

RESUME

Name :- DESAI KEYUR PUSHPAVADAN

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

Ichchhanath, SURAT- 395 007, Gujarat, India

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

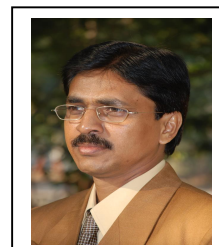
Position :- Professor & Head

Date of Joining Institute : 22/03/1988

Date of Joining Present Position: 06/07/2011

Date of Birth : 07/01/1966

Date / year of Ph.D. degree: 30/01/2004



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	2004	Mechanical

Experience :

University / College	Designation	Period
M/s. Borasara M/cs. (Division of Himson)	G.E.T.	15/12/1987 to 21/03/1988
S.V.R. college of engineering, Surat	Adhoc Lecturer	22/03/1988 to 31/07/1988
		17/09/1988 to 13/05/1989
		01/06/1989 to 15/07/1989
		21/08/1989 to 30/06/1990
S.G.U., Surat / S.V.R. college of engineering, Surat	Lecturer	16/08/1990 to 15/08/1996
Deemed / S.V.R. college of engineering, Surat	Asst. Professor	30/01/2004 to 31/12/2005
Deemed / S. V. National Institute of Technology, Surat	Asso. Professor *	01/01/2006 to 05/07/2011
Deemed / S. V. National Institute of Technology, Surat	Professor	06/07/2011 to till date
Deemed / S. V. National Institute of Technology, Surat	Head of Department	01/02/2017 to till date

* (Including 1 year 3 months as Prof (RIL) in AGP 10,000/-)

Research Publication : (Refer Annexure A for details)

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

Publication	Numbers
National Conference	28
National Journal	16
International Conference	41
International Journal	26

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

M.Tech. : 37(Completed) + 01 (Ongoing)

(Refer Annexure B for details)

Ph.D. : 05 (Completed) + 03 (Ongoing)

No. of Patent obtained (with details): NIL

No. of Patent applied (with details): NIL					
No. of R&D Project (Funded by various agencies) : 07 (Refer Annexure C for details)					
No. Conference /Short term Course / Workshop / Training Programme / Seminar Organized : (Refer Annexure D for details)					
Programme	Number	Programme	Number	Programme	Number
International Conference	**	Short Term Course	02	Training Programme	**
National Conference	**	Workshop	01	Seminar	03
No. of Expert Lecture Delivered (Please attach list with details) : 05					
No. of Expert Lecture Organized (Please attach list with details) : > 08 (Refer Annexure E for details)					
Consultancy & Testing : (Refer Annexure F for details)					
(a) Consultancy : ***					
(b) Testing : 12					
Interaction with outside World: (Not limited to following) (attach list with following category) Like : (Refer Annexure H for details)					
<ul style="list-style-type: none"> (a) Institute abroad, Eminence institute in India & National Research Lab. (b) Institute / Industry not cover above (c) State level Institute / Industry / R&D Organization (d) NBA Visit (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)

- (i) Research Publication list (Since Joining)
- (ii) M. Tech. / Ph.D. guided dissertation / thesis detailed list
- (iii) Patent Detail (as per above format)
- (iv) R & D Project (as per above format)
- (v) No. Conference /Short term Course / Workshop / Training Programme / Seminar Organized (as per above format)
- (vi) No. Expert lecture delivered and organized (attach list with details)
- (vii) Consultancy & Testing (as per above format)
- (viii) Interaction with outside world (attach list with details)

Annexure A

Research Publication List (Since Joining)

Sr. No.	Title of Paper/Report/Book	Author(s)	Name & Vol. of Journal & Year	Page No.	
				From	To
INTERNATIONAL JOURNALS					
1	Experimental investigations on RDM of Ti6Al4V with planetary tool actuation	Mathai V. J. Harshit K. Dave Desai K. P.	Journal of the Brazilian Society of Mechanical Sciences and Engineering, Vol. 39, 2017	3467-3490	
2	Application of Radial Tool Movement in Electrical Discharge Machining Process for Boring Operation	Sudhanshu Kumar Harshit K. Dave K. P. Desai	International Journal of Materials, Mechanics and Manufacturing, Vol. 5, August 2017	178-183	
3	Experimental investigation on performance of different tool movement strategies in EDM process for boring operation	Sudhanshu Kumar Harshit K. Dave K. P. Desai	International Journal of Advanced Manufacturing Technology, 2016	Published online	
4	Study on Effect of Process Parameters on Responses during Planetary EDM of Titanium Grade 5 Alloy	Harshit K. Dave Mathai V. J. Desai K. P.	International journal of Modern Manufacturing Technologies, Vol. 8, 2016	-	
5	Machining of Archimedean Spiral by Parametric Programming	V K Joshi Desai K P Raval H K	International journal of Modern Manufacturing Technologies, Vol. 8, 2016	-	
6	Theoretical Study on Standing Wave Thermoacoustic Engine	S. Kalra, K. P. Desai, H. B. Naik, M. D. Atrey	ICEC & ICMC 25, at Netherland in 2014 and Published in Physics Procedia, Vol. 67 (2015)	456-461	
7	Transient analysis of single stage GM type double inlet pulse tube cryocooler	P B Gujarati, K P Desai, H B Naik, M D Atrey	Presented in CEC & ICMC , at Arizona, USA 2015 and Published in IOP Conf. Series: Materials Science and Engineering, Volume:101 Paper ID: 012033	-	
8	Study on effect of process parameters on over cut and tool wear rate micro electro discharge slotting process	Harshit K. Dave Mathai V. J. Mayanak M. K. Raval H. K. Desai K. P.	International Journal of Advanced Manufacturing Technology, 2015	Published online	

9	A Parametric study of Radial tool actuation in Orbital EDM	Sudhanshu Kumar Harshit K. Dave K. P. Desai	Advances in Materials and Processing Technologies, 2015, vol.3-4	394	403
10	Study of effect of tool motion strategies on tool wear characteristics during generation of non circular cavities by EDM process	Mathai V. J. Harshit K. Dave Desai K. P.	International Journal of Machining & Machinability of Materials, 2015, Vol. 17	150	164
11	Studies on quality of microholes generated on Al 1100 using micro-electro-discharge machining process	Harshit K. Dave Mathai V. J. Raval H. K. Desai K. P.	International Journal of Advanced Manufacturing Technology, 2015	01	14
12	Experimental studies on thermoacoustic engine with gaseous mixture	K. P. Desai	Advances in cryogenic engineering, vol. 59A, 2014	784	789
13	Generation of square cavity using planetary EDM	Mathai V. J. Harshit K. Dave Desai K. P.	Advanced Materials Research, vol. 1036, 2014	314	319
14	Experimental Studies on Thermoacoustic Engine with Gaseous Mixtures	Ushir V. Desai K. P. Naik H. B. Atrey M. D.	CEC & ICMC held at Alaska, USA, June 17-21, 2013 and published in Advances in Cryogenics Engineering, Vol. 59A, 2014.	784	789
15	Study of Micro Hole characteristics on Al 1100 during MEDM – an Empirical Approach	Mathai V. J. Harshit K. Dave Desai K. P. Raval H. K.	International Journal of Advanced Materials Manufacturing and Characterization, 2013	321	327
16	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, 2013	55	66
17	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	International Journal of Machining and Machinability of Materials, 2013	215	230
18	Investigations on Performance Improvement of Standing Wave Type Thermoacoustic Prime Mover using acoustic amplifier.	Mehta S. M. Desai K. P. Naik H. B. Atrey M. D.	2 nd Asian Conference on Applied Superconductivity and Cryogenics Nov. 2011, New Delhi, India and published in Indian	184	189

			Journal of Cryogenics, Vol. 38 No. (1-4), 2013.		
19	Onset Behaviour of Standing Wave Thermoacoustic Pressure Wave generator	Mehta S. M. Desai K. P. Naik H. B. Atrey M. D.	ICEC & ICMC 25, at at Spokane 2011 and Published in Advances in Cryogenics Engineering, 57 A, 2012.	459	466
20	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, 2012	78	94
21	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, vol. 4, issue 2, 2012	53	58
22	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, vol. 2, issue 1, 2012	12	20
23	Modeling of cutting Forces as a function of Cutting Parameters in Milling Process using Regression Analysis and Artificial Neural Network	Harshit K. Dave Keyur P. Desai Harit K. Raval	International Journal of Machining & Machinability of Materials (Inderscience), Vol 8, No.1/2 (2010)	198	208
24	Some Preliminary Metallurgical Studies on Grain Size and Density of Work Material used in Micro Turning Operation	A. S. Patil, H. K. Dave R. Balasubramaniam K. P. Desai H. K. Raval	Journal of Minerals & Materials Characterization & Engineering (Michigan Tech. University, USA), Vol 9, No. 9, (2010)	845	853
25	Performance Prediction of PTR for Different Pressure Waveforms	Sonal Desai K. P. Desai H. B. Naik K.G. Narayankhedkar M. D. Atrey	Advances in Cryogenics , Vol. : 53 – B, (2007)	1691	1698
26	Phaser Analysis for Double Inlet Pulse tube Cryocooler	Meeta Chokhawala, Desai K. P. Naik H. B. Narayankhedkar K. G.	Advances In Cryogenics , Vol.: 45 - B (1999)	159	166

NATIONAL JOURNALS					
1	CNC Milling of Planar Curves Using Macro Programming	V K Joshi Desai K P Raval H K	Journal of manufacturing Engineering, 2016	13	19
2	Effect of orbital tool actuation during Electro discharge machining process- A critical review	Sudhanshu Kumar Harshit K. Dave K. P. Desai	The Association of Engineers, Vol. 85, 2015	49	71
3	Performance of inertance type G-M pulse tube cryocooler	B.C.Shah S.Desai H.B.Naik K.P.Desai	NSC-24 held at IPR Gandhinagar, Gujarat, 2013 and published in Indian Journal of Cryogenics, , Vol. No. 40, February, 2015.	178	181
4	Influence of Orbital Parameters with Tool Actuation on Radial Path in Electro Discharge Machining Process	Sudhanshu Kumar Harshit K. Dave K. P. Desai	Journal of Manufacturing Engineering, Vol. 10 (3)	144	150
5	Study of surface integrity of a surface machined by electro discharge machining	Harshit K. Dave Keyur P. Desai Harit K. Raval	Journal of Manufacturing Engineering (SME Journal), Vol. 6, no. 3, (2011)	36	40
6	Optimization of milling operation using combined Grey Taguchi relational method and ANOVA	H. K. Dave K. P. Desai H. K. Raval	Journal of Manufacturing Engineering (SME Journal), Vol. 5, no. 3, (2010)	190	196
7	Theoretical Model For Thermoacoustic Devices	S. Mehta H. B. Naik K. P. Desai M. D. Atrey	Indian Journal of Cryogenics, Vol. 34 (1-4), (2010)	141	146
8	Design and Development of Standing Wave Thermoacoustic Prime Mover for 300 HZ Operating Frequency	S. Mehta H. B. Naik K. P. Desai M. D. Atrey	Indian Journal of Cryogenics, Vol. 36 (A), 2011.	150	153
9	Effect of Flow Straightner on The Performance of the G-M Type Pulse Tube Cryocooler	S. Desai K. P. Desai H. B. Naik M. D. Atrey	Indian Journal of Cryogenics, Vol. 34 (1-4), (2010)	509	512
10	Performance of Double Inlet Pulse Tube with and without Buffer Volumes	S. Desai K. P. Desai H. B. Naik	Indian Journal of Cryogenics, Vol. 36 (A), 2011.	141	143,
11	Effect of Valve opening on the Performance of Orifice	Desai K. P. Naik H. B.	Indian Journal of Cryogenics, 32 (1-4),	37	40

	Pulse Tube Refrigerator	Narayankhedkar K. G.	November (2006)	
12	Double Inlet Pulse Tube Refrigerator capable of reaching 48 K	Desai K. P. Naik H. B. Narayankhedkar K. G.	Indian Journal of Cryogenics, Special Issue – 3 February , (2005)	-
13	Experimental Investigations on GM Type Orifice Pulse Tube Refrigerator	Desai K. P. Naik H. B. Narayankhedkar K. G.	Indian Journal of Cryogenics, Special Issue – 3 February , (2005)	-
14	Theoretical Analysis of GM Type Orifice Pulse Tube Refrigerator	Desai K. P. Naik H. B. Narayankhedkar K. G.	Indian Journal of Cryogenics, Special Issue – 3 February , (2005)	-
15	Experimental Study of Pulse Tube Cryocooler	Sonal Desai Desai K. P. Naik H. B. Narayankhedkar K. G.	Journal of Engineering & Technology, Vol. 15, September (2003)	-
16	Analysis of Orifice Pulse Tube Refrigerator	Desai K. P. Naik H. B. Narayankhedkar K. G.	Indian Journal of Cryogenics, Vol.: 23, December (1997)	-

INTERNATIONAL CONFERENCES

1	Application of radial tool movement in electrical discharge machining process for boring operation	Sudhanshu Kumar Harshit K. Dave Keyur P. Desai	International Conference on Material And Manufacturing Technology, Thailand (ICMMT-2016)
2	Investigation on Effect of Process Parameters on Dimensional Accuracy of Features Generated by Planetary EDM	Mathai V. J. Harshit K. Dave Keyur P. Desai	6 th International & 27 th All India Manufacturing Technology, Design and Research Conference, 2016
3	Machining of Bezier Curve by Macro Programming	V K Joshi Prof. K. P. Desai Prof H K raval	4 th International Conference on Production and Industrial Engineering, 2016
4	Novel numerical analysis of single stage GM type orifice pulse tube cryocooler	P. B. Gujarati, K. P. Desai, H. B. Naik M. D. Atrey	ICEC26-ICMC 2016, held Manekshaw Centre, New Delhi, India March 07-11, 2016.
5	Optimization of thermoacoustic engine driven thermoacoustic refrigerator using response surface methodology	A. B. Desai, K. P. Desai, H. B. Naik M. D. Atrey	ICEC26-ICMC 2016, held Manekshaw Centre, New Delhi, India March 07-11, 2016.
6	Effect of flushing strategies on	Mathai V. J.	International Conference on

	responses during planetary EDM of Ti-6Al-4V	Harshit K. Dave Keyur P. Desai	Precision, Meso, Micro and Nano Engineering (COPEN 9)- 2015
7	Effect of depth variation on machining responses during tool movement in EDM process	Sudhanshu Kumar Harshit K. Dave Keyur P. Desai	International Conference on Precision, Meso, Micro and Nano Engineering (COPEN 9)- 2015
8	A parametric Study of Radial tool actuation in orbital EDM	Sudhanshu Kumar Harshit K. Dave Keyur P. Desai	Advances in Materials and Processing Technology, AMPT-2014
9	Investigation on the effect of Tool motion strategies in EDM on Surface Quality	Mathai V. J. Harshit K. Dave Keyur P. Desai	Advances in Materials and Processing Technology, AMPT-2014
10	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	Advances in Materials and Processing Technology, AMPT-2014
11	Performance Evaluation of Orbital EDM along Helical Path over conventional cavity sinking EDM of Inconel 718	Harshit K. Dave Keyur P. Desai Harit K. Raval	Proceedings of 42 nd North American Manufacturing Research Conference June 9-13, 2014, Detroit, Michigan, USA.
12	Studies on Tool Wear Characteristics in Micro Electro Discharge Slotting Process (μ -EDS)	Harshit K. Dave Mathai V. J. Mayanak M. K. Harit K. Raval Keyur P. Desai	Proceedings of 5 th International and 26 th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) pp. 295-1 – 295-7.
13	Performance evaluation on orbital EDM along helical path over cavity sinking EDM of Inconel 718	Harshit K. Dave Keyur P. Desai Harit K. Raval Rajurkar K. P.	42 nd North American Manufacturing Research Conference June 9-13, 2014
14	Study of the Effect of Cryogenic Treatment of Tool Electrodes during Electro Discharge Machining	Harshit K. Dave Vaghela R. V. Vishal J. Mathai Keyur P. Desai Harit K. Raval	International Conference on PRECISION, MESO, MICRO AND NANO ENGINEERING
15	A Study on the Effects of Machining Parameters on Surface Roughness of a Micro Milled 3D Cavity	Harshit K. Dave Vaghela R. V. Vishal J. Mathai Keyur P. Desai Harit K. Raval	International Conference on PRECISION, MESO, MICRO AND NANO ENGINEERING
16	Technological Development of DLRP process: A Review	B.V. Desai Harit K. Raval Keyur P. Desai	3 rd International Conference on Production and Industrial Engineering CPIE-2013
17	Study on micro hole accuracy and electrode depletion during micro EDM process through Grey based Taguchi approach	Harshit K. Dave Sudhanshu Kumar Vishal J. Mathai Keyur P. Desai	3 rd International Conference on Production and Industrial Engineering CPIE-2013

		Harit K. Raval	
18	Application of Artificial Neural Network for predicting multiple responses during EDM process	Harshit K. Dave Sudhanshu Kumar Vishal J. Mathai Keyur P. Desai Harit K. Raval	3rd International Conference on Production and Industrial Engineering C PIE-2013
19	Some aspects of process monitoring in manufacturing using acoustic emission	R. S. Barot, K. P. Desai, H. K. Raval	International Conference on Advanced Computing and Communication Technologies (ICACCT-2013), Asia Pacific Institute of Information Technology, S. D. India, Panipat, pp. 38 - 42, 16th November 2013.
20	Some aspects of sensor application for monitoring manufacturing processes	R. S. Barot, K. P. Desai, H. K. Raval	International Conference on Advanced Computing and Communication Technologies (ICACCT-2013), Asia Pacific Institute of Information Technology, S. D. India, Panipat, pp. 33 – 37, 16th November 2013
21	Review of sensor application for monitoring precision manufacturing processes	R. S. Barot, K. P. Desai, H. K. Raval	Proceedings of 4 th International and 25 th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2012) pp. 76
22	Research Progress in Die-Less Rapid Prototyping Process	Bhavin V. Desai, Dr. Harit K. Raval Dr. Keyur P. Desai	ASME 2012 International Mechanical Engineering Congress & Exposition, Houston, Texas, US, November 9-15, (2012). IMECE2012-87254
23	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	9th International conference on Advances and Trends in Engineering Materials & their Applications, to be held at Montreal, Canada, August,(2011)
24	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	9th International conference on Advances and Trends in Engineering Materials & their Applications to be held at Montreal, Canada, August,(2011)
25	Effect of Orbital Tool Movement on Material Removal Rate during Electro Discharge Machining	Harshit K. Dave Keyur P. Desai Harit K. Raval	9th International conference on Advances and Trends in Engineering Materials & their Applications to be held at Montreal, Canada, August,(2011)
26	Onset Behavior of Standing Wave Thermoacoustic Pressure Wave Generator	Shreya Mehta Hemant Naik Keyur Desai	Cryogenic Engineering Conference & International Cryogenic Materials Conference, Spokane, Washington,

		Milind Atrey	USA, June 13-17, (2011)
27	Design and Analysis of Flexural based Micro Gripper	Y. M. Nikam Harshit Dave R. Balasubramaniam K. P. Desai H. K. Raval	3 rd International and 24 th AIMTDR conference at AUCE, Visakhapatnam, December, (2010)
28	Design of Standing Wave Type Thermoacoustic Prime Mover for 300Hz Operating Frequency	Shreya Mehta Hemant Naik Keyur Desai Milind Atrey	Sixteenth International Cryocooler Conference held at Georgia Tech University, Atlanta, USA, May, (2010)
29	Theoretical and Experimental Investigation of 30K Single Stage G-M Type Pulse Tube Cryocooler	S. Desai K. P. Desai H. B. Naik M. D. Atrey	Sixteenth International Cryocooler Conference held at Georgia Tech University, Atlanta, USA, May, (2010)
30	Expansion Pressure Range and Effect of Pressure on Tube to Tube-sheet Joint	Keyur Desai Nikunj Patel	International Conference on Advances in Mechanical Engineering, SVNIT, Surat, August, (2009)
31	Investigations on Improvement of Output Quality characteristics in Electro Discharge Machining Process through the Optimization of Process Parameters using Taguchi Method	Harshit K. Dave Keyur P. Desai Harit K. Raval	International Conference on Advances in Mechanical Engineering, SVNIT, Surat, December, (2008)
32	Investigations on Prediction of MRR and Surface Roughness on Electro Discharge Machine using Regression Analysis and Artificial Neural Network Programming	Dave H. K. Desai K. P. Raval H. K.	World Congress on Engineering & Computer Science, San Francisco, USA, October, (2008) (Presented)
33	Performance Prediction of PTR for Different Pressure Waveforms	Desai K. P. Naik H. B. Shreya Desai	Cryogenic Engineering Conference & International Cryogenic Material Conference, Chattanooga, USA, July, (2007)
34	Fundamentals and design aspects of thermo-acoustic device	Shreya Mehta Hemant Naik Keyur Desai Milind Atrey	International conference on Advances in Mechanical Engineering, SVNIT, Surat, India, May (2007)
35	Theoretical Model for G-M Type Orifice Pulse Tube Cryocooler	K. P. Desai H. B. Naik K. G. Narayankhedkar	21 st IIR International Congress of Refrigeration, Washington DC, USA, August, (2003)
36	Phaser analysis for Orifice Pulse Tube Cryocooler	Meeta Chokhawala K. P. Desai H. B. Naik K. G. Narayankhedkar	18 th International Cryogenic Engineering Conference <i>(Presented)</i> Mumbai, India, February (2000)
37	Development of Three Variable Co-relations for Metal	Lad S. D. Desai K. P.	International Conference on Advances in Mechanical &

	Removal Rate(MRR) and Surface Finish (Ra & Rt) in EDM Process	Raval H. K.	Industrial Engineering, Roorkee, India, February (1997)
38	Computer Aided Design of Gating and Riser System	Desai K. P. Raval H. K.	International Conference on Automation (ICAUTO-95), Indore, India, December 1995 (Presented)
39	Performance of Two Level and Three Level Time Stepping Schemes for Solidification Problem	Desai K. P. Naik H. B. Dave A. K.	International Conference on Advances in Mechanical Engineering Bangalore, India, December, (1995)
40	Computer Aided Design of Press Tools for Sheet Metal Blanking	Raval H. K. Desai K. P.	International Conference on Stochastic Models, Optimization Techniques and Computer Applications (ICSOC-94) Coimbatore, India, December, (1994)
41	Computer Aided Sheet Metal Strip Layout	Desai K. P. Raval H. K.	International Conference on CAD, CAM, Robotics and Autonomous Factories (INCARF-93) New Delhi, India, December, (1993)

NATIONAL CONFERENCES

1	“Machining/Processing of Shape Memory Alloys – A Review”,	Vishal J. Mathai Sudhanshu Kumar Harshit K. Dave Keyur P. Desai	Proceeding of National Conference on Recent Advances in Manufacturing at SVNIT, Surat, 2015
2	Effect of pulse duration on machining of AISI 304 utilizing radial tool orbiting technique in EDM process	Sudhanshu Kumar Harshit K. Dave Keyur P. Desai	Proceeding of National Conference on Recent Advances in Manufacturing at SVNIT, Surat, 2015
3	Design and analysis of standing wave quarter wavelength thermo acoustic engine	A. B. Desai K. P. Desai H. B. Naik M. D. Atrey	Presented in NSC-25, held at University of Hyderabad, Hyderabad, India, December 8-10, 2014.
4	Numerical modelling of GM type orifice pulse tube cryocooler	P. B. Gujarati K. P. Desai H. B. Naik M. D. Atrey	Presented in NSC-25, held at University of Hyderabad, Hyderabad, India, December 8-10, 2014.
5	CFD Simulation of Standing Wave Type Thermoacoustic Prime - Mover	Chirag Fadadu H. B. Naik K. P. Desai	NSC-24 held at IPR Gandhinagar, Gujarat, India, January 21-24, 2013.
6	Effect of Cryogenic Temperature Rolling on Mechanical Properties and Microstructure of Pure Copper	KandarpChangela, H. B. Naik, K.P. Desai	NSC-24 held at IPR Gandhinagar, Gujarat, India, January 21-24, 2013.
7	Investigations on Performance Improvement of Standing	Mehta S. M. K. P. Desai	NSC-24 held at IPR Gandhinagar, Gujarat, India, January 21-24, 2013.

	Wave Type Thermoacoustic Prime Mover using acoustic amplifier	H. B. Naik M. D. Atrey	
8	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)
9	Design and development of standing wave thermoacoustic prime mover for 300 Hz operating frequency	Shreya Mehta Hemant Naik Keyur Desai Milind Atrey	23 rd National Symposium on Cryogenics, NIT, Rourkela, October, (2010)
10	Performance of Double Inlet Pulse Tube With And Without Buffer Volumes	S. Desai K. P. Desai H. B. Naik M. D. Atrey	23 rd National Symposium on Cryogenics NIT, Rourkela, October, (2010)
11	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	Advances in Materials & Product Design at SVNIT, Surat during 22 – 23 November, 2010, Proceedings of AMPD (2010) pp. 74-84
12	Optimization of Material Removal Rate in Electro Discharge Machining Process using Response Surface Method	H. K. Dave K. P. Desai H. K. Raval	Golden Jubilee National Conference on Recent Advances in Manufacturing at SVNIT, Surat, July, 2010, Proceedings of RAM (2010) pp. 103-107
13	Orbital Machining during Electro Chemical Machining Process: A Review	V. K. Joshi K. P. Desai H. K. Raval	Golden Jubilee National Conference on Recent Advances in Manufacturing at SVNIT, Surat, July, 2010, Proceedings of RAM (2010) pp. 66-71
14	Effect of flow-straightner on the performance of G-M type Pulse tube Cryocooler	S. Desai K. P. Desai H. B. Naik M. D. Atrey	22 nd National Symposium on Cryogenics (NSC-22), IISC Bangalore, December, (2008)
15	Theoretical model of thermo-acoustic device	Shreya Mehta Hemant Naik Keyur Desai Milind Atrey	22 nd National Symposium on Cryogenics (NSC-22), IISC Bangalore, December, (2008)
16	Optical Seam Tracking - An Advanced Welding Automation Technique	Nikunj Gaderia, Desai K. P.	Emerging Trends in Mechanical Engineering, SVNIT, Surat, June, (2007)
17	Fundamentals and Design Aspects of Thermo-acoustic Device	Shreya Mehta, K. P. Desai H. B. Naik	Emerging Trends in Mechanical Engineering, SVNIT, Surat, June, (2007)
18	Cryo-tempering : A Novel Method of Improving	Shreya Mehta K. P. Desai	Emerging Trends in Mechanical Engineering, SVNIT, Surat, June,

	Properties of Steels	H. B. Naik	(2007)
19	Effect of Valve Opening on the Performance of Pulse Tube Refrigerator In OPTR Mode	K. P. Desai H. B. Naik K. G. Narayankhedkar	21st National Symposium on Cryogenics, NPL, New Delhi, November, (2006)
20	Experimental study of orifice pulse tube refrigerator	Desai K. P. Naik K. P. Narayankhedkar K. G.	21st National Symposium on Cryogenics, NPL, New Delhi, November, (2006)
21	Double Inlet Pulse Tube Refrigerator capable of reaching 48 K.	Desai K. P. Naik K. P. Narayankhedkar K. G.	20th National Symposium on Cryogenics (Presented) Surat, India, February (2005)
22	Experimental Investigations on GM Type Orifice Pulse Tube Refrigerator	Desai K. P. Naik K. P. Narayankhedkar K. G.	20th National Symposium on Cryogenics (Presented) Surat, India, February 2005
23	Theoretical Analysis of GM Type Orifice Pulse Tube Refrigerator	S. Desai, K. P. Desai H. B. Naik	20th National Symposium on Cryogenics (Presented) Surat, India, February (2005)
24	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)
25	Parametric Study on power consumption in Turning	H. K. Raval K. P. Desai D. B. Naik Dr. A. K. Dave	Proc. of 8th National Convention of Mechanical Engineers, The Institution of Engineers (India), Roorkee, Oct-30-31,, Nov-1, (1992)
26	Thermal Conductivity of Moulding Sand.	Desai K. P. Naik H. B.	7th ISME Conference Madras, India, December, (1989)
27	Performance Characteristics of Alcohol fueled S. I. Engine	Desai K. P., Channiwala S. A.	11th National Conference on I.C. Engine & Combustion (NCICEC) Chennai, India , December, (1989)
28	Performance Characteristics of LPG fueled S. I. Engine	K. P. Desai R. D. Jani D. M. Talati S. A. Channiwala	10th National Conference on I.C. Engine & Combustion (NCICEC) Rajkot, India, December, (1987)

Annexure B

M.Tech. / Ph.D. guided dissertation / thesis detailed list

M.E./M.Tech. DISSERTATIONS GUIDED: 37 (Completed)

- 1) "Parametric Study of Heat Loss in Runner" by Mr. R. Yadav.
- 2) "Parametric Study of EDM Process" by Mr. S.D. Lad.
- 3) "Experimental Investigations of Tool-Chip Interface Temperature during Interrupted Maching by Mr. P.P. Tamakuwala.
- 4) "Design Development and Testing of a Distribution Valve for PTR" by Mr. R.D. Jadeja.
- 5) "Phasor Analysis of Ptr" by Ms. Meeta Chokhawala.
- 6) "Development of an Experimental Set-up for PTR" by Ms. Sonal Desai.
- 7) "Analysis of active Buffer PTR system" by Mr. P. C. Jha.
- 8) "Experimental study of PRT" by Ms. Falguni Desai.
- 9) "Effect of Valve Opening on the Performance of Pulse Tube Refrigerator" by Mr. Vipul Goti.
- 10) "Investigations on Two-Stage Pulse Tube Refrigerator" by Mr. Kalpesh Dhavale.
- 11) "Evaluation and improvements of Seam Tracking System", by Nikunj Gaderia.
- 12) "Design and Development of Hydraulic Expansion Bag", by Mr. Nikunj Patel.
- 13) "Investigations on Inertance Pulse tube Refrigerator" by Ms. Bhumika Barfiwala
- 14) "Analysis of Thermoacoustic Refrigerator" by Mr. Ketan Choudhary.
- 15) "Some Investigations on Microturning" by Mr. Atul S. Patil.
- 16) "Design of Micro Assembly Station & Design and Analysis of Micro Gripper" by Mr. Yogesh Nikam.
- 17) "Computer Aided Design of Jigs & Fixtures" by Mr. Divyesh Patel.
- 18) "Analysis of influence of Process Parameters on Surface Quality, TWR and MRR on Inconel-601" by Mr. Vinay Parikh.
- 19) "Phasor Analysis of Pulse Tube Cryocoolers" by Mr. Nilay Modi.
- 20) "Experimental Investigations on G-M type Pulse Tube Cryocooler" by My. T. Srikanth.
- 21) "Experimental Investigations on Thermo Acoustic Refrigerator" by Mr. Abhinav Desai.
- 22) "Design and fabrication of thermoacoustic prime mover" by Brijmohan Singh Anjna.
- 23) "CFD simulation of standing wave type thermoacoustic prime mover" by Chirag M. Fadadu.
- 24) "Development of traveling wave type thermoacoustic prime mover" by Chandra Prakash Gupta.

- 25) "Experimental study on cryogenic rolling" by Kandarp P. Changela.
- 26) "Investigations on G-M type single stage pulse tube refrigeration" by Hardik C. Desai
- 27) "Experimental investigation on thermoacoustic refrigeration" by Mayank R. Purohit.
- 28) "Development of the Solar Driven Thermoacoustic Prime Mover" by Chetan Khunt.
- 29) "Development of Thermoacoustically driven Pulse Tubecryocooler" by Naresh Yarramsetty.
- 30) "Experimental Investigation of Travelling wave Thermoacoustic Engine" by Sachin Shamrao Mali.
- 31) "Experimental Investigation of Thermoacoustic engine by using Noble Gas" by Ushir Vishal D.
- 32) Thermoacoustic cooling system for microelectronic circuit by Manju Lata.
- 33) Pulse Tube Cryocooler driven by thermoacoustic engine by Vinay Ingle.
- 34) Investigation on Gifford McMahon Type Pulse Tube Cryo cooler by Jaymin Parikh
- 35) Characterization of a 300 Hz Thermo Acoustically Driven Pulse Tube Cooler by Tushar Rathod
- 36) Investigations on Influence on Process Parameter on Depth in Pulsed Fiber Laser Marking Machine of Hylam Material by Ganesh Jadhav
- 37) Finite Element Analysis for Optimizing the Punch and Die Clearance in the Blanking Process by Shailesh Pol

Ph.D. RESEARCH GUIDED: 5 (Completed) + 3 (Ongoing)

- 1) Theoretical and experimental investigations on standing wave thermoacoustic engine with 300 Hz frequency by Mrs. Shreya Mehta (completed).
- 2) Helical path orbital electro Discharge Machining of AISI 304 and Inconel 718 by Mr. Harshit K. Dave (completed).
- 3) Investigations on Electro-chemical Machining: V. K. Joshi (ongoing).
- 4) Investigations on Incremental Forming Process: Mr. Bhavin Desai (completed).
- 5) Investigations on Two Stage Pulse tube Cryocooler for 10 K Applications: Mr. Paresh Gujarati (ongoing).
- 6) Spark column behaviour analysis using acoustic for EDM – Mr. Rakesh Barot (ongoing).
- 7) Investigations on orbital EDM process – Mr. Sudhanshu Kumar (completed).
- 8) Investigations on micro EDM process – Mr. Vishal J. Mathai (completed).

Annexure C

R & D Project

Title of Project	Funding Agency Name (a) National* (b) State * (c) Private* (d) Trust/Society*	Team of Investigator(s)	Sanction Amount (Rs.)	Sanctioned Date	Status Ongoing/ Completed
Design Development & investigations on Two Stage GM Type Pulse Tube Cryocooler for 10 K Application	(a)	Dr. H. B. Naik Dr. K. P. Desai Dr. M. D. Atrey (IIT-B)	29,00,000/-	2012	Completed
Investigations On Metal Removal Rate In Electro Discharge Machining Process Under Orbital Tool Movement" Sanction No. Sr/S3/Merc - 0044/2010(G)/2011 (21-06-2011)	(a)	Dr. K. P. Desai Dr. H. K. Dave Dr. H. K. Raval	15,35,000/-	2011	Completed
Financial Assistance under FIST Program to strengthen PG teaching and research in the department.	(a)	Project Implementaion Group Dr. H. B. Naik Dr. K. P. Desai Dr. J. Banerjee	1,36,00,000/-	2008	Completed
Development of a Prototype Thermo-acoustic Prime Mover	(a)	Dr. H. B. Naik Dr. K. P. Desai	15,01,000/-	2008	Completed
Design, Development & Investigations of Pulse Tube Nitrogen Liquefier of around 1 litre / hour Capacity	(a)	Dr. H. B. Naik Dr. K. P. Desai Dr. M. D. Atrey (IITB)	33,77,000/-	2004	Completed
Development & Investigations on Pulse Tube Refrigerator for 1 watt capacity at 80 K Applications	(a)	Dr. H. B. Naik Dr. K. P. Desai Dr. K. G. Narayankhedkar (IITB)	12,47,000/-	1998	Completed
Development of Cryogenics Laboratory	(a)	Dr. K. P. Desai Dr. H. B. Naik	15,00,000/-	1997	Completed
Development of Prototype Thermo-acoustic Refrigerator	(d)	Dr. H. B. Naik Dr. K. P. Desai	1,30,000/-	2007	Completed

* Please mention category of funding agency viz. (a),(b),(c) and (d)

Annexure D

Conference /Short term Course / Workshop / Training Programme / Seminar Organized

Module Description	Any other contributory Inst. / Industry	Developed / organized by	Duration	Resoruce Persons	Target Audience	Usages and citation etc.
Short term training programme on Advance Manufacturing process	TEQUIP-II	SVNIT, Surat	June, 2015	Faculty from IITs and NITs as expert speakers	Faculty of Academic institutes + industry personnel + artician	Literature distributed amongst participants
National Level Seminar on Traditional Black Smithy- Present Trends & Future Prospects	VNIT, Nagpur ATRC, Bardoli	SVNIT, Surat	January, 2009	Faculty from IITs and NITs as expert speakers	Faculty of Academic institutes + industry personnel + artician	Literature distributed amongst participants
Workshop on Finance	NPIU, Delhi Inst. of Engineers, SURAT CHAPTER	SVNIT, Surat	March, 2006	Faculty from NPIU as expert speakers	Faculty of Academic institutes + industry personnel	Literature distributed amongst participants
Twentieth National Symposium on Cryogenics – 2005	Indian Cryogenics Council, Self Financed	SVNIT, Surat	Feb, 2005	Faculty from IITs, NITs, expert speakers	Faculty of Academic institutes + industry personnel	Literature distributed amongst participants
Self Financed Course on Cryogenic Engineering	AICTE, New Delhi	SVNIT, Surat	October, 1998	Faculty from IITs and NITs as expert speakers	Faculty of Academic institutes + industry personnel	Literature distributed amongst participants
Seminar on “Internet – Uses and Applications’	SVNIT	Faculty Association SVNIT, Surat	Feb, 1997	Faculty from NITs as expert speakers	Faculty of Academic institutes + industry personnel	Literature distributed amongst participants

Annexure E

Expert lecture delivered and organized

No. of Expert Lecture delivered:

- 1) Expert lecture on “Advanced Machining Process” in AMP-2015 at SVNIT, Surat.
- 2) Expert lecture on “Orbital EDM” at Nirma University, Ahmedabad.
- 3) Visiting professor for M. Sc. (Tech) (Instrumentation) Programme for V.N.S.G.U, SURAT (For Three Years).
- 4) Expert Lecture on “Advances in GT and CAPP “at Nirma University, Ahmedabad.
- 5) Lecture on ‘Group Technology and CAPP’ at Short Term Training Programme (Advances in CAM) at SVNIT, Surat, July 2008.
- 6) Invited Lecture on ‘Group Technology’ at N. G. Patel Polytechnic College, Bardoli.
- 7) Lecture on ‘Unconventional Machining Processes at Short term training programme (RTMT-06) at Sakalchand College of Engineering, Visnagar, December 2006.
- 8) Practical Demonstration about the uses of ANSYS Software at "Dedicated Course on FEM for Mechanical Engineering for Larson and Toubro, Hazira, August 1995.

Annexure F

Consultancy & Testing

Sr. No.	Title	Organization	Month & Year of Completion	Amount
1.	Overall coordinator, Reliance Degree level Training Programmes	Reliance Industries Ltd., Hazira	July 2007 - March 2010	3.5 Crores Approx.
2.	Chief Coordinator, Training programmes for L&T- MHI Turbine Generator Pvt. Ltd.	L & T – MHI, Boilers and L & T – MHI, Turbine	(a) October 2008 to December 2008 (b) November 2009 to January 2010	82 Lacs Approx.
3.	Measurement of blade angles for yarn cutting blades	Reliance Industries Ltd., Hazira	January 2007	1000.00
4.	Surface roughness Measurement for a pulley	Rajkamal Industries, Navsari	August 2007	1200.00
5.	Measurement of micro-hole diameter	M/S/ Fairdeal Filaments	July 2007	1000.00
6.	Machining of Welded specimen for weld joint strength testing	All weld Industries, Olpad	April 2006	800.00
7.	Chief co-coordinator, Training Programme for ESSAR	Essar Steel Ltd., Hazira	2004 - 2005	6.0 Lacs. Approx.
8.	Calibration of various Measuring Instruments	Welding Rods Pvt. Ltd., Surat	May 2002	4000.00
9.	Inspection of the Machining work done at the Institute	Indu Magnetic, Surat	1999-2001	—
10.	Inspection of the Machining work done at the Institute	Gujarat Gears, Surat	1997-2000	—
11.	Surface Roughness Measurement	Baroda Rayon Corporation., Surat	1997-1999	5000.00
12.	Profile Checking and Surface Roughness Measurement	Garden Engineering Ltd., Surat	1995-1997	3000.00

Annexure G

Interaction with outside world

(a) Institute abroad, Eminence institute in India & National Research Lab.

- (1) IIT, Bombay
- (2) UC Berkley, San Francisco, USA
- (3) IISc, Bangalore
- (4) U.V.C.E., Bangalore
- (5) SGSITS, Indore
- (6) IIT, Delhi
- (7) University of Roorkee, Roorkee
- (8) SGSITS, Indore

(b) Institute / Industry not cover above

- (1) L & T, Hazira, Surat
- (2) Reliance, Hazira, Surat
- (3) Essar Steel Ltd., Hazira, Surat
- (4) Design Tech, Pune
- (5) Rajkamal Industries, Navsari
- (6) M/S/ Fairdeal Filaments
- (7) All weld Industries, Olpad
- (8) Welding Rods Pvt. Ltd., Surat
- (9) Indu Magnetic, Surat
- (10) Gujarat Gears, Surat
- (11) Baroda Rayon Corporation., Surat
- (12) Garden Engineering Ltd., Surat

(c) State level Institute / Industry / R&D Organization

- (1) MHRD, New Delhi
- (2) DST, New Delhi
- (3) AICTE, New Delhi
- (4) BRNS, DAE, Mumbai
- (5) IUACC, Delhi

(d) NBA Visit

N.A.

(e) Member of Board of Studies / Academic body of other institute

- (1) Board of studies in Mechanical Engineering, VNSGU, Surat

(f) Expert Lecture

As per Annexure E

(g) Thesis evaluation / Examination conduct

M.Tech. Thesis

- a. Gujarat Technological University, Ahmedabad (GJ) - 12

(h) Collaborative R&D Projects

As per Annexure C

(i) Consultancy & Testing work

As per Annexure F

(j) Collaborative Conference / Workshop / Seminar organized

As per Annexure D

(k) Visiting faculty to other institute

- (1) Veer Narmad South Gujarat University, Udhna Magdalla Road, Surat

(l) Co-guidance Project / Dissertation / Thesis

N.A.

(m) Visit to foreign country to participant in International Conference, foreign deputation, Post Doct, etc.

- (1) Visited USA during 22-24 October, 2008 to attend and to presented a research paper in World Congress on Engineering & Computer Science, UC Berkley, CA.