

BIO DATA



Name :- Dr. Harit K. Raval

Address :- S.V. National Institute of Technology (Institute of National Importance)

Ichchhanath, SURAT- 395 007, Gujarat, India

Ph. No.:91-261-2201571 (O)

Position :- Dean (R&C)

Professor (Former HOD)

Date of Joining Institute : 22/03/1988

Date of Joining Present Position: 06/09/2003

Date of Birth : 18/10/1965

Date / year of Ph.D. degree: 06/09/2003

Qualification:

Degree	University	Year	Specialization
B.E. (Mechanical)	S.G.University, Surat	1987	Mechanical
M.E. (Mechanical)	S.G.University, Surat	1990	Mechanical
Ph.D. (Mechanical)	S.G.University, Surat	2003	Mechanical

Experience :

University / College	Designation	Period
S.V.R. college of engineering, Surat	Adhoc Lecturer	22/03/1988 to 15/08/1990
S.G.U., Surat / S.V.R. college of engineering, Surat	Lecturer	16/08/1990 to 03/07/1994
S.G.U., Surat / S.V.R. college of engineering, Surat	Asst. Professor	04/07/1997 to 05/09/2003
Deemed / S. V. National Institute of Technology, Surat	Professor	06/09/2003 to till date

Research Publication : (Refer Annexure I for details)

(No. of Research Publication Since Joining – Please attach list of Publications)

Publication	Numbers
National Conference	38
National Journal	09
International Conference	70
International Journal	34

No. of M. Tech. / Ph.D. guided with details (Please attach list of Dissertation/ Thesis) :

M.Tech. : 57 (Completed) + 07 (Ongoing)

Ph.D. : 05 (Completed) + 08 (Ongoing)

(Refer Annexure II, III for details)

No. of Patent obtained (with details):

No. of Patent applied (with details): 03 (Refer Annexure IV for details)

No. of R&D Project (Funded by various agencies) : 09 (Completed) + 01 (Ongoing) + 01 (Sanctioned) + 01 (Approval not yet received) = 11 (Refer Annexure V for details)

**No. Conference /Short term Course / Workshop / Training Programme / Seminar Organized :
(Refer Annexure VI for details)**

Programme	Number	Programme	Number	Programme	Number
International Conference	**	Short Term Course	20	Training Programme	09
National Conference	05	Workshop	06	Seminar	03

No. of Expert Lecture Delivered (Please attach list with details) : 56

No. of Expert Lecture Organized (Please attach list with details) : >20

(Refer Annexure VII for details)

Consultancy & Testing : (Refer Annexure VIII for details)

(a) Consultancy : 06 (Academic) + 02 (Industrial) = 08

(b) Testing : 01

Interaction with outside World: (Not limited to following) (attach list with following category)

Like : (Refer Annexure IX, X for details)

- (a) Experiments and Computational Projects Added to Teaching Laboratory
- (b) Contribution to institute management through personal initiative in responsible positions
- (c) Administrative responsibility/experience
- (d) Reviewer (Research Projects, Ph.D. Thesis, Journal, Book)
- (e) Member of Board of Studies / Academic body of other institute
- (f) Expert Lecture
- (g) Thesis evaluation / Examination conduct
- (h) Collaborative R&D Projects
- (i) Consultancy & Testing work
- (j) Collaborative Conference / Workshop /Seminar organized
- (k) Visiting faculty to other institute
- (l) Co-guidance Project / Dissertation / Thesis
- (m) Visit to foreign country to participant in International Conference, foreign deputation, Post Doct, etc.

SIGNATURE

Enclosed list (All details provide in Tabular form)

1. List of Research Publications (ANNEXURE I)
2. Details of Ph.D. students and details of M.Tech. Students (ANNEXURE II & III)
3. Detail of Patent Applied (ANNEXURE IV)
4. Details of R&D projects handled completed & ongoing including lab developed/ongoing and other details (ANNEXURE V)

5. Details of Conferences/Seminar/Short Term Course/Training Program organized (ANNEXURE VI)
6. Details of Expert Lecture Delivered/Organized (ANNEXURE VII)
7. Details of Consultancy and other revenue generation as being added to as contribution to the institute development (Annexure VIII)
8. Details of Interaction with Outside World (ANNEXURE IX & X)

ANNEXURE-I

List of Research Publication (Since Joining)

Sr. No.	Title of Paper/Report/Book	Author(s)	Name & Vol. of Journal & Year	Page No.		Citation	Present Impact Factor
				From	To		
INTERNATIONAL JOURNALS							
1	Prediction of Punch Reversal Position under V-Plate Bending using Real Material (Power- Law) Behavior	S. J. Thanki Raval H. K. Dave A. K.	Journal of Materials Processing Technology, 114 (2001)	227	232	04	-
2	Bendability Analysis for bending of C-Mn Steel on Heavy Duty 3-Roller Bending Machine	H. V. Gajjar A. H. Gandhi T. A. Jafri H. K. Raval	International Journal of Mechanical System Science and Engineering Vol.1, No 2	111	116	-	1.755
3	Finite Element Analysis of Sheet Metal Air-Bending using Hyperform LS-DYAN	Himanshu V. Gajjar Anish H. Gandhi Harit K. Raval	International Journal of Mechanical System Science and Engineering Vol.1, No 2	117	122	04	1.755
4	Analytical and Empirical Modeling of top roller position for 3-roller cylindrical bending of plates and its experimental verification	A. H. Gandhi H. K. Raval	Journal of Materials Processing Technology, Ms. Ref. No.: PROTEC-D-07-00140. 197 (2008)	268	278	30	1.953
5	An Analytical Model to Predict Elongation of Tailor Welded Blanks [TWB]	Patel. V. K. Raval H. K.	Journal: Lecture Notes in Engineering and Computer Science, Vol: 2173, Issue: 1, (2008)	814	819	-	2014 (Evaluation Pending)
6	Simulation of three-roller bending process using ANN: A parametric study	Anish H. Gandhi P. P. Gohil Harit K. Raval	Int. Journal of Manufacturing Research, Vol.4 No.3, (2009)	265	280	03	-
7	Formulation of springback and machine setting parameters for multi-pass three-roller cone frustum bending with change of flexural modulus	Anish H. Gandhi A. A. Shaikh Harit K. Raval	International Journal of Material Forming, Vol.2, No.1, March (2009)	45	57	10	0.509 (2012)
8	Effect of Sheet Thickness on FLD for AISI-1008 (HR Grade)	Patel Ramsing R. H. K. Raval	International Journal of Applied Engineering Research. Vol4, No.11(2009)	2377	2386	-	-
9	Some Preliminary Metallurgical Studies on Grain Size and Density of Work Material used in Micro Turning Operation	A. S. Patil, H. K. Dave B. Balasubramaniam K. P. Desai	Journal of Minerals & Materials Characterization & Engineering, USA, Vol.9, No.9, (2010)	845	853	01	-

		H. K. Raval					
10	Springback Simulations of Monolithic and Layered Steels Used for Pressure Equipment	Anish H. Gandhi Harit K. Raval	Journal of World Academy of Science, Engineering and Technology, Vol.70, (2010)	694	700	-	-
11	Modeling of Cutting Forces as a Function of Cutting Parameters in Milling Process using Regression Analysis and Artificial Neural Network	Harshit K. Dave Harit K. Raval	Special issue on "Artificial Intelligence Applied in Machining" of the International Journal of Machining and Machinability of Materials, Volume 8, Numbers 1-2, 5 August (2010)	198	208	01	-
12	Effect of Powder Mixed Dielectric Fluid on Surface Modification during Electrical Discharge Machining (EDM): A Review	Anand K. Patel H. K. Raval H. R. Prajapati	International Journal of Mechanical Engineering Research (IJMER) Volume 1, Number 1, (2011)	149	158	-	5.7731
13	Thinning Analysis for Hot Forming of Single-Piece Hemispherical Dish End Using Finite Element Simulation and its Empirical Modeling	H. K. Raval A. H. Gandhi M. M. Makwana H. K. Dave Y. K. Srivastav	International Journal of Material Forming available online DOI 10.1007/s12289-011-1078-z	115	124	-	0.509 (2012)
14	A Taguchi approach based study on effect of process parameters in Electro Discharge Machining using Orbital Tool Movement	Harshit K. Dave Keyur P. Desai Harit K. Raval	International Journal of Machining and Machinability of Materials (IJMMM) (Ref. No.# IJMMM-29768), Vol. 2, issue1	12	20	03	-
15	Modeling and Analysis of Material Removal Rate during Electro Discharge Machining of Inconel 718 under orbital tool movement	Harshit K. Dave Keyur P. Desai Harit K. Raval	International Journal of Manufacturing Systems	12	20	-	1.070
16	Development of Semi empirical model for predicting Material Removal Rate during orbital electro discharge machining of Inconel 718	Harshit K. Dave Keyur P. Desai Harit K. Raval	Special Issue on "Machining of Aerospace Materials", International Journal of Machining and Machinability of Materials (IJMMM)	215	230	-	-
17	An Approximate Bending force prediction for 3-roller conical bending process	Mahesh K. Chudasama Harit K. Raval	International Journal of Material Forming	303	314	03	0.509 (2012)
18	Analytical model for prediction of force during 3-roller multipass conical	Chudasama M. K., Raval H. K.	International Journal of Mechanical Engineering & Robotics				

	bending and its experimental verification,		Research, Vol. 1, No.3, 2012, pp. 91-105				
19	Optimization of multiple response characteristics in orbital electro discharge machining of inconel 718 using taguchi's loss function	Harshit K. Dave Keyur P. Desai Harit K. Raval	International Journal of Manufacturing Technology and Management, manuscript no. IJMTM - 32018	78	94	-	-
20	Experimental investigations on orbital electro discharge machining of inconel 718 using taguchi technique	Harshit K. Dave Keyur P. Desai Harit K. Raval	International Journal of Modern Manufacturing Technology	53	58	-	-
21	Effect of machining conditions on MRR and surface roughness during CNC Turning of different Materials Using TiN Coated Cutting Tools – A Taguchi approach	H. K. Dave L. S. Patel H. K. Raval	International Journal of Industrial Engineering Computations	925	930	08	-
22	Studies on quality of microholes generated on Al 1100 using micro-electro-discharge machining process	H. K. Dave V. J. Mathai K. P. Desai H. K. Raval	International Journal of Advanced Manufacturing Technology available online DOI 10.1007/s00170-013-5542-4	01	14	-	1.205
23	Bending force prediction for dynamic roll-bending during 3-rollerconical bending process	M K Chudasama H K Raval	Journal of Manufacturing Processes (Accepted on 25-09-2013, Article in press)			-	1.072
24	Development of analytical model of bending force during 3-roller conical bending process and its experimental verification	M K Chudasama H K Raval	International Journal of Mechanical, Industrial Science and Engineering Technology, Vol 7, No 11, pp. 1192-1200.				
25	An analytical model for bending and springback of bimetallic sheet	Kagzi Shakil A, A H Gandhi, H K Dave, H K Raval	Mechanics of Advanced Materials and Structures (2012), DOI: 10.1080/15376494.2014.933990				
26	Development of Analytical Model for Dynamic Bending Force During Single Pass 3-Roller Cone Frustum Bending Technique	M K Chudasama H K Raval	Universal Journal of Mechanical Engineering Vol. 2, No. 4, 2014, pp. 148-154				
27	Comparison of Analytical Models of Force Prediction	M K Chudasama H K Raval	Advanced Materials Research Vol. 1016				

	during Dynamic Bending Stage for 3-Roller Conical Bending Process		(2014) pp 150-155				
28	An analytical model for bending and springback of bimetallic sheet	Shakil Kagzi, A H Gandhi, H K Dave, H KRaval	Mechanics of Advanced Materials and Structures, DOI: 10.1080/15376494.2014.933990 (In press), 2014				
29	Study of Earing Defect during Deep Drawing Process with Finite Element Simulation	Ravi Patel, H K Dave, H K Raval	Key Engineering Materials, Transtech, vol. 639, pp. 91-98, 2015.				
30	Comparative Study of Forward and Backward Flow Forming Process using Finite Element Analysis	R J Bhatt, H K Raval	International Journal of Industrial Engineering and Management Science, Vol. 5, No. 2, 2015	46	50		
31	Finite Element Analysis of Roller of Flow Forming Process	R J Bhatt, H K Raval	International Journal of Advances in Engineering and Emerging Technology Vol. 7, (7), 2015	510	516		
32	An Investigation of Forces during Flow Forming Process	Ravi J Bhatt, Harit K Raval	International Journal of Modern Manufacturing Technologies, Vol. 8 (1), 2016	12	17		
33	“Optimization of Process Parameters during Flow Forming Process and its Verification”,	Ravi J Bhatt, Harit K Raval,	Mechanics, MT-15138 (under review)				
34	Optimization of cutting rate and taper in bandsawing process using Taguchi and Desirability approach	Bhavesh mevada H K raval	International Journal of Modern Manufacturing and Technology, Romania IJMMT Vol. VIII 2/2016. Dec.20,2016	31	41		

NATIONAL JOURNALS

1	Studies on Springback Characteristics of Metal-Polymer-Metal Laminate Using Stastical Design of Experiments	Chinmay K. Desai A. A. Shaikh H. K. Raval	Journal of Manufacturing Engineering, Vol.4, Issue 3, (2009)	197	202		
2	Optimization of Milling Operation using Combined Grey Taguchi relational method and ANOVA	H. K. Dave K. P. Desai H. K. Raval	International Journal of Manufacturing Engineering (SME-India) Vol5, Issue:3, (2010)	190	196		
3	Study of Surface Integrity of a Surface Machined by	Dave H. K. Desai K. P.	Journal of Manufacturing	36	40		

	Electro Discharge Machining	Raval H. K.	Engineering, 2011. Vol.6, Issue. 1, (2011)				
4	Experimental Analysis of Forming Limit Diagram of AISI 1008 Steel	Ram Singh Patel Raval H. K.	Journal of Manufacturing Engineering, Vol.6, Issue 1, (2011)	61	68		
5	Decision Support System for Cost Estimation of Production of Pulley used in Automobile Cooling Applications	M. K. Chudasama Dr. H. K. Raval	Indian Journal of Manufacturing Engineering				
6	Stress analysis of frame structure of three roller bending machine using ANSYS	Kagzi Shakil A, A H Gandhi, H K Raval	Journal of manufacturing Engineering, 2012, 7-3,	277	283		
7	CNC milling of planar curves using macro Programming	Vatraj K Joshi, H K Raval, K P Desai	Journal of Manufacturing Engineering, March 2016, Vol. 11, Issue. 1, 2016	013	019		
8	“Study on Effect of Tooling Angles during Flow Forming Process”,	Ravi J Bhatt, Harit K Raval,	Journal of Manufacturing Engineering, Vol. 11, (3), 2016	166	170		
9	Investigating the effect of top arm angle on material removal rate and cut quality (Taper) in bandsaw cutting operation	Bhavesh mevada H K Raval	Journal of Manufacturing Engineering Vol. 11, Issue-4, Dec 2016	184	192		

INTERNATIONAL CONFERENCES

1	Computer Aided Sheet Metal Strip Layout	Raval H. K. Desai K. P. Dave A. K.	Proc. of the Int. Conf. on CAD, CAM Robotics and Autonomous Factories, I.I.T. Delhi Dec-16-19, (1993)				
2	Computer Aided Optimization of Deep Drawing using Shape Analysis	Raval H. K. Dave A. K.	Proc. of the Int. Conf. on CAD, CAM Robotics and Autonomous Factories, I.I.T. Delhi Dec-16-19, (1993)				
3	Computer Aided Design and Drafting of CAM for Single Spindle Automat	Raval H. K. H. J. Nagarsheth	Proc. of the Int. Conf. on CAD, CAM Robotics and Autonomous Factories, I.I.T. Delhi Dec-16-19, (1993)				
4	Computer Aided Design of Press Tools for Sheet Metal Blanking	Desai K. P. Raval H. K. Dave A. K	Proc. of the Int. Conf. on Stochastic Models, Optimization Techniques and Computer Application (ICSOC-94), P.S.G. College of Technology, Coimbtore, Dec (1994)				
5	Deep Cup Drawing Process Prediction using Shape Analysis: The Computer Aided Optimization	Raval H. K. Dave A. K.	Proc. of the Int. Conf. on Automation, Indore Dec-12-14, (1995)				

6	Simulation of Pyramid Type Three Roller Plate Bending Process	Raval H. K. Lalwani D. I. Dave A. K.	Proc. of the Int. Conf. on CAD, CAM Automation Robotics and Factories, I.I.T, Delhi. Dec-17-20, (1996)		
7	Development of Three Variable Co-relation of Metal Removal Rate (MRR) and Surface Finish (Rt and Ra) in EDM Process	Lad S. D. Desai K. P. Raval H. K.	Proc. of the Int. Conf. on Advance in Mechanical and Industrial Engineering, University of Roorkee Feb-6-8, (1997)		
8	Simulation of Press Bending Using Real Time Material Characteristics	Lalwani D. I. Raval H. K. Dave A. K.	14th CAR & FOF, 14th Int. Conf. on CAD, CAM Robotics and Factories of the Future, P.S.G. College of Technology, Coimbtore Dec-1-34, (1998) (Presented by Co-author Dave A. K.)		
9	Simulation and Experimental Verification of Three Roller Bending Process	Lalwani D. I. Raval H. K. Dave A. K.	Int. Conf. on Intelligent Flexible Autonomous Manufacturing System (IFAMS-2000), Coimbtore, Jan-10-12, (2000)		
10	Prediction of Gap Formation under V-Bending using Real Material Behavior (Power-Law)	Lalwani D. I. Raval H. K. Dave A. K.	5th Int. Conf. on Engg. Design and Automation, Las Vegas, USA, Aug-5-8, (2001)		
11	Prediction of Spring back in Air Vee Bending using A.N.N. for Real Material Behavior (Power –Law)	Dhaval Bhatt, Chinmay Desai Harit K. Raval Dr. A .K. Dave	6th Int. Conf. on Engg. Design and Automation. HAWAI, USA, Aug-4-7 (2002)		
12	Prediction of top roller position in three roller bending using ANN fro real material behavior (Power-Law)	Anish Gandhi Chinmay Desai H. K. Raval Dr. A. K. Dave	2nd Int. Conf. on Advance Material Processing, Singapore, Dec. 2-4, (2002)		
13	Simulation of Multiple Pass Bending using Change of Modulus of Elasticity	Gandhi A. Raval H. Dave A.	Int. Symp. on Advance Materials and Processing, (ISAMAP-2K4), Material Science Centre, Indian Institute of Technology, Kharagpur 721302, 6th to 8th Dec, (2004)		
14	Investigation on Multiple Pass Bending - Simulation Study	A. H. Gandhi G. J. Solanki H. K Raval	Int. Conf. on Recent Advances in Mechanical & Material Engineering,(ICRAMME05), Kuala Lumpur, Malaysia, 30-31 May, (2005)		
15	Stress-strain Curve for Multiple Pass Loading of Ductile Material	A. H. Gandhi H. K. Raval	Int. Conf. on Recent Advances in Mechanical & Material Engineering,(ICRAMME05), Kuala Lumpur, Malaysia, 30-31 May, (2005)		
16	The Effect of Various Parameters on Spring back and Energy in Multiple Pass (Air Vee) Bending- Part 1	Solanki G. J. Gandhi A. H. Raval H. K.	Proc. Of 3rd Int. Conf. on Manuf. Research (ICMR2005), Cranfield University, Sept 6-8, (2005) (Presented)		
17	The Effect of Various Parameters on Spring back	Solanki G. J. Gandhi A. H.	Proc. of 3rd Int. Conf. on Manuf. Research (ICMR2005), Cranfield		

	and Energy in Multiple Pass (Air Vee) Bending- Part 2	Raval H. K.	University, Sept 6-8, (2005) (Presented)		
18	Analytical Modeling of Top Roller Position for Multiple Pass Cylindrical Forming of Plates	A. H. Gandhi Dr. H. K. Raval	ASME Int. Mechanical Engg. Congress and Exposition, IMECE2006, Paper no IMECE 14279, Nov. (2006)		
19	Finite Element Analysis of Sheet Metal Air-Bending Using Hyoerform LS-DYNA	Himanshu V. Gajjar Anish H. Gandhi Harit K. Raval	Proceeding of World Academy of Science Engineering and Technology (WASET) Volume 26, Dec, 2007 (International Conference on Computer Electrical and Systems Science and Engineering, CESSE 2007), Bangkok, Thailand,14-16, Dec, (2007)		
20	Bendability Analysis for Bending of C-Mn Steel Plates on Heavy Duty 3-Roller Bending Machine.	Himanshu V. Gajjar Anish H. Gandhi Tanvir A. Jafri Harit K. Raval	Proceeding of World Academy of Science Engineering and Technology (WASET) Volume 26, Dec, 2007 (International Conference on Computer Electrical and Systems Science and Engineering, CESSE 2007), Bangkok, Thailand, 14-16, Dec, (2007)		
21	Investigations on Predication of MRR and Surface Roughness on Electro Discharge Machine Using Regression Analysis and Artificial Neural Network Programming	Harshit K. Dave Keyur P. Desai Harit K. Raval	Proceeding of International Conference on Modeling Simulation and Control, 2008 (as part of World Congress on Engineering & computer Science 2008) San Franisco, USA, 22-24, Oct, (2008) (Presented)		
22	Mathematical Modelling and Finite Element Simulation of Pre-Bending Stage of Three-Roller Plate Bending Process	A. H. Gandhi H. V. Gajjar H. K. Raval	Proceeding of International Manufacturing Science & Engineering Conference (MSEC), 2008, Evanston, IL, USA, 7-10, Oct, (2008) (Presented)		
23	Finite Element Analysis of Deformed Geometry in Three Roller Plate Bending Process	Vishal K Tailor A. H. Gandhi R. D. Moliya Harit K. Raval	Proceeding of International Manufacturing Science & Engineering Conference (MSEC), 2008, Evanston, IL, USA, 7-10, Oct, (2008) (Presented)	07	
24	Visual Simulation Of Aristo Robot With Workspace Analysis	Upendra K. Parghi H. K. Raval	Proceeding of International Manufacturing Science & Engineering Conference (MSEC), 2008, Evanston, IL, USA, 7-10, Oct, (2008) (Presented)		
25	An Analytical Model to Predict Elongation of Tailor Welded Blanks [TWB]	Patel. V. K. Raval H. K.	Proceeding of International Conference on Machine Learning and Data Analysis 2008 at World Congress on Engineering & computer Science 2008) pp. 814-819, San Franisco, USA, 22-24, Oct, (2008) (Presented)		
26	Investigations on	Harshit K. Dave	International Conference on		

	Improvement of Output Quality characteristics in Electro Discharge Machining Process through the Optimization of Process Parameters using Taguchi Method	Keyur P. Desai Harit K. Raval	Advances in Mechanical Engineering, (ICAME-2008), SVNIT, Surat, India, 15-17, Dec. (2008)		
27	Investigation of Effect of Nozzle Inclination Angle on Limit Pressure of Nozzle to Shell Joint	Parag D. Mahajan K. N. Srinivasan H. K. Raval S. A. Channiwala	International Conference on Fascinating Advancement in Mechanical Engineering, Shivakasi, Dec 11-13, (2008)		
28	Deep Forming Simulation for Double Groove Pulley of Automotive application	M. K. Chudasama H. K. Raval	International Conference on Advanced Manufacturing and Automation INCAMA2009, Kalasalingam University, Tamilnadu, India, 26-28, March, (2009)		
29	Force Analysis of Forming Single Groove Pulley Used In Automobile Cooling Application	M. K. Chudasama H. K. Raval	International Conference on Mechanical, Aeronautical and Manufacturing Engineering , ICMAME : 2010 organized by World Academy of Science, Engineering and Technology, at Paris, France, 28-30, July, (2010)		
30	Springback Simulations of Monolithic and Layered Steels Used for Pressure Equipment	Anish H Gandhi Shakil Kagzi Harit K Raval	International Conference on Mechanical, Aeronautical and Manufacturing Engineering , ICMAME : 2010 organized by World Academy of Science, Engineering and Technology, at Singapore, 25-27, Aug., (2010)		
31	Design And Analysis of Flexural Based Micro Gripper	Y. M. Nikam Harshit Dave R. Balasubramaniam K. P. Desai H. K. Raval	3rd International And 24th AIMTDR Conference Programme December 13-15, (2010)		
32	Investigation on the effect of Machining Parameters on MRR and Taper Angle in Electro Chemical Machining	Harshit K. Dave Dipesh Chaudhari Keyur P. Desai Harit K. Raval	Proceeding of AES-ATEMA'2011 Ninth International Conference (Advances and Trends in Engineering Materials and their Applications, Montreal, CANADA: August 01 - 05, (2011) (Presented)		
33	Effect of Orbital Tool Movement on Material Removal Rate during Electro Discharge Machining	Harshit K. Dave Keyur P. Desai Harit K. Raval	Proceeding of AES-ATEMA'2011 Ninth International Conference (Advances and Trends in Engineering Materials and their Applications, Montreal, CANADA: August 01 - 05, (2011) (Presented)	01	

34	Parametric Optimization of Cutting Forces during CNC End Milling of Incoloy 825 Using RSM	Harshit K. Dave Bhargav B. Patel Keyur P. Desai Harit K. Raval	Proceeding of AES-ATEMA'2011 Ninth International Conference (Advances and Trends in Engineering Materials and their Applications, Montreal, CANADA: August 01 - 05, (2011) (Presented)		
35	Effect of Seam Welding on Forming Limits of IF-Steel Sheet	D. Sutariya H. Raval K. Kalaivani K. Hariharan A. Prabhu K. Narasimhan	Numisheet, (2011) (Paper submitted for consideration for presentation and publication)		
36	Analysis of micro holes generated during micro electro discharge machining of all 100 using tungsten electrode	Dave H. K., Mathai V. J., Raval H. K.	Proceedings of 4th International and 25th AIMTDR, Kolkata, Dec. 14-16, 2012, pp. 1073-1078.		
37	Electro discharge drilling through holes under different flushing conditions	Dave H. K., Sudhanshu Kumar, Raval H. K.	Proceedings of 4th International and 25th AIMTDR, Kolkata, Dec. 14-16, 2012, pp. 417-422.		
38	Application of ANN for predicting multiple responses during EDM process	Dave H. K., Sudhanshu K., Mathai V. J., Desai K. P., Raval H. K.	Proceedings of 3rd International Conference on Production & Industrial Engineering, NIT Jalandhar, March 29-31, 2013, pp. 104-109.		
39	Study on micro hole accuracy and electrode depletion during micro EDM process through Grey based Taguchi approach	Dave H. K., Mathai V. J., Sudhanshu K., Desai K. P., Raval H. K.	Proceedings of 3rd International Conference on Production & Industrial Engineering, NIT Jalandhar, March 29-31, 2013, pp. 999-1003.		
40	Technological Development of DLRP process: A Review	Bhavin Desai Harit Raval Keyur Desai	Proceedings of 3rd International Conference on Production & Industrial Engineering, NIT Jalandhar, March 29-31, 2013, pp. 333-340.		
41	Thinning Analysis for Cold Forming of Hemispherical Crown and Petal Dish End of Various Ferrous Materials Grade as per ASME	Raval H. K., Gandhi A. H., Kagzi S. A., Srivastav Y. K.	International conference and exhibition on pressure vessel and piping (2013), C-062.		
42	Thickness change in bimetallic material in V-bending Process	Kagzi Shakil , Raval Harit	International conference and exhibition on pressure vessel and piping (2013), C-071.		
43	Experimental Investigation on Surface Quality of Sheet Metal Component Formed by DLRP Process	B. V. Desai K. P. Desai H. K. Raval	2nd International Conference on Industrial Engineering (ICIE 2013), SVNIT, Surat, November 20-22, 2013, pp. 1011-1017		
44	A study on the effects of machining parameters on surface roughness of a micro milled 3D cavity	Mathai V. J., Patel P. K., Dave H. K., Raval H. K.,	Proceedings of Eighth International Conference on Precision, Meso, Micro & Nano Engineering (COPEN-8: 2013), NIT Calicut,		

		Desai K. P.	Kerala, December 13-15, 2013, pp. 96 - 101		
45	Study of the effect of cryogenic treatment of tool electrodes during electro discharge machining	Mathai V. J., Vaghela R. V., Dave H. K., Raval H. K., Desai K. P.	Proceedings of Eighth International Conference on Precision, Meso, Micro & Nano Engineering (COPEN-8: 2013), NIT Calicut, Kerala, December 13-15, 2013, pp. 680 - 684		
46	Die-Less Rapid Prototyping Process : Parametric Investigations	Bhavin V. Desai Keyur P. Desai Harit K. Raval	3rd International Conference on Materials Processing and Characterisation (ICMPC 2014)		
47	Relating Product Manufacturing decisions To Environmental And Cost Performance Using CAPP	Promod Chougale, H K Raval	3rd International Conference on Materials Processing and Characterisation (ICMPC 2014), 8-9 March 2014, GRIET Hyderabad		
48	Performance Evaluation of Orbital EDM along Helical Path over Cavity Sinking EDM of Inconel 718	H K Dave, K P Desai, H K Raval, K P Rajurkar	Proceedings of 42ND North American Manufacturing Research Conference, June 9 – 13, 2014, Detroit, Michigan, 2014 (accepted for publication: Manuscript no. NAMRC42 - 4417)		
49	Some aspects of Sensor application for monitoring manufacturing processes	Rakesh Barot, H K Raval, K P Desai	7th International Conference on Advance computing and communication Technologies (ICACCTTM—2013), 16 Nov 2013, Pg 33- 37, at Asia Pacific Institute of Information and Technology SD India, (APIIT), Panipat, Haryana.		
50	Some aspects of process monitoring in manufacturing using acoustic emission	Rakesh Barot, H K Raval, K P Desai	7th International Conference on Advance computing and communication Technologies (ICACCTTM—2013), 16 Nov 2013, Pg 38- 42, at Asia Pacific Institute of Information and Technology SD India, (APIIT), Panipat, Haryana, India		
51	Springback study of bimetallic material during bending	Kagzi Shakil A, A H Gandhi, H K Dave, H K Raval	Proceedings of North American Manufacturing and Research Conference (2014), 42, 4443		
52	Factors Affecting Weld Line Movement in Tailor Welded Blank	Kagzi Shakil A, Sanjay Patil, H K Raval	World Academy of Science, Engineering and Technology, International Journal of Mechanical, Aerospace, Industrial and Mechatronics Engineering (2014), 8-6, 1131-1134		
53	Studies on Tool Wear Characteristics in Micro Electro Discharge Slotting Process (μ -EDS)	H K Dave, V J Mathai, M K Mayank, H K Raval, K P Desai	Proceedings of 5th International and 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014), Indian Institute of Technology, Guwahati, India, pp. 295-1 – 295-7, 2014.		

54	Electro Discharge Machining of AISI 304 using Solid and Bundled Electrodes	H K Dave, S Kumar, N C Rana, H K Raval	Proceedings of 5th International and 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014), Indian Institute of Technology, Guwahati, India, pp. 296-1 – 296-7, 2014.		
55	Factors Affecting Weld Line Movement in Tailor Welded Blank	Shakil Kagzi, Sanjay Patil, H K Raval	World Academy of Science, Engineering and Technology, International Journal of Mechanical, Aerospace, Industrial and Mechatronics Engineering, 8-6, pp. 1131-1134, 2014		
56	Process Variables of Tube Flow Forming- A Review	R J Bhatt, H K Raval	Proceedings of International Conference on Advances in Materials and Product Design (AMPD-2015), SVNIT, Surat, 2015		
57	Analysis of Three Roller Backward Flow Forming Process: A Simulation Approach	R J Bhatt, H K Raval	Proceedings of International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-2015), IIT Bombay, 2015		
58	A Simulation Study of Flow Forming Process for Two Different Strategies: Forward and Backward	R J Bhatt, H K Raval	Proceedings of International Conference on Advances in Materials, Manufacturing and Applications (AMMA-2015), NIT Trichy, 2015		
59	Numerical Investigation on Effect of Leading (Attack) Angle during Single Roller Backward Flow Forming Process for AA6063	Ravi Bhatt, Harit Raval	Proceedings of International Conference on Computing in Mechanical Engineering (ICCME-2015), SCMS, Kochi, 2015		
60	Finite element analysis of the effect of geometric and material parameters on tube hydro-forming	Dhrumit Gajjar, Harit K Raval	Proceedings of International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-2015), IIT Bombay, 2015		
61	An investigation of cone angle during roller forming process	Shakil Kagzi, Harit K Raval	Proceedings of International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-2015), IIT Bombay, 2015		
62	Investigation on Acoustic Monitoring and Parametric Optimization of EDM of INCOLOY 800 using Grey Relation Analysis	R S Barot, K P Desai, H K Raval	Proceedings of International Conference on Advances in Materials and processing Technologies (AMPT 2014) conference, 16-20 November 2014, Atlantis, The Palm, Dubai, UAE		
63	A review on cutting forces in hard turning of AISI 4340 while Turning	Prashant P Powar, H K Raval	Proceedings of International Conference on Production and Industrial Engineering (CPIE 2013), March 29-31, 2013, NIT, Jalandhar, Punjab, India, pp 50-55, (ISBN-978-81-920453-1-3)		
64	“Investigation of Effect of Material Properties on Forces	Ravi J Bhatt, Harit K Raval	11th International Symposium on Plasticity and Impact Mechanics, IIT		

	during Flow Forming Process”		Delhi, 2016		
65	“Investigation on Effect of Operating and Tooling Variables during Flow Forming Process”	Ravi J Bhatt, Harit K Raval	Proceedings of 6th International & 27th All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016), COE Pune, (ISBN: 978-93-86256-27-0)	906	910
66	“Investigation on Effect of Design Parameters during Reverse Flow Forming Process”	Ravi J Bhatt, Harit K Raval	SMF-2016 (Sheet Metal Forming Research Association), IIT Bombay, 2016		
67	“FE Analysis of 3-roller Forward Flow Forming process for 45CrNiMoV”	Ravi J Bhatt, Harit K Raval	XII IPRoMM National Workshop on Industrial Problems on Machines & Mechanisms “Challenges in Manufacturing”, NIT Nagpur, 2016		
68	“Prediction of Failure during Flow Forming Process”	Ravi J Bhatt, Harit K Raval,	IVth International Conference on Production & Industrial Engineering (CPIE-2016), NIT Jalandhar, 2016		
69	“Review of sensor application for monitoring precision manufacturing processes”	R S Barot, K P Desai, H K Raval,	(Abstract published) 4th International & 25th AIMTDR (All India Manufacturing technology, Design and Research) Conference–2012, Jadvpur University, Kolkata, page 76, December 14 - 16, 2012	76	
70	An application of Slip line Method to Predict Cutting Force Generated in Machining Process – A Review	Bhavesh mevada and H K raval	2nd International Conference on Industrial Engineering ICIE 2013.954-959 20-22 Nov.2013,SVNIT, Surat		

NATIONAL CONFERENCES

1	Computer Aided Selection of Hammer Size in Forging	H. K. Raval D. B. Naik Dr. A. K. Dave	Proc. of 7 th ISME Conf. on Mechanical Engg., IIT Delhi, Feb. (1990)		
2	Computerized Hammer Selection in Forging	H. K. Raval D. B. Naik Dr. A. K. Dave	Proc. of All India Seminar on Automated Manuf. Systems- Institute of Engineers (INDIA), Lucknow, Nov. (1990)		
3	Experimental Investigation in Forging	H. K. Raval D. B. Naik Dr. A. K. Dave	Proc. of 35 th ISTAM, Anna University, Madras, Dec. 19-22, (1990)		
4	Experimental Computer Aided Studies in Forging	H. K. Raval D. B. Naik Dr. A. K. Dave	National Seminar on Newer Manuf. Techniques for Improved Productivity, The National Insti. of Engg., Mysore, Nov. 23, (1991)		
5	Development of Lathe Tool Dynamometer	H. K. Raval D. B. Naik Dr. A. K. Dave	Proc. of 36 th ISTAM, IIT Bombay, Dec-19-22, (1991)		
6	Parametric Study on power	H. K. Raval	Proc. of 8 th National Convention of		

	consumption in Turning	K. P. Desai D. B. Naik Dr. A. K. Dave	Mechanical Engineers, The Institution of Engineers (India), Roorkee, Oct-30-31,, Nov-1, (1992)		
7	Analysis of Orthogonal Metal Cutting Process using Grid Marking Techniques	B. M. Sutaria H. K. Raval Dr. K. N. Mistry	17 th AIMTDR (All India Machine Tool Design and Research) R.E.C. Warangal, Jan. (1997)		
8	Parametric Study of EDM Process	S. D. Lad K. P. Desai H. K. Raval	National Seminar on Engineering Trends in Design Engineering & XIIth National Convention of Mechanical Engineering, The Institution of Engineers (INDIA), Allahabad, Jan-31-Feb. 2, (1997)		
9	Comparative Studies of Geometrical Method with the Experimentation for Plate Bending	Raval H. K. Dave A. K. D. I. Lalwani	Proc. Of 19 th AIMTDR (All India Machine Tool Design and Research) Conference I.I.T., Chennai, Dec. 14- 16, (2000)		
10	Prediction of Top Roller Position in 3-Roller Bending using ANN for Power Law Material Behavior	Chinmay K. Desai Anish H. Gandhi Dr. H. K. Raval Dr. A. K. Dave	National Conf. on Development and Challenges in Manuf. Engg. (NCDPCM-2004), Manipal Institute of Technology, Manipal, 18 th to 20 th March, (2004)		
11	Application of Expert System to Flash Less Forging of Connecting Rod	Dinesh N. Kamble H. K. Raval	National Conference on Emerging Trends in Mechanical Engineering (ETME) June, 4-5, (2007)		
12	Artificial Neural Network Application In Cylindrical Bending Process	Dipali P. Pandya Harit K. Raval	Proceedings of the 2009 Innovation In Mechatronics Engineering Conference, at G H Patel College of Engg and Tech., Vallabh Vidyanagar, March 13-14, (2009)		
13	Orbital Machining During Electrochemical Machining Process : A Review	V. K. Joshi K. P. Desai H. K. Raval	Proceeding of National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978 93 80697 05 5), pp. 66-71, July, 19-21, (2010)		
14	Effect of Powder Mixed Dielectric Fluid on Surface Modification during Electrical Discharge Machining (EDM): A Review	Anand. K. Patel H. K. Raval	Proceeding of National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978 93 80697 05 5),pp. 89-95, July 19-21, (2010)		
15	Optimization of Material Removal Rate in Electro Discharge Machining Process using Response Surface Method	H. K. Dave K. P. Desai H. K. Raval	Proceeding of National Conference on Recent Advances in Manufacturing, SVNIT, SURAT (ISBN No. 978 93 80697 05 5), pp.103-107, July 19-21, (2010)		
16	Investigation on the Influence of Machining Parameters on Material Removal Rate for EDM Process	V. A. Parikh H. K. Raval	Proceeding of National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978 93 80697 05 5), pp. 114- 118, July 19-21, (2010)		
17	MIG Welding Defects	V. A. Kulkarni	Proceeding of National Conference		

	Prioritization and Resulting Porosity Defect Optimization by using Taguchi's DOE for Parameter Design	R. R. Kulkarni S. S. Sarnobat H. K. Raval	on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978 93 80697 05 5), PP.375-380, July 19-21, (2010)		
18	Taguchi Method for the Optimization of the Automobile Product Design Parameters	Dipesh B. Trivedi Harit K. Raval M. N. Qureshi	Proceeding of National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978 93 80697 05 5), pp.204-210, July 19-21, (2010)		
19	Prediction & comparison of Forming Limit Diagram of AISI 1008 Steel	Apurva Chouksey Ramsing Patel V. R. Iyer H. K. Raval	Proceeding of National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978 93 80697 05 5), pp. 295-302, July 19-21, (2010)		
20	A Decision Making Framework Model For EDM Electrode Material Selection Based On Combined Multi Attribute Decision Making Method	Harshit K Dave. Keyur P. Desai Harit K. Raval	Proceedings of National conference on Advances in Materials & Product Design, SVNIT, Surat, India, 74-84, (2010)		
21	Investigation of Deep Drawing Process	A. Gore H. K. Raval	Proceeding of 2 nd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-81-8465-762-3), pp. 7-10, Sept 15-17, (2011)		
22	Technique Used in Computer Aided Process Planning and Their Classification : A Review	P. D. Chougule S. Kumar H. K. Raval	Proceeding of 2 nd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-81-8465-762-3), pp. 63-68, Sept 15-17, (2011)		
23	Optimization of Material Removal Rate and Surface Roughness in CNC Turning Process using Taguchi Method	L. S. Patel H. K. Dave H. K. Raval	Proceeding of 2 nd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-81-8465-762-3), pp. 89-93, Sept 15-17, (2011)		
24	Laser Beam Cutting: Optimization of Process Parameters-A Literature Review	S. A. Pore S. S. Sarnobat A. D. Lipare H. K. Raval	Proceeding of 2 nd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-81-8465-762-3), pp. 123-128, Sept 15-17, (2011)		
25	Design Optimization and FE Analysis of Draw Bead in Sheet Metal Forming Process: A Review	D. K. Bhatt V. P. Palsanawala H. K. Raval	Proceeding of 2 nd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-81-8465-762-3), pp. 129-134, Sept 15-17, (2011)		
26	Analysis of Surface Roughness and MRR for Inconel 718 by CNC Turning Process using Taguchi Method	B. S. Rathod S. S. Sarnobat H. K. Raval	Proceeding of 2 nd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-81-8465-762-3), pp. 135-140, Sept 15-17, (2011)		
27	Process Parameter Optimization in Drilling of	V. D. Navale S. S. Sarnobat	Proceeding of 2 nd National Conference on Recent Advances in		

	Composite Materials for Avoiding De-lamination	N. K. Kamble H. K. Raval	Manufacturing, SVNIT, Surat (ISBN No. 978-81-8465-762-3), pp. 141-146, Sept 15-17, (2011)		
28	A Die-less Rapid Prototyping Process for Sheet Metal using Water Jet-A Review	B. V. Desai Dr. H. K. Raval Dr. K. P. Desai N. C. Rana	Proceeding of 3 rd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-93-5067-338-6), pp. 69-74, June 27-29, (2012)		
29	Investigation on the Optimization of Machining Parameters in EDM Using different tool electrode materials	H. K. Dave Sudhanshu K. V. J. Mathai H. K. Raval	Proceeding of 3rd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-93-5067-338-6), pp. 204-209, June 27-29, (2012)		
30	Laser Beam Cutting : Optimization of Process Parameters by using Full Factorial Design	S. A. Pore S. S. Sarnobat H. K. Raval A. D. Lipare	Proceeding of 3rd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-93-5067-338-6), pp. 210-215, June 27-29, (2012)		
31	Process Parameter Optimization in Drilling of Composite Material for Avoiding De-lamination	V. D. Navale S. S. Sarnobat Dr. H. K. Raval	Proceeding of 3rd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-93-5067-338-6), pp. 216-221, June 27-29, (2012)		
32	Methods of Manufacturing Cost Estimation in the Early Stage of Design: A Review	P. D. Chougule Dr. S. Kumar, Dr. H. K. Raval	Proceeding of 3rd National Conference on Recent Advances in Manufacturing, SVNIT, Surat (ISBN No. 978-93-5067-338-6), pp. 310-315, June 27-29, (2012)		
33	Finite Element Analysis of Trash Bin used for Metal Scrap Disposal	R. J. Bhatt H. K. Raval	Proceeding of 4 th National Conference on Recent Advances in Manufacturing, SVNIT, Surat		
34	Effect of material properties on springback of layered strip: An analytical study	Kagzi S A, A H Gandhi, H K Raval	Proceedings of first national conference on thermal fluid and manufacturing science (TFMS2012-1117), 398-402		
35	Effect on Tool Wear, Tool life, Surface roughness while Hard Turning of EN24 – A Review	Prashant P Powar, H K Raval	Proceedings of 5th National Conference, RAM-2015, SVNIT, Surat, 15-17th May, 2015, pp 50-55		
36	“Experimental Study on Backward Flow Forming Process”,	R J Bhatt, H K Raval,	Proceedings of National Conference on Recent Advances in Manufacturing (RAM-2015), SVNIT, Surat	79	84
37	“Numerical Investigation on Forward Flow Forming Process”,	R J Bhatt, H K Raval	Proceedings of National Conference on Recent Advances in Manufacturing (RAM-2015), SVNIT, Surat	85	89
38	“Analysis of Backward Flow Forming Process using DOE”,	Ravi J Bhatt, Harit K Raval,	Proceeding of National Conference on Recent Advances in Manufacturing (RAM-2016), SVNIT, Surat	120	125
Procedia					
1	“Influence of Operating Variables during Flow Forming Process”,	Ravi J Bhatt, Harit K Raval,	5th CIRP Global Web Conference Research and Innovation for Future Production, Procedia CIRP, 2016	146	151

Book Chapter				
1.	“Numerical Investigation on Effect of Leading (Attack) Angle during Single Roller Backward Flow Forming Process for AA6063”,	Ravi Bhatt, Harit Raval,	Computing in Mechanical Engineering, Research Publishing, Singapore, 2016.	77

ANNEXURE-II

List of Ph.D. Students

Sr. No.	Name of Student	Title	Date of Registration	Date of Completion	Admission Category
1	Dr. Anish H. Gandhi	Investigation of Conical Bending Process	July 2004	02/09/2009	PEC
2	Dr. Harshit K. Dave	Helical Path Orbital Electro Discharge Machining of AISI 304 & Inconel 718	16/07/2007	06/07/2012	FIR-PIS
3	Mr. Mahesh Chudasama	Investigation of Forces during Conical Bending Process	23/07/2009	10/10/2014	FIR-PEC
4	Mr. Bhavin V. Desai	Investigation of incremental sheet metal forming process	30/12/2010	Completed (30/06/2016)	PEC-FIR
5	Mr. Shakil A. Q. Kagzi	Investigation of force analysis in three Roller Banding	26/07/2012	Completed (24/04/2017)	PPF
6	Mr. Vratraj K Joshi	Development of Canned cycles for CNC Machining process	28/12/2009	On going	PEC
7	Mr. Sandeep Sarnobat	Investigation on Oblique Turning of Hard Material	19/07/2010	On going	PEC
8	Mr. Rakesh S. Barot	Investigation on acoustic emissions during EDM	10/01/2012	On going	PEC
9	Mr. Promod Chougule	Energy Conscious Process Planning for sustainable manufacturing	15/07/2011	On going	PEC
10	Mr. Bhaveshkumar G. Mewada	Hard Metal Machining	25/07/2012	On going	PEC
11	Mr. Prashant P. Powar	Study of Hard Turning	26/12/2012	On going	PEC
12	Mr. Ravi Bhatt	Investigation of roll forming	05/08/2013	On going	FIR
13	Mr. Shalin Prakashbhai Marathe	Investigation of TWB produced using FSW	18/07/2016	On going	FIR

ANNEXURE-III

M.E. / M.Tech. DISSERTATIONS GUIDED: 57 (Completed) + 01 (Under Student Exchange Program)
07 (Ongoing)

- 1) "Parametric Study of EDM Process", Mr. S.D. Lad, 1995-96
- 2) "Stress Analysis in Orthogonal Metal Cutting Operation", Mr. B.M. Sutaria, 1995-96
- 3) "Investigation of Three Roller Bending Process", Mr. D.I. Lalwani, 1996-97
- 4) "Development of Computer Algorithm for Saddle Position under Hydro Test", Mr. Dharmesh Patel
- 5) "Development of Computer Algorithm and Experimental Investigations for Bending", Shashank Thanki, 2000-2001
- 6) "Simulation and Experimental Investigations On Three Roller Plate Bending Process", Piyush P. Gohil-2002-2003
- 7) "Experimental Analysis of Spring back in V-Bending", Jayesh N. Jariwala-2002-03
- 8) "Simulation of Three Roller Bending Process for Real Material Behavior using Artificial Neural Network: A Parametric Study", Anish Gandhi-2003-04
- 9) "Theoretical and Experimental Investigation on Maximum Temperature in Surface Grinding", Dinesh N. Kamble, 2003-04.
- 10) "Investigation of Multi Pass Bending : A Simulation Study", Girish Solanki, 2003-04
- 11) "An Analytical and Experimental Investigation of Cutting Force in Milling Operation", Praful Dongre, 2003-04.
- 12) "Enhancement of Rolling Machine Capacity for Bending of Plate of thickness from 125mm to 160mm For C-Mn Steel in Cold Condition", Himansu Gajjar, 2006-07
- 13) "Configuration of Computer Integrated Manufacturing Setup", Upendra Parghi, 2007-08
- 14) "Finite Element Analysis of Sheet Metal", Vimal Patel, 2007-08
- 15) "Investigation of Bending of Plates", Dipali D Shrotriya , 2007-08
- 16) "Limit Analysis of Pressure Vessel Materials", Parag Mahajan, 2007-08
- 17) "Investigation on Control of Ovality of Pressure Vessel Shell", Vishal Tailor, 2007-08
- 18) "Investigation of Forming Limit Diagram", Ramshing Patel, M.Tech. (Research), 2007-09
- 19) "Thinning of Dished End During Forming – A Study", Yogeshkumar Srivastav, 2008-09.
- 20) "Limit Load Estimation of Cylindrical Vessel With Oblique Nozzle", Suraj Hiremath, 2008-09.
- 21) "Development of Knowledge Based System for Production of Automobile Pulley For Cooling Application", Mahesh K. Chudasama, 2008-09.
- 22) "Development of Canned Cycle for CNC Milling Machines", Chaudhari Gauravkumar Rameshbhai, 2008-09.
- 23) "Analysis of the Influence of EDM Parameters on Surface Quality, TWR and MRR of INCONEL 601", Vinay A. Parikh, 2008-09.
- 24) "Experimental Investigation of Oblique Turning", Harsh Parmar, 2009-2010.
- 25) "Investigation of E.C.M.", Dipesh Choudhary, 2009-2010.
- 26) "Development of CANNED cycle for Bezier/ B-Spline Curve on CNC Milling Machine", Mohan Rawat, 2009-2010.
- 27) "Parametric Investigation during Deep Drawing of AISI 304: A Simulation Study", Shobhran Singh Yadav, 2009-2010.
- 28) "Development of New CANNED Cycle for Cutting of BICORN, EIGHT & PILFIRI Curve on CNC Milling Machine", Pankaj Navgir, 2010-2011.
- 29) "Finite Element Simulation of Milli Square Cup Forming", Bhavesh Patel, 2010-2011.
- 30) "Finite Element Simulation of Deep Drawing Process of EN10130 Fe P01", Amal Gore, 2010-2011.
- 31) "Investigation on Tailor Welded Blank", Sanjay Patil, 2010-2011.
- 32) "Limit Load Estimation of Cylindrical Shell with Oblique Nozzle", Deepak Pawar, 2010-2011.
- 33) "Finite Element Analysis & Study of Influence of Draw Bead during Deep Drawing Process:", Darshan Bhatt, 2011-2012.
- 34) "Effect of Process Parameters on Weld Line Movement of Tailor Welded Blanks", Raviraj Singh, 2011-2012.

- 35) "Limit Load Estimation of Cylindrical Pressure Vessel with Nozzle inclined at Angles α & β with both planes", Anupam Prakash, 2011-2012.
- 36) "Study of formability during Tube Hydroforming Process", Ankit Pambhar, 2011-2012.
- 37) "Study of Formability of AL6061O Alloy Sheet", Sagar Telrandhe, 2011-2012.
- 38) "Development of canned cycle for machining of Hypertochoid curve on CNC milling machines with Fanuc-OM controller", Jaydeep Patel, 2011-2012.
- 39) "Analysis of stress-strain & temperature distribution in orthogonal cutting of Ti-6Al-4V Alloy", Ajaykumar Tewari, 2012-2013.
- 40) "Analysis of various necking criteria in sheet metal forming", Manan N Panchal, 2012-2013.
- 41) "Role of retrogression in the perform annealing of age hardenable aluminium alloy", Jitesh Vasavada, 2012-2013.
- 42) "Electro Discharge Machining of AISI 304 using Bundle Electrode", Nipul C. Rana, 2012-2013.
- 43) "Crack Propagation Analysis during Ductile Fracture of Aluminum Alloy Using Cohesive Zone Models", Vishal A. Mehta, 2012-2013.
- 44) "Synthesis and Deformation of Single Crystal and Micro pillars of Ti6Al4V", Chaudhari Rakesh Vasant, 2013-2014
- 45) "Investigation on Tensile Instability of Sheet", Surendra Kumar Suman, 2013-2014
- 46) "Strain Path Modeling in Single Point Incremental Sheet Metal Forming (SPIF)", Pathak Jigar Krushnabhai, 2013-2014
- 47) "Finite Element Analysis of Earing Defect during Deep Drawing Process", Ravikant Patel, 2013-2014
- 48) "Investigation of tensile instability in sheet metal components", Kishan Ashok Fuse, 2014-2015
- 49) "Finite Element Analysis and investigation of metal cutting process: A simulation Study", Patel Gaurav Ramanbhai, 2014-2015
- 50) "Modeling, Simulation and Optimization of cup forming", Pavan Nagda, 2014-2015
- 51) "Mechanics of Ball end milling", Purnanak Bhatt, 2014-2015
- 52) "Seismic design and analysis of pressure vessels", Falgun Mevada, 2014-2015
- 53) "In Situ Microstructure Studies on X-Ray Micro CT", Saurabh Khatri, 2015-16
- 54) "Thermo Mechanical Deformation & Characterization of Tungsten Heavy Alloy", Sumit Kumar Singh, 2015-16
- 55) "Machinability of Aerospace Grade Titanium Alloy", Nikhil Gotawala, 2015-16
- 56) "Investigations on Incremental Sheet Metal Forming", Subham Sarthi, 2015-16
- 57) "Investigation on Single Point Incremental Forming Process Formability through Finite Element Simulation", Vinod Golakiya, 2016
- 58) "Study of Formability of Tailor Welded Blank by Finite Element Simulation", Manoj Patil, 2016
- 59) "Study of Non-axisymmetric Stretch Flanging using Abaqus", Killi Dhruvi, 2016
- 60) "Investigation on flow forming using finite element simulation" Mahesh Naik 2016

ANNEXURE-IV

Detail of Patent Applied

Sr. No.	Title	Application/Registration Number & Date	Faculty
1.	Roller Bending Machine for Continuous Bending of Blanks into Constant and Varying Cross-section Shells/Sections	No.:1446/Mum/2010 dated 07/05/2010 12:19:54 (Applied [Under Examination])	Dr. H. K. Raval Dr. A. A. Shaikh Mr. A. H. Gandhi (Ph.D. Student) Mr. Shakil Kagzi (J.R.F.)
2	Metal cutting band saw machine with special feature	201621014415 26/04/2016 Published (on date 13/05/2016) with ref. no 20/2016	Bhavesh G Mevada & Harit K Raval
3	A setup for variable quantity lubrication for turning process	201621021714 24/06/2016	Prashant Prakash Powar & Harit K Raval

ANNEXURE-V

Details of R&D projects handled Completed & Ongoing Including Lab Developed / Ongoing and Other Details

Sr. No.	Title	Sponsoring agency	Fund sanctioned Lacs of Rs.	Duration	Status/Remarks
1	Technical Education Quality Improvement Programme (TEQIP) <i>A/TEQIP/Sanction letter/ 2003/5490A/TEQIP/GOI/2003 dtd:16/2/2004</i>	TEQIP / NPIU / MHRD (World Bank Project)	Rs.22.39 Crore	2004-08	Completed (TEQIP Coordinator)
2	Prediction of Machine Setting Parameter and Roller Configuration for Continuous Bending of Conical Shells on 3-Roller Bending Machine <i>No. SR/S3/MERC/0026/2007. Sept, 25, 2007</i>	DST (SERC)	Rs. 27,96,480/-	3 Years	Completed Patent Application No: 1446/MUM/2010 dtd: 7/5/2010
3	Experimental and Analytical Study of Metal – Polymer Laminate <i>Sponsored by TEQIP/ Research Project/ 07-08/92 dtd 25-06-2007) Transferred to Annual Plan</i>	Annual Plan	Rs: 1,87,500/-	1 Year	Completed
4	Marie Curie International Research Staff Exchanging Scheme -7 th Frame Work Programme on Precision 4E Precision Engineering Enhancement Europium Exchange <i>FP7-269168. dated 24/3/2010</i>	REA Executive agency. Brussels FP7- PEOPLE-2010- IRSES	Proposal submitted 443000 EURO (SVNIT Budget 100800 EURO)	4 Year	Project has cleared 1 st review by Exceeding threshold score of 70%. Approval Not Received
5	Investigations on Orbital Electro Discharge Machining Process. <i>No.SR/S3/MERC/0044/2010 (G). Dated 21/6/2011</i>	DST	Rs.15,35,000/- -	2 Year	Completed
6	Technical Education Quality Improvement Programme (TEQIP-II) <i>Grant received vide letter no.16-5/2011-TS.VII. Dated 06/06/2011.</i>	TEQIP / NPIU / MHRD (World Bank Project)	Rs.12.00 Crore	4Year	Completed
7	Investigation on Bending	DST	Rs.33,00,000/	3 Year	Completed

	Forces and Friction Co-efficient during Continuous Bending of Conical Shells on 3-Roller Bending Machine. <i>No.SR/S3/MERC/0047/2011 . dated 13/04/2011.</i>		-		
8	Study of effect of tooling on formability of 6xxx aluminium alloys during single point die-less rapid prototyping (Incremental Forming)	GUJCOST	Rs. 5,00,000/-	2 Year	Ongoing
Details of Additional Research And Development Projects Prior to Review Period					
9	Development of Metal Forming Laboratory <i>F.4-1/91 TD VI Govt. of India., Dept of Education Dt. 22/1/92</i>	MHRD	Rs. 5.00 lacs	3 Years	Completed
10	Modernization and Removal of Obsolescence of Workshop Phase – III <i>F.28.1/99/TS-1 .Dt.31/3/2000</i>	MHRD	Rs.10.00 lacs	2 Years	Completed
11	Theoretical and Experimental Investigation in Bending Process <i>8017/RD II/BOR/95,Dt.11/3/97</i>	AICTE	Rs. 5.00 lacs	3 Years	Completed

ANNEXURE-VI

Details of Self-Financed/Government Sponsored Short Term Courses Offered as Coordinator & Main Teacher

Sr. No.	Institute / Organization	Title	Duration		
			From	To	Days
1	S.V.N.I.T	Coordinator from host Institute for NPIU organized two days workshop on Finance.	1/3/2006	2/3/2006	2 days
2	S.V.N.I.T	Co-coordinator, three days workshop on “Different Aspects of Electron Microscopy”, sponsored by TEQIP/SVNIT	29/3/2006	31/3/2006	3 days
3	S.V.N.I.T	Coordinator, Three days Induction Training Program for newly recruited Faculty sponsored by TEQIP	15/1/2008	17/1/2008	3 days
4	S.V.N.I.T	Coordinator, Three days Induction Training Program for newly recruited Faculty sponsored by TEQIP	18/1/2008	20/1/2008	3 days
5	S.V.N.I.T	Coordinator, Three days Induction Training Program for newly recruited Faculty sponsored by TEQIP	21/1/2008	23/1/2008	3 days
6	S.V.N.I.T	Coordinator, Five days Management Capacity Development Program for Middle Level Faculty as (Future Manager), sponsored by TEQIP	28/1/2008	1/2/2008	5 days
7	S.V.N.I.T	Coordinator, Five days Management Capacity Development Program for Middle Level Faculty as (Future Manager), sponsored by TEQIP, under Networking of Institution	4/2/2008	8/2/2008	5 days
8	S.V.N.I.T	Coordinator, Two days Management Capacity Development Program for Senior Level Faculty, HOD & Deans and Administrative Officers, sponsored by TEQIP	15/3/2008	16/3/2008	2 days
9	S.V.N.I.T	Coordinator, one week AICTE Sponsored training program on Advances in CAM	23/6/2008	27/6/2008	5 days
10	S.V.N.I.T	Coordinator, one week AICTE Sponsored Training program on Recent Trends in C.A.E.	30/6/2008	4/7/2008	5 days
11	S.V.N.I.T	Coordinator, one week AICTE Sponsored Training Program on Advances in Manufacturing.	29/12/2008	2/1/2009	5 days

12	S.V.N.I.T	Coordinator, one week AICTE Sponsored Training Program on HyperForm- HyperMesh Software Training.	5/1/2009	9/1/2009	5 days
13	S.V.N.I.T	Coordinator, one day program on “Intellectual Property Right”	24/3/2009	-	1 day
14	S.V.N.I.T	Coordinator, one week AICTE Sponsored Training Program on CAE and Design Optimization using Optistruct	20/7/2009	24/7/2009	5 days
15	S.V.N.I.T	Coordinator, one week AICTE Sponsored Training Program on INNOVATE, CREATE, MANUFACTURE and MANAGE DIGITALLY	18/1/2010	22/1/2010	5 days
16	S.V.N.I.T. Anchor Cell	CNC Programming (FANUC)	4/4/2011	8/4/2011	5 days
17	S.V.N.I.T. Anchor Cell	CNC Programming (FANUC)	13/6/2011	17/6/2011	5 days
18	S.V.N.I.T. Anchor Cell	CNC Programming (FANUC)	23/4/2012	27/4/2012	5 days
19	S.V.N.I.T	Coordinator, TEQIP-II sponsored one week training program, “Advances in Manufacturing”	28/7/2014	1/8/2014	5 days
20	S.V.N.I.T	Coordinator, TEQIP-II sponsored one week Continuing Education Program, “Metal Forming”	22/12/2014	26/12/2014	5 days
21	S.V.N.I.T	Coordinator, TEQIP-II sponsored one week Continuing Education Program, “Advanced Manufacturing Processes”	08/06/2015	12/06/2015	5 days
22	S.V.N.I.T	Coordinator, Self Financed STTP on “Advances in Material Processing”	29/06/2015	03/07/2015	5 days
23	S.V.N.I.T	Coordinator, Self Financed STTP on “Tools & Techniques for Effective Teaching & Research”	26/10/2015	30/10/2015	5 days

Details of Conference Organized

1	S.V.N.I.T. (DST, New Delhi)	National Conference on “Recent Advances in Manufacturing”	19/7/2010	21/7/2010	3 days
2	S.V.N.I.T. (DST, New Delhi)	2nd National Conference on “Recent Advances in Manufacturing”	15/9/2011	17/9/2011	3 days
3	S.V.N.I.T. (DST, New Delhi)	3rd National Conference on “Recent Advances in Manufacturing”	27/6/2012	29/6/2012	3 days
4	S.V.N.I.T. (DST, New Delhi)	4 th National Conference on “Recent Advances in Manufacturing”	26/6/2014	28/6/2014	3 days
5	S.V.N.I.T. (DST, New Delhi)	5 th National Conference on “Recent Advances in Manufacturing”	15/05/2015	17/05/2015	3 days

Details of Short Term Courses Organized as Member of Organizing Committee					
1	S.V.N.I.T	Member, Organizing Committee of two days workshop, “Three Dimensional Modeling for CAD Applications”, sponsored by TEQIP,	6/2/2006	7/2/2006	2 days
2	S.V.N.I.T	Member Organizing Committee, two days National Workshop on “Traditional Black Smith : Present Trend and Future Prospect”	12/1/2009	13/1/2009	2 days
3	SURUCHI (Bardoli, Surat)	Agriculture Tools and Traditional Black smithy “Present Trends and Future Prospect”	20/1/2011	22/1/2011	3 day
Details of Conference/Self-Financed/Government Sponsored Short Term Courses Organized Prior to Review Period					
1	S.V.N.I.T	Summer Training on “FEM for Mechanical Engineers”	June, 1993		
2	S.V.N.I.T	Seminar on “Conservation of Energy in Textile Industries”	May, 1995		
3	S.V.N.I.T	Course on “Lubrication - A Key to Bearing Survival”	January, 1997		
4	S.V.N.I.T	Course on “Heat Exchangers-Some Aspects and Considerations	October, 1997		
5	S.V.N.I.T	Short term training programme on “Advance Solar Energy Technology”	July, 2000		
6	S.V.N.I.T	Entrepreneurship Awareness Camp on “Development of Ancillaries for Large & Medium Scale Industries”	16/1/2003	18/1/2003	3 days
7	S.V.N.I.T	“20 th National Symposium on Cryogenics”	Feberuary, 2005		
8	S.V.N.I.T	Workshop on “Measurement Technique in Turbo-machines”	23/6/2005	25/6/2005	3 days

ANNEXURE-VII

Expert Lectures Delivered/Organized

Sr. No.	Details
1	“Finite Element Method”, at M/s Larson & Toubro, Hazira under training program for engineers, August-September 1995
2	“Practical demonstration about the use of Ansys software”, at M/s Larson & Toubro, Hazira under Dedicated course of FEM for Mechanical Engineering, August 1995
3	“CAM for Mechanical Engineers” as Resource Person at Gandhinagar under TECHSAT Project (GUJCOST), 12 th & 16 th September 2001
4	“Metal Forming” as Resource Person at Gandhinagar under TECHSAT Project (GUJCOST), 10 th April 2002
5	“Flexible Manufacturing System: An Overview”, at SVMIT, Bharuch under STTP on Emerging Trends in CAD/CAM, 11 th May 2005
6	“Automated Guided Vehicle System: An Overview”, at SVMIT, Bharuch under STTP on Emerging Trends in CAD/CAM, 11 th May 2005
7	“Advanced Manufacturing Techniques”, at L.C.I.T., Bhandu, Mehsana, 17 th May 2006
8	“Computer Integrated Manufacturing” at Sankalchand Patel College of Engineering, 19 th Dec, 2006.
9	“Institute Past, Present and Future”, at Induction Training Program at S.V.National Institute of Technology, SURAT, 15 th Jan, 2008
10	“Institute Past, Present and Future”, at Induction Training Program at S.V.National Institute of Technology, SURAT, 18 th Jan, 2008.
11	“Institute Past, Present and Future”, at Induction Training Program at S.V.National Institute of Technology, SURAT, 21 st Jan, 2008
12	“Development of Material Handling System”, AICTE Sponsored Short Term Training Program on Advances in CAM, S.V.N.I.T., Surat, 23 rd -27 th Jun,08
13	“Computer Aided Quality Control”, AICTE Sponsored Short Term Training Program on Advances in CAM, S.V.N.I.T., Surat, 23 rd -27 th Jun,08
14	“CNC Programming”, AICTE Sponsored Short Term Training Program on Advances in CAM, S.V.N.I.T., Surat, 23 rd -27 th Jun,08
15	“Development in Sheet Metal Forming” at Nirma Institute of Technology, A’bad, 28 Nov, 2008.
16	“Computer Integrated Manufacturing” at A.I.C.T.E. Sponsored Short Term Training Program on Advances in Manufacturing”, S.V. National Institute of Technology, 1 st Jan, 2009.
17	“Strip Layouts of Sheet Metals” at A.I.C.T.E. Sponsored Short Term Training Program on Hyperform – HyperMesh Software Training”, S.V.National Institute of Technology, Surat, 7 th Jan, 2009.
18	“Failure Analysis in Forming using F.L.D.” at A.I.C.T.E. Sponsored Short Term Training Program on Hyperform – HyperMesh Software Training”, S.V.National Institute of Technology, Surat, 9 th Jan, 2009.
19	Research Methodology : Sampling and Sampling Plan” at Kamla Nehru Institute of Technology, KNIT, Sultanpur, U.P. invited by M/s. Equate, New Delhi, 17 th Jan, 2009.
20	“Design of Experiments : Taguchi Aproach” at Kamla Nehru Institute of Technology, KNIT, Sultanpur, U.P. invited by M/s. Equate, New Delhi, 17 th Jan, 2009.
21	“Research Methodology : Sampling and Sampling Strategy” at A.I.C.T.E. Sponsored Short Term Training Program on Pedagogy and Research Methodology, S.V. National Institute of Technology, 22-23, Jan, 2009.
22	“CNC Lathe and Milling Programming”, L & T Employee training program, S.V.N.I.T., Surat, 5 th Jan – 28 th Jan, 2009. (Service to Continuity)
23	“Introduction to AMS” at State level three days workshop on Advances in Manufacturing System

	AMS2009, N. G. Patel Polytechnics at Isroli, Pt. Afwa, Bardoli on 25 th Feb, 2009, 25-27, Feb, 2009
24	Plenary talk “Development in Sheet Metal Forming” at R.C. Patel Institute of Engineering and Technology, Sirpur, Maharashtra, on 6 th March, 2009.
25	“Research Methodology : An overview” at G.B. Pant Agriculture University, Pant Nagar, invited by M/s. Equate, New Delhi, 17 th March, 2009.
26	“Research Methodology : Sampling and Sampling Strategy” at G. B. Pant Agriculture University, Pant Nagar, invited by M/s. Equate, New Delhi, 17 th March, 2009.
27	“Taguchi’s Design of Experiments” at G.B. Pant Agriculture University, Pant Nagar, invited by M/s. Equate, New Delhi, 17 th March, 2009.
28	“Research Methodology : Sampling and Sampling Strategy” at A.I.C.T.E. Sponsored Short Term Training Program on Pedagogy and Research Methodology, S.V. National Institute of Technology, 3-7, Aug, 2009.
29	“Computer Aided Quality Control”, at A.I.C.T.E. Sponsored Short Term Training Program on Advances in Manufacturing, S.V. National Institute of Technology, 28 th Dec,2009- 1 st , Jan, 2010.
30	“Some Development in Sheet Metal Forming”, at A.I.C.T.E. Sponsored Short Term Training Program on Advances in Manufacturing, S.V. National Institute of Technology, 28 th Dec., 2009- 1 st , Jan, 2010.
31	“Technical Education Quality Improvement Program (Project Management : A Case Study)”, on 8/1/2010 at A.I.C.T.E. Sponsored Short Term Training Program on Knowledge Management, S.V. National Institute of Technology, 4-8, Jan, 2010.
32	“Computer Integrated Manufacturing”, on 15 April, 2010 at Vidhabharti Trust Polytechnic, Umrahk.
33	“Computer Aided Quality Check”, at Vidhyabharti Trust Polytechnic, Umrahk on 15 April, 2010.
34	Resource speaker for Training program on “CNC Programming (FANUC)” by Anchor Cell at SVNIT, Surat during April 4-8, 2011.
35	Resource speaker for Training program on “CNC Programming (FANUC)” by Anchor Cell at SVNIT, Surat during June 13-17, 2011.
36	Resource speaker for Training program on “CNC Programming (FANUC)” by Anchor Cell at SVNIT, Surat during April, 2012.
37	“TEQIP Implementation & Challenges” at Biral Vishvakarma Mahavidyalaya, BVM Engineering College, Vallabh Vidyanagar, 10 th May 2012.
38	“Advances in Metal Forming” at Mechanical Engineering Department, Nirma University, Ahmedabad, 31 st August, 2012.
39	“Theory of Plastic Deformation” at TEQIP-II sponsored CEP on Fundamentals of Material Processing, S.V. National Institute of Technology, June 10-14, 2013.
40	“Methods of Solving Forming Problems” at TEQIP-II sponsored CEP on Fundamentals of Material Processing, S.V. National Institute of Technology, June 10-14, 2013.
41	“Analysis of Bulk Forming Processes” at TEQIP-II sponsored CEP on Fundamentals of Material Processing, S.V. National Institute of Technology, June 10-14, 2013.
42	“Analysis of Sheet Metal Forming Processes” at TEQIP-II sponsored CEP on Fundamentals of Material Processing, S.V. National Institute of Technology, June 10-14, 2013.
43	“Design of Experiments” at TEQIP-II sponsored short term training program organized by Civil Engineering Department, S.V. National Institute of Technology, June 24-28, 2013
44	“Integration of CAD / CAM” at Short term training program on Importance of CAD/CAM organized by Mechanical Engineering Department, L.D. Coe. Of Engg. & Tech., November 18-22, 2013.
45	“Some Research Studies in Sheet Metal Forming” at Short term training program on “Manufacturing Process Modeling & Simulation” organized by Production Engineering Department, BVM, V.V.Nagar, January 6-10, 2014.
46	“Forming of Tailor Welded Blanks (TWB)” at Short term training program on “Manufacturing Process Modeling & Simulation” organized by Production Engineering Department, BVM, V.V.Nagar, January 6-10, 2014.
47	“Theory of Stress- Strain” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014

48	“Theory Plasticity” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014
49	“Analysis of Forging” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014
50	“Analysis of wire drawing & extrusion” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014
51	“Analysis of rolling” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014
52	“Slip line theory” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014
53	“Analysis of Deep Drawing” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014
54	“Experimental strain analysis” at CEP on “Metal Forming organized by Mechanical Engineering Department, SVNIT, Surat, December 22-26, 2014
55	“Rolling Mechanics (Based on Stress Concept)” at ESSAR Learning Systems (ELS), Hazira, Gujarat, August 28, 2015
56	“Theory of Plastic Deformation” at Nirma University, Ahmedabad, September 05, 2014
57	“ Smart Innovation in mechanical and allied engineering” at Parul University ,Vadodara, March 08, 2016.
58	“Research Scope in manufacturing field” rat Nirma University, Ahmedabad March 29, 2016

ANNEXURE-VIII

Consultancy and other Revenue Generation as being Added to as Contribution to the Institute Development

Sr. No	Title	Organization	Month & year of completion	Amount
Academic Consultancy Work:		Involved as a Faculty and Team Member to Provide Training as per below detail		
1	Practical Training Program for DET Employees of Essar Steel Ltd.”	Essar Steel Ltd, Hazira	3 Month, 2006	8,00,000/-
2	Degree Level Training Programme in Various Discipline of engineering for Reliance employee (Mechanical Engineering)	Reliance Industry, Hazira	3 years	3,30,00,000/-
3	Training Program for ITI apprentices of employee of L & T. Hazira Batch-1	L.& T., (MHI), Hazira	Dec, 2008 O.O. No. D/MED/1664/200 8-09	8,98,400/-
4	Training Program for ITI apprentices of Employee of L & T. Hazira. Batch-2	L.& T., (MHI), Hazira	Oct, 2009 O.O.No. CED/DEAN (R&IL)/ 2009- 2010 Dtd 6/11/2009	19,95,280/-
5	Training Program for ITI apprentices of Employee of L & T. Hazira. Batch-3	L.& T., (MHI), Hazira	Nov, 2009 O.O.No. CED/DEAN (R&IL)/ 2009- 2010 Dtd 6/11/2009	
6	Training Program for ITI apprentices of Employee of L & T. Hazira. Batch-4	L.& T., (MHI), Hazira	Oct, 2010 to Jan, 2011	
Industrial Consultancy Work:		Involved as a Faculty and Team Member to Provide Training as per below detail		
1	Testing of Capillary Diameter of Spinnerette (Hole)	Reliance Industries Ltd., Hazira, Surat	03/09/2012	8,427/-
2	Measurement of Taper Angle of Lock Nut	Techno Shine, Surat, Gujarat	25/10/2012	825/-
3	Third party Inspector for procurement of Machinery/ Equipment under “Niram Shaer Yojana”	SUDA, Surat	March 2013 to June 2013	45,000/- (Approx)

ANNEXURE-IX

Details of Experiments and Computational Projects Added to Teaching Laboratory

Experiments Added to Computer Integrated Manufacturing Lab for UG/ PG Programme	
Sr. No.	Title
1	Demonstration of CNC Milling machine with user interface and calculating the Co-ordinates of given geometry in absolute and increment mode for cutter path.
2	Introduction of G codes and M codes and write the CNC part programming for a given geometry using Linear, Circular interpolation. (Using FANUC Controller)
3	Write the CNC part programming for a given geometry using Mirror and Subroutine. (Using FANUC Controller)
4	Write the CNC programming for a given geometry using Polar Co -ordinate for drilling cycles.
5	Write the CNC part programming for a given geometry using Tool Radius Compensation and Repeat loop for Peck Drilling Cycle. (Using FANUC Controller)
6	Introduction and programming of all canned cycle of Milling machine. (Using FANUC controller)
7	Demonstration and study of CNC Lathe machine with sample programming.
8	Write CNC programming for given geometry (Lathe) using stock removal cycles (Using FANUC controller)
9	Demonstration of FMS setup. (AS / RS, AGV, CNC Lathe, CNC Milling, Robot & CMM setup)
10	Demonstration of Advance manufacturing Machines like AJM (Abrasive Jet Machine), EDM (Electro Discharge Machine), μ Machine (Micro Machine), VMS (Vision Measuring System).
Experimental Facilities Added to Laboratory	
1	CIM Set up (CNC Lathe; CNC Milling; ASRS system; Vision Inspection System; AGV; CMM)
2	Universal Tensile Testing Machine
3	Electrochemical Machining Setup
4	Ultrasonic Machining Setup
Computational Facilities Added to Laboratory for Ph.D., PG & UG students	
1	LS-Dyna, 971
2	Hyperform 9
3	VR Mill (Virtual reality Lab.)

4	VR Turn (Virtual reality Lab.)
5	Master CAM, X7
6	ABAQUS
Computational Facilities Added to Laboratory Prior to Review Period	
1	Unigraphics, NX5
2	MSM SIM
3	EXSL CNC simulation software

ANNEXURE-X

Details of contribution to institute management through personal initiative in responsible positions

Sr. No.	Title	Duration		
		From	To	
1	Head of Mechanical Engineering Department	09-1-2012	07-01-2014	
2	Technical Education Quality Improvement Programme - II (TEQIP-II)	Co-coordinator	31-1-2012	Till Date
		Coordinator	11-1-2010	30-1-2012
3	Technical Education Quality Improvement Programme - I (TEQIP-I)	Coordinator	2005	31-3-2009
		Nodal Officer	2004	2005
4	Member Senate as a Professor	2005-06	Till Date	
5	Coordinator, Five days Management Capacity Development Program for Middle Level Faculty as (Future Manager), sponsored by TEQIP	Coordinator	28/1/2008	1/2/2008
6	Coordinator, Five days Management Capacity Development Program for Middle Level Faculty as (Future Manager), sponsored by TEQIP, under Networking of Institution	Coordinator	4/2/2008	8/2/2008
7	Coordinator, Two days Management Capacity Development Program for Senior Level Faculty, HOD & Deans and Administrative Officers, sponsored by TEQIP	Coordinator	15/3/2008	16/3/2008
8	Dean (Research & Consultancy)	Dean	01/02/2017	Till Date

ADMINISTRATIVE RESPONSIBILITY/EXPERIENCE

Sr. No.	Details
1	Laboratory In charge for Production Engineering Laboratory
2	Laboratory In charge for Metal Forming Laboratory
3	Laboratory In charge for C.A.M Laboratory
4	Workshop In charge for Workshop Total = 5 Y
5	In charge Simulation Laboratory
6	Coordinator, for the implementation of Technical Education Quality Improvement Programme (TEQIP) at the Institute from 23/12/2005 to 31/07/2009 vide Institute Office Order No. D/1640 dated. 23/12/2005.
7	Member of Project Procurement Sub-committee for TEQIP/NPIU, vide letter No. E/92 dtd 22/4/2004.
8	Nodal officer Procurement & Finance vide Institute letter to NPIU, vide letter No. P/1177 dtd 4/8/2004.

9	Member Secretary as a Nodal Officer Procurements for Campus Wide Networking for TEQIP, vide letter No. C/BOG(4)/2415 dtd. 15/10/2004.
10	Member Secretary as Nodal Officer Procurements for Project Monitoring Committee for TEQIP Project, Vide letter No. C/BOG (4)/2415 dtd. 15/10/2004.
11	Member of Senate of the S. V. National Institute of Technology, SURAT.
12	P.G. Incharge for M.Tech. (Mech), M.Tech(Turbo), M.Tech (I.P.E.D) from 1/6/05 to 21/10/05 vide letter No. MED/327/2005-06 for the period of 1/6/2005 to 31/7/2005. And vide Office Order No. E/HKR/666 dated. 21/7/2005 for the period of 21/7/2005 to 21/10/2005.
13	Coordinator for Centre of Excellence for Computer Aided Engineering with M/s. Altair India., 2007
14	Coordinator, Accreditation of Production Engineering Programme. 2-4, May, 2008.
15	Coordinator, Production Engineering Section, Since Sept-Oct, 2008.
16	Dy. Superintendent, AIEEE 2009.
17	Member Admission Committee for AIEEE 2009
15	Member Admission Committee for AIEEE 2010
16	Member Secretary for the scrutiny committee for the P.G. program for funding from TEQIP (Phase-II) vide office order no. TEQIP-II/Revised Scrunity Committee/2011-11/13. Dated 16/06/2010.
17	Member Secretary for the committee for the Faculty Development for necessary funding from TEQIP (Phase-II) vide office order no. TEQIP-II/Revised Faculty Development/2010-10/12. Dated 16/06/2011.
18	Member of committee to formulate the norms and guidelines for Intellectual Property Right (IPR) of the Institute vide office order No.D/IPR/2010-11/388. Dated 17/6/2011
19	Invited as member of departmental board of study for Rasoni College of Engineering, Nagpur (Telephonic Invitation)
20	Invited as member of need analysis for the Mechanical Engineering Department of Nirma Institute of Technology, A'bad
21	Member of purchase Committee for purchase of Furniture vide letter No.EFurniture/233, dtd: 12-9-1994 Member of Central Procurement Committee for purchase of various Equipment etc. for TEQIP /NPIU grant. Vide letter No. E/91 dtd 22/4/2004
22	Member of Review Committee to review the research contribution (papers) at 3 rd International Conference on Manufacturing Research, Cranfield University, UK, 6 th -8 th Sept, 2005.
23	Co-coordinator Finance Committee of "Third Convocation", of S.V.N.I.T., Surat, held on 26 th , March, 2006. Vide letter no. T & P/ 963 dtd 20/2/2006.
24	Co-coordinator Finance Committee of "Fourth Convocation", of S.V.N.I.T., Surat, Vide letter no. T & P/ 08 dtd 03/01/2007
25	Co-coordinator Finance Committee of "Fifth Convocation", of S.V.N.I.T., Surat, Vide letter no. T & P/ 273 dtd 26/09/2007
26	Co-coordinator Finance Committee of "Sixth Convocation", of S.V.N.I.T., Surat, Vide letter no. T & P/ 6 th Convocation/715 dtd 07/01/2009.
27	Co-coordinator Finance Committee of "Seventh Convocation", of S.V.N.I.T., Surat, Vide letter no. T & P/ 7 th Convocation/933 dtd 01/10/2009.
28	Member of Committee for Renewal of Registration to availing Customs/Central Excise duty exemption vide O.O.No. E & S/Custom-Excise/11-12/ dtd. 15/6/2011.
29	Member of Committee to prepare project submitted to the MHRD for Centre of Excellence vide letter No.P/REC/COE/Computer/1984, dtd: 30-3-1994

30	Member of purchase Committee of computer stationery through Central Store vide letter No.Store/239, dtd: 23-4-1994
31	Advisory Committee Member for NUCONE'2010 organized by Nirma Institute, Ahmedabad
32	Advisory Committee Member for NUCONE'2011 organized by Nirma Institute, Ahmedabad
33	Member of Advisory Board of C S Patel Institute of Technology CHARUSAT, Changa, Gujarat, India
34	Member of Board of Studies of Mechanical and Automobile Engineering at Parul University, Vadodara, Gujarat, India

INTERACTION WITH THE OUTSIDE WORLD

1	NBA Expert, Osmania University, Hyderabad, October 5-7, 2012
2	NBA Expert, Ram Krishnan Raju Engineering College, Bhimavaram, 4-16, Dec-2012
3	NBA Expert, Acharya Shrimanarayan Ploytechnic, Wardha, 26-28 Sept-2014
4	NBA Expert, Ambala College of Engineering, Haryana, 21-23 March-2014
5	NBA Expert, Raja Rajesware College of Engineering, Mysore Road, Bangalore 03-05, Oct-2015
6	NBA Expert, Sant Longowal Institute of Engineering and Technology, Sangrur, Punjab, 20-22, Nov-2015
7	NBA Expert, Venkateswara College of Engineering, Chennai, 20-22 March-2015
8	UGC-AICTE Joint Inspection Member, Jaypee University, UP, 21-22 May-2015
9	Endowed Professor Activity for one year (25 days in year), Charusat College of Engineering, Changa, Gujarat, 2014-15
10	Expert for Faculty Recruitment, NIT Manipur, 4 Oct-2013
11	Expert for Faculty Recruitment, NIT Nagpur, 4-5, Dec-2014
12	Expert for Faculty Recruitment, C K Pithawala College of Engineering and Technology, 15 April-2015
13	Expert for Faculty Recruitment, Pandit Dindayal Petrolyum University (PDPU), 18-19 May-2015
14	Expert for Faculty Recruitment, NIT Jaipur, 12 Jan-2016
15	AICTE Observer, CMAT Exam, 21-22 May-2013
16	AICTE Observer, CMAT Exam, 23-24, Feb-2013
17	AICTE Observer, CMAT Exam, 25 Sept-2014
18	AICTE Observer, CMAT Exam, 21-23 Feb-2014
19	AICTE Observer, CMAT Exam, 19-21 Feb-2015
20	AICTE Observer, GPAT Exam, 23 Feb-2015
21	Examiner, M.Tech. Exam, NIT Nagpur, 31 May 2014
22	Examiner, Ph.D. Exam, MANIT, Bhopal, 8-10-Jan-2016
23	Panel Member of Selection Committee, SVKM;s Narsee Monjee Institute of Management Studies, Shirpur, 29 July-2015
24	Expert Member, AICTE-UGC Inspection, Shri Venkateshwara University, UP, 3-4 Sept-2015
25	Expert Member, Pranveer Singh Institute of Technology (PSIT), Kanpur, 16-19, August-2015
26	NBA Expert, SAINTGITS College of Engineering, Kottukulam Hills, Pathamutton, Kottayam, Kerala, 19-21 February 2016
27	NCEVT-2016, Conference session Chair at Parul University Vadodara, April 8, 2016.
28	NBA Expert, Thapar Univesity, Punjab.21-23 april 2017
29	UGC Inspection Member, Sarvepalli Radhakrishnan University, Bhopal, 11-12 May-2017

Ph.D. Thesis review

Sr. No.	Title	University/ College	Year
1	A model of alternative organizational improvement practices and organizational performance.	Rashtrasant Tukadoji Maharaj Nagpur University	2010
2	Prototyping uncertainty in maintenance activity and its simulation	Rashtrasant Tukadoji Maharaj Nagpur University	2013
3	Formulation of a field data model for functioning of workstation of flour grinding system emphasizing ergonomic consideration and optimization	Rashtrasant Tukadoji Maharaj Nagpur University	2014
4	Experimental and analytical investigation of interphase influence on the properties of fiber reinforced composites	MSU, Baroda.	2014
5	Performance improvement in the organization through and integrated model for Lean, TQM and Six Sigma.	Rashtrasant Tukadoji Maharaj Nagpur University	2014
6	Modeling and optimization of micro electrical discharge machining of super alloys	Motilal Nehru National Institute of Technology Allahabad	2014
7	Modelling through ANN simulation of performance of various process energized by human powered flywheel motor	Rashtrasant Tukadoji Maharaj Nagpur University	2016
8	Formulation of approximate generalized field data based model and its simulation, optimization, reliability evaluation for some operations of manufacturing enterprise.	SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI	2016
9	Some studies on the effect of process parameters in the photochemical machining of SS316L	Dr. Babasaheb Ambedkar Technological University, Maharashtra.	2017