves in Natural Channel	P. V. Timbadiya Dr. P. L. Patel Dr. P. D. Porey	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.

31	Hydrodynamic Simulation of Open Channel Flow using MIKE 11 and its Validation: A Case Study	P. V. Timbadiya Apurva M. Suthar Dr. P. L. Patel	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.
32	Irrigation Operating Policies using Genetic Algorithm for Ukai Reservoir, India: A Case Study	S. S. Shiyekar Dr. P. L. Patel Dr. P. D. Porey	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.
33	Chance Constraint Linear Programming Model for Optimal Cropping Pattern	A. B. Mirajkar Dr. P. L. Patel	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.
34	Analysis of Sediment Yield Data in Tapi Basin	Prabhat Chandra Dr. P. L. Patel Dr. P. D. Porey Dr. I. D. Gupta	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.
35	Comparative Performance of Critical Tractive Stress Predictors for Bimodal Sediments	Shailesh B. Patel Dr. P. L. Patel Dr. P. D. Porey	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.
36	Estimation of Friction Factor for Alluvial Rivers	B. R. Andharia Dr. V. L. Manekar Dr. P. L. Patel Dr. P. D. Porey	Proceeding of National Conference, HYDRO-2011, At SVNIT (Surat), on 29-30 December, 2011.
37	Comparative Prediction of rating curves using 1D and 1D-2D coupled Hydrodynamic models	P. V. Timbadiya P. L. Patel P. D. Porey	Proceeding of National Conference, HYDRO-2012, IIT- Bombay, December, 7-8, 2012.
38	Sustainable Irrigation Planning using two phase Multi-Objective Fuzzy linear programming approach	A. B. Mirajkar P. L. Patel	Proceeding of National Conference, HYDRO-2012, IIT- Bombay, 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	Proceeding of National Conference, HYDRO-2012, IIT- Bombay, December, 7-8, 2012.
40	Experimental investigation on threshold for incipient motion of graded sediments	S.B.Patel P.L.Patel P.D.Porey	Proceeding of National Conference, HYDRO-2012, IIT- Bombay, 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	Proceeding of National Conference, HYDRO-2012, IIT- Bombay, December, 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	Proceeding of National Conference, HYDRO-2012, IIT- Bombay, December, 7-8, 2012.
43	Sustainable Irrigation Planning Management With Multi- Objective Fuzzy Linear	A. B. Mirajkar P. L. Patel	Proceedings of SWRDAM-13 to be held at GEC Aurangabad, during Sept, 30 <sup>th</sup> –Oct 1 <sup>st</sup> 2013.

Programming

## 12.0 Consultancy Projects:

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

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

## 13. List of Completed/ Ongoing Ph.D. Programmes

Sr. No.	Name of Students Praful V. Timbadiya	Title of Thesis Development of 1D-2D Integrated Hydrodynamic Model for River Flood Prediction in Coastal Urban Flood Plain	Ph.D. Supervisors Dr. P L Patel Dr. P D Porey	Date of Joining 20/07/2007	Status Completed August 2012
2	Shailesh B. Patel	Incipient Motion and Bed Load Transport Characteristics of Unimodal and Bimodal Sediments	<b>Dr. P L Patel</b> 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	<b>Dr. P L Patel</b> 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	23/07/2009	Completed December 2016
7	Jineswar Sinha	Development of 2-Layered 2-D Model for Compound Open Channel Flow	Dr. P D Porey 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	Ongoing
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	<b>Dr. P L Patel</b> Dr. R A Christian	26/07/2013	Ongoing
11	Priyank J. Sharma <b>DST Inspire Fellow</b>	Inflow prediction and Real time reservoir operation	<b>Dr. P L Patel</b> Dr. V Jothiprakash (IIT Bombay)	31/07/2014	Ongoing
12	Resmi S. R.  Junior Research Fellow	Morphological study of Tapi river using Remote sensing Technique	<b>Dr. P L Patel</b> Dr. P V Timabadiya	17/07/2015	Ongoing
13	P. Laxmi Narayana	Experimental investigation of aggradations in mobile boundary channels	Dr. P V Timbadiya <b>Dr. P L Patel</b>	17/07/2015	Ongoing
14	Sangita Pawar	Reservoir operation study using Fuzzy Logic	Dr. P L Patel	17/07/2015	Ongoing

## 14. List of Completed/ Ongoing M.Tech Programmes

Sr. No. At Delhi	Name of Students College of Engineering (D	Title of Thesis OCE) – 1999-2006	M.Tech Supervisors	Year	Status
1	Megha Datta Ghosh	Transport of coarse sediments	Dr. P L Patel	1999-	Completed
_				2000	
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  Dr. P L Patel  sediments		2004-05	Completed
12	Suchitra Rani	Computer aided design of tunnel type silt ejector	Dr. P L Patel	2004-05	Completed
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 sedimenthed 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 SVNI	T Surat – 2007 onwards	•			•
17	Shailesh B. Patel	Entrainment characteristics of non-uniform unimodal and bimodal sediments	<b>Dr. P L Patel</b> Dr. A D Ghare	2007-08	Completed
18	Nishi Bhuvandas	Application of linear programming model in optimization of irrigation benefits of Ukai command area	<b>Dr. P L Patel</b> 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	2011-12	Completed

			Mrs. V V Bhosekar (CWPRS, Pune) Ms. Nishi Bhuvandas		
21	Mandeep Singh	Silt erosion in hydro turbines	Dr. J Banerjee (MED, SVNIT Surat)	2011-12	Completed
	(M.Tech Research)		Dr. P L Patel		
			Mr. Himanshu Tiwari (RES, MP)		
22	Anarghya Jain	Characterization of turbulence events and bed load transport of	Dr. P L Patel	2012-13	Completed
		sediment mixture			
23	Dhvani Patwa	Characterization of turbulence events and incipient motion of	Dr. P L Patel	2012-13	Completed
		sediment mixture			
24	Priyank Sharma	Stochastic dynamic programming model in development of	Dr. P L Patel	2013-14	Completed
		operation policy for a multipurpose reservoir	Dr. V Jothiprakash (IIT Bombay)		
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	Dr. P L Patel	2014-15	Completed
		of Surat city, India	Dr. P V Timbadiya		
27	Resmi S. R.	L-moment approach in regional flood frequency analysis of upper	Dr. P L Patel	2014-15	Completed
		Tapi basin, India			
28	Garima Nagpal	Regional frequency analysis of rainfall using L-moment approach	Dr. P L Patel	2014-15	Completed
		of lower Tapi basin, India			
29	P. Laxmi Narayana	Analytical and experimental investigation on bed level variation	Dr. P V Timbadiya	2014-15	Completed
		of alluvial channel due to overloading	Dr. P L Patel		
30	Chethan S. V.	2D Numerical modeling of river flood in coastal floodplain in	Dr. P L Patel	2015-16	Completed
		lower Tapi basin, India			
31	Lalit Pal	Hydrological modeling under impact of climate change in Upper	Dr. P L Patel	2015-16	Completed
		Tapi basin, India			
32	Akshay Rajak	Morphological study of middle Tapi river using remote sensing	Dr. P L Patel	2015-16	Completed
		and GIS techniques			
33	Chaitanya J C	Characterization of turbulence events, incipient motion condition	Dr. P L Patel	2016-17	Ongoing
		and bed load transport of sediment mixture			
34	Neha Manoj	Numerical hydraulic modeling for natural river	Dr. P L Patel	2016-17	Ongoing

## 15. List of B. Tech. Projects

Sr. No.	Name of Students	Title of Project	<b>Project Supervisors</b>	Academic year	Status
At D	elhi College of Enginee	ring (DCE) – 1999-2006			
1	Ashish Saxena	Silting problems in power channels	Dr. P L Patel	1999-2000	Completed
2	Sanjeev Kumar Rai Sunil Varshney Vikas Mittal Vipin Gupta	Computer aided design of sediment excluder	Dr. P L Patel	2000-2001	Completed
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
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,	Hydraulic design of hydroelectric power components	Dr. P L Patel	2004-2005	Completed

14	Surakshit Khullar Chetan Sharma, Ajay Varshney, Amandeep, Gopal Sharma, Prayeen 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
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 S	VNIT Surat – 2007 onwa	ards			
18	Praveen Arora Prashant Sagar Anand Sonekar	Sediment Transport Concepts in Design of Sediment Excluders	<b>Dr. P L Patel</b> Shri G D Kale	2007-08	Completed
19	Neha Agrawal Manish Singh Roshan Barla	Simulation of Unsteady Flow in Open Channel using HEC-RAS	<b>Dr. P L Patel</b> 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	<b>Dr. P L Patel</b> Shri P V Timbadiya	2009-10	Completed
21	Niket Shah Rishabh Shah Jaimin Trivedi Anjali Joseph	Application of HEC HMS and GIS Remote Sensing in Prediction of Runoff for Gopalkheda Catchment	<b>Dr. P L Patel</b> Dr. S M Yadav	2010-11	Completed

22	Aditya Arekar Anshuk Garg	Analysis of Water Distribution Network of SVNIT Campus	<b>Dr. P L Patel</b> 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	<b>Dr. P L Patel</b> Dr. P V Timbadiya	2012-13	Completed
24	Raj Sekhar Shriram Meena Dewashish Rai Akshay Jain Ankit Dhake	Analysis and Computation of Uniform Flow and Gradually Varied Flow	<b>Dr. P L Patel</b> Dr. P V Timbadiya	2013-14	Completed
25	Pallavi Sirohi Sunil Agarwal Bhavika Parmar Nausad Alam Gurmpreet Lalana Shailendra S ingh Dinesh Kumar	Design of Storm Water Network	<b>Dr. P L Patel</b> 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	Numerical modelling of open channel flow	Dr. P L Patel	2016-17	Ongoing

# 16. Conference/ Workshop/ Seminar/ Symposium/ STTPs organized

S NO	Name of Summer/ Winter Schools/ Training Programmes Course	Duration	Funding Agency	Venue
Short T	Term Training Programme (STTP)			
1	Design of Storm Water Network for Smart City: Theory and Practice - II (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	Dec.14-18, 2009	AICTE	Dept. of Civil Engg., SVNIT Surat
0	(Coordinator)	<b>D</b>	A V COTTY	5 46 45
8 Confor	Advances in water resources (Co-Coordinator) ences/Workshop/ Seminar Organized	Dec.22-26, 2008	AICTE	Dept. of Civil Engg., SVNIT Surat
1	National conference on "Water	Oct. 14-15, 2016	Centre of Excellence	Dept. of Civil Engg.,
1	Resources and Flood Management (WRFM) – 2016" with special reference to Flood modeling (Coordinator)	Oct. 14-13, 2010	(CoE), TEQIP-II	SVNIT Surat
2	Project Appraisal Monitoring Committee (PAMC) meet of Ministry of Earth Sciences (Coordinator)	July 15, 2014	Ministry of Earth Sciences (MoES)	Dept. of Civil Engg., SVNIT Surat
3	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)	Dept. of Civil Engg., SVNIT Surat
4	Workshop on "River Hydraulics and Management of Indian Rivers" (Coordinator)	March 22, 2014	Centre of Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
5	Workshop "Objective and Outcome Based Education" (Coordinator)	Dec. 21-22, 2013	TEQIP-II	Dept. of Civil Engg., SVNIT Surat
6	National Seminar on "Climate Change Impacts on Water Resources Systems" (Co-coordinator)	Nov. 27-29, 2013	Centre of Excellent (CoE), TEQIP-II	Dept. of Civil Engg., Parul Institute of Technology & Engg. Vadodara
7	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
8	National Conference on 'Hydraulics and	Dec.29-30, 2011	ISH, DST, CSIR,	Dept. of Civil Engg.,

	Water Resources', HYDRO-2011 (Coordinator)		DRDO,MNIT Jaipur, Narmada Water Resources Water Supply and Kalpsar Deptt.	SVNIT Surat
9	National Workshop on 'Flood forecasting and protection measures'-FFPM-2010 (Coordinator)	Aug.28, 2010	NCP (AICTE) Project	Dept. of Civil Engg., SVNIT Surat
10	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
11	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
12	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
13	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
14	Awareness Workshop on "Intelligent Transportation Systems" (Coordinator)	April, 05,2005	Delhi College of Engineering	Dept. of Civil Engg Delhi College of Engineering
15	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
Softwa	re Training Programme organized			
1	Bentley Water GEMS, Sewer GEMS, Storm CAD	June 16-19, 2014	Annual Plan 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 Plan Grant, SVNIT Surat	Dept. of Civil Engg., SVNIT Surat
Summe	er / Winter Schools			
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

1	Expert Lectures by Dr. Vishnu Prasad, Prof., NIT Bhopal, on 'Selection of Pumps: Performance and Tesing' (Coordinator)	August 24, 2016	Centre of Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
2	Expert Lectures by Dr. Vivekanand Singh, Prof., NIT Patna, on 'Numerical modeling for soil moisture prediction in the catchment' (Coordinator)	August 09, 2016	Centre of Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
3	Expert Lectures by Dr. S K Jain, Scientists G, NIH Roorkee, on 'Environmental flows' (Coordinator)	May 11, 2016	Centre of Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
4	Expert Lectures by Dr. M L Kansal, Prof., IIT Roorkee, on 'Issues on River Health Monitoring' (Coordinator)	March 21, 2016	Centre of Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
5	Expert Lectures by Dr. K G Ranga Raju, Emeritus Prof., IIT Roorkee, on 'Rivers and River Control structures' (Coordinator)	Jan. 06, 2016	Centre of Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
6	Expert Lectures by Dr. Rakesh Mishra, Professor, University of Huddersfield, UK on 'Industrial Applications of Computation Fluid Dynamics' (Coordinator)	Aug. 12, 2015	Centre of Excellent (CoE), TEQIP-II	Dept. of Mechanical Engg., SVNIT Surat
7	Expert Lectures 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 Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
8	Expert Lectures 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 Excellent (CoE), TEQIP-II	Dept. of Civil Engg., SVNIT Surat
9	Expert Lectures 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
10	Expert Lectures 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
11	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

#### 17. Membership of Technical Societies:

- (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)

18. Administrative responsibility undertaken			
Sr. No. SVNIT	Name of the Assignment Surat	Duration	Name of responsibility shared/ service offered
1	Dean Academics	Nov.27, 2015 to till date	<ul> <li>a) Smooth and efficient conduct of Academic Programs as per the Academic regulations approved by the Institute Senate.</li> <li>b) Conduct of Institute Academic Advisory Committee (IAAC), Senate meetings, and Convocations</li> <li>c) Conduct of Examinations and classes as per the Academic Calendar</li> <li>d) Accreditation of UG and PG Programs</li> </ul>
2	Head, Department of Civil Engineering	July 05, 2013 July 06, 2015	<ul> <li>e) Administrative Head of the department</li> <li>f) Smooth conduct of UG/ PG/ PhD courses in the Department</li> <li>g) Handling the admissions of PG/ PhD students at the Department level</li> <li>h) Taking care of laboratory and class infrastructure of the department</li> <li>i) Looking after administrative needs of faculty, staff and students</li> <li>j) All four eligible PG programmes got Tier I accreditation from National Board of Accreditation (NBA) New Delhi</li> <li>k) The SAR for Accreditation of UG program has been submitted to NBA for accreditation</li> <li>l) The concept of single subject with single teacher, where ever applicable, was introduced first time in the department for ensuring responsibility oriented teaching</li> <li>m) The data base of ongoing consultancy, has been developed first time in the department for better monitoring of the projects</li> <li>n) 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</li> </ul>
3	Dean (Research and Consultancy)	May 09, 2009- Oct. 16, 2010	<ul> <li>(a) Revised syllabi for different PG courses were put up to the Institute Senate through BPGS&amp;R</li> <li>(b) Administered smooth admission process of PG and PhD programmes</li> <li>(c) Meetings of BPGS&amp;R were initiated and conducted for discussing the policy matters amongst the members and putting the same to the</li> </ul>

Institute Senate.

MoUs were initiated for collaboration between the

4	Dean (PG)	July 16, 2007- May 09, 2009	SVNIT and Industries; and academic Institutions at National and International level  (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.
5	Director-in-charge SVNIT Surat Water Resources Lab In-charge (APPENDIX A)	Apr. 23, 2009- June, 17 2011 Aug. 27,2008- Sep. 21, 2011	<ul> <li>(c) Admission process of PG Admissions were conducted at the Institute level</li> <li>(d) Revised syllabi for different PG courses and put up to the Institute Senate through BPGS&amp;R</li> <li>(e) Routine administrative components of PG programmes</li> <li>The duty of Director-in-charge was assigned as and when regular Director was on official duties/leaves.</li> <li>(a) Strengthened existing experimental and Computational Hydraulics Laboratory in the Department by procuring the new experimental and computational equipments as well as facilities,</li> <li>(b) Desired facilities for Hydraulics experiments were planned during the construction of new Advanced Hydraulics Laboratory in the Department</li> <li>(c) A new Sediment transport flume was procured as part of DST Project in the Advanced Hydraulics</li> </ul>
7	Departmental Coordinator of UG (accreditation)	March 2013 onwards	laboratory of the department The team was formed; and SAR of UG accreditation is submitted to AICTE for accreditation
8	Member of Academic Performance Review Committee (APRC), SVNIT Surat	2007 to Oct. 2010; July 2013 onwards	For discussion of policies related to academic issues
9	Member of Institute Academic Advisory Committee (IAAC), SVNIT Surat	2007 onwards	For discussion of policies related to academic issues
10	Chairman, Institute Canteen Committee	July 2012 –	Advising the Institute authority for better
11	Canteen Committee	June 2013	- · · · · · · · · · · · · · · · · · · ·
11	Chairman, Scrutiny Committee for staff selection at the Institute level	•	management of the Institute canteen List of eligible Administrative officer/ Technical officer (Non-Technical posts) were handed over to the Institute administration. Selection process is over.
12	Chairman, Scrutiny Committee for staff selection at the Institute level Member of Central Counselling Board	June 2013	management of the Institute canteen List of eligible Administrative officer/ Technical officer (Non-Technical posts) were handed over to the
	Chairman, Scrutiny Committee for staff selection at the Institute level Member of Central Counselling Board CCB-2009 Member of Institute level scrutiny	June 2013 Apr. 2012	management of the Institute canteen List of eligible Administrative officer/ Technical officer (Non-Technical posts) were handed over to the Institute administration. Selection process is over.  Conducted admission process of B.Tech students in
12	Chairman, Scrutiny Committee for staff selection at the Institute level Member of Central Counselling Board CCB-2009 Member of Institute	June 2013 Apr. 2012 2009 April 2008-	management of the Institute canteen List of eligible Administrative officer/ Technical officer (Non-Technical posts) were handed over to the Institute administration. Selection process is over.  Conducted admission process of B.Tech students in the Institute through AIEEE-2009

	Disciplinary Committee	Jan 2010	disciplinary actions at the Institute level
16	Member Institute Purchase Committee	Jan 2008- Jan 2009	Advising the Institute administration in purchases at the Institute level

## Delhi College of Engineering (DCE)

17	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.
18	Officer-in-charge, Examination Cell	2001-2007	For conducting examination working smoothly at Institute level
19	Coordinator, Water Resources Engineering Section	June 01, 2004- 2007	For coordinating and enhancing water resources section at department level
20	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
21	Warden Bhaskaracharya Hostel, vide Admn. letter no. HOO/02/2003/718-	May 1, 2003 – Apr. 1, 2004	For conducting smooth working at Hostel
22	Dy. Proctor	July 29, 2005	At Institute level
23	Coordinator for Award of PhD. scholarship	Academic Year 2000-2004	At Institute level