

BIO DATA

Name: - Dr. Bharkatkar M. Sutarla

Address: - 39, Rajvihar Row House,
B/H Shreeji Nagari Nr. Parishram Park, Ugat Road
Jahangirabad, Surat – 395 005

Date of Birth: 21/05/1967, **Place:** Goral, Dist; Sabarkantha, Gujarat.

Position: -Associate Professor Joining of Present Post: 01/01/2006

Date of Joining: 17/08/1991 **Ph.D. Degree Awarded:** 2011



Educational Qualifications:

Degree	College/University	Year	Specialization
Ph.D.*	SVNIT, Surat	2011	Engine Tribology
M.E. Mechanical	REC, Surat, South Gujarat	1996	Mechanical Engg.
B.E. Mechanical	S.S. Engg. College, Bhavnagar	1989	Mechanical Engg.

* **Title of Theses:** Experimental Evaluation of PRA Friction Using Various Operating Parameters Under Motorized Condition

Experiences :

University / College/ Industry	Designation	Period
SVNIT, Surat	Associate Professor	01/01/2006 to till date
SVNIT, Surat	Lecturer	17/08 /1991 to 31/12/2005
B & B Polytechnic College, V.V.Nagar, Anand	Lecturer	01/03/ 1991 to 16/08/1991
Mipco Seamless Rings Ltd., Bharuch	Maintenance Engineer	01/08/1990 to 28/02/1991

Subjects taught and Research Area of Interest:

Basic Mechanical Systems	Mesurement Systems
Energy & Enviornment Engineering	Applied Thermodynamics & Thermal engineering
Industrial Tribology (PG)	Tribology & Machine Dynamics
Experiment Techniques (PG)	Heat Transfer
Instrumentation & Control (PG)	

Research Publications :

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

Publications	Numbers
International Journal	21
National Journal	02
International Conference	35
National Conference	28

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

- Ph.D. : 2 Completed + 05 on going
- M. Tech. Disrtation : 26 Completed
- B. Tech Disertation : 15 Completed + 2 PDDC

No. of R&D Project (Funded by various agenices) :

Title of Project	Funding Agency Name (a) National* (b) State * (c) Private* (d) Trust / Society*	Team of Investigator(s)	Sanction Amount (Rs.)	Sanctioned Year/Date	Status Ongoing/ Completed
Tribology Performance Study on Two Stroke SI Engine (2006-2007)	(a)	Dr. D. V. Bhatt B. M. Sutaria	7.5 Lacs	2006-2007	Completed

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

Consultancy & Testing : Consultancy : 02

Title of Project /Work	Agenices	Team of Faculty	Amount(Rs.)	Date
To Provide Proof Checking Services For Launching Scheme For Steel Girder For Railway Over Bridge on Bagodra – Vasad – Tarapur Road	M/s Rajkamal Builders Infrastructure Pvt Ltd. 54, Park hill society, Near Heaven Park Society, Ramdevnagar, Ahmedabad -380 015	Dr. B. M. Sutaria Dr. A. K. Deasai Dr. C. D. Modhera	1,01,250 = 00	September – October, 2013
Remaining Life Assesments Study of Steel Tanks Nos 20	RSPL, GIDC Panoli, Ankleshwar	Dr. B. M. Sutaria Dr. A. K. Deasai Dr. J. V. Meghani	1,77,000 = 00	Feb-March, 2016

Institute Administrative Responsibilities:

Sr. No	Nature of Work	Period
1.	Institute exam coordinator	2015 to till date
2.	Additional Liaison officer, SC ST Cell	2017 to till date
3.	Professor In charge & Head of Physical Education	2018 to 2019
4.	Coordinator of Ph. D. for Institute Convocation ceremony	2011 to 2017
5.	Department Research & Consultancy cell	2017 to 2018
6.	Chairman Public Relation	2017 to 2018
7.	Member of Procurement Committee (World Bank Funded Project, TEQIP –I)	2003 to 2009
8.	Former Hostel Warden	1995 to 1997
9.	Former Gymkhana In-charge	1995 to 1996
10.	Former Cochairman, Annual culture program SPARSH	2012 to 2016

Department Administrative Responsibilities:

Sr. No.	Departmental Work	Duration
1.	PG In-Charge M. Tech (Research)	2011 to 2014
2.	PG In-Charge M. Tech. (Mechanical)	2014 to 2017
3.	PG In-Charge M. Tech. (Mechanical) -Project/Seminar	2017 to 2019
4.	Coordinator , PG and U.G. Exams	2012 to 2013
5.	Committee Member for PhD Program Admission	2012 to 2017
6.	Co-Chairman of UG-Program Curriculum Revision	2014 to 2015
7.	M. Tech (Research) Scrutiny Committee	2014 to 2015
8.	M. Tech under Sponsored Scrutiny Committee	2015 to 2016
9.	P.G. Admission-2016	2016 to 2017
10.	Member of Departmental Time Table Committee	2003 to 2005
11.	Member of M. Tech. Syllabus Revision/Restructuring Committee	2014 to 2015
12.	Member of Departmental Ph.D. Admission Committee	2011 to Continue
13.	Member of Departmental Squad Committee for Exam	2017 to 2019
14.	Coordinator, Ph.D. Programme (Including QIP & M. Tech. Research sponsored category)	2020 to Continue

Department Laboratory In-charges:

Sr. No	Laboratory Name	Period
1.	Internal Combustion Engine	1993 to 1995
2.	Basic Mechanical Systems	1995 to 2000
3.	Tribology & Maintenance	2000 to 2003
4.	Heat Transfer	2002 to 2010
5.	Tribology & Machine Dynamics	2005 to till date
6.	Mechanical Measurement Systems	2016 to till date

(Dr. B. M. Sutaria)

Visited foreign countries: UK, USA, Turkey, UAE, Thailand

Email:bms@med.svnit.ac.in, CC No.:09427421615

RESEARCH PUBLICATIONS:

International Journals:

Sr. No.	Authors	Title of Paper	Journal/ Volume/ Page No	Year
1	Sutaria B. M. Bhatt D.V. Mistry K.N.	Simulation of Piston Ring Friction Models of Single Cylinder Internal Combustion Engine	World Applied Science Journal, Volume 7 (8) / PP: 998-1003	2009
2	Sutaria B. M. Bhatt D.V. Mistry K.N.	Analysis of Friction Characteristic at Piston Ring Assembly Using Various Parameters on Single Cylinder S.I. Engine	Applied Engineering Research (IAER) Volume 6, No. 5 /PP: 645–660	2011
3	Bhatt M.K. Sutaria B.M. Gaderia S.N. Channiwala S.A.	Determination of losses & loss coefficients of solar flat plate collector when wind velocity & tilt angle at zero value - an experimental study	Applied Mechanics and Materials, Volume 376, pp:294-298	2013
4	Bhatt M.K. Sutaria B.M. Gaderia S.N. Channiwala S.A.	To study different losses and loss co-efficient on solar flat plate collector at 900 yaw angle	Applied Mechanics and Materials, Volume 575, pp: 677-681	2014
5	Sutaria B. M. Bhatt D.V.	Optimization of Reciprocating Friction and Wear Test Rig Operating Parameters for Segmented Piston Ring: Liner Assembly	Springer 2014, XXVIII, PP: 205-214, ISBN 978-81-322-1655-1	2014
6	Bandapalli. C Singh K. K. Sutaria B. M. Bhatt D. V.	Experimental Investigation of Machinability Parameters in High-Speed Micro-End Milling of Titanium (Grade-2)	International Journal of Advances in Manufacturing Technology, DOI 10.1007/s00170-015-7443-1, Received: 12 October 2014 / Accepted: 15 June 2015, Vol.85, pp.:2139-2153 Springer-Verlag London.	2015
7.	Tejashkumar Chaudhary Sutaria B. M.	Investigation of Friction Characteristics in Segmented Piston Ring Liner Assembly of IC Engine	International Journal of Perspectives in Science, http://dx.doi.org/10.1016/j.pisc.2016.06.032	2016

8.	Bandapalli. C Singh K. K. Sutaria B. M. Bhatt D. V.	Experimental Investigation and Estimation of Surface Roughness Using ANN, GMDH & MRA Models in High Speed Micro End Milling of Titanium Alloy (Grade-5)	Materials Today: Proceedings - Elsevier 4 (2017): 1019–1028, https://doi.org/10.1016/j.matpr.2017.01.115	2017
9.	Patil M. G. Sutaria B. M.	Tribological Parameters Analysis of Cam Follower Pair with Using Different Concentration of Anti-Wear Additives in Lubricants	International Journal of Advances in Science Engineering and Technology, ISSN: 2321-9009, Vol-5, Iss-3, Spl. Issue-1 Aug.-2017	2017
10.	Bandapalli. C Singh K. K. Sutaria B. M. Bhatt D. V.	Experimental Investigation of Surface Roughness In High Speed Micro End Milling of Near Alpha Titanium Alloys	International Journal of Precision Technology, Print ISSN: 1755-2060 Online ISSN: 1755-2079, https://doi.org/10.1504/IJPTECH.2017.090764	2018
11.	Bandapalli. C Singh K. K. Sutaria B. M. Bhatt D. V.	Experimental Investigation of Top Burr Formation in High-Speed Micro-End Milling of Titanium Alloy	Machining Science and Technology, doi: 10.1080/10910344.2018.1449213	2018
12.	Dave Hiren R. Sutaria B. M. Patel Brijesh	Effect of Pilot Quantity on Combustion and Emission Characteristics of a Single-Cylinder Diesel Engine under Fixed Dwell Condition: Experimental and Numerical Study	Clean Technologies and Environmental Policy https://doi.org/10.1007/s10098-019-01680-6	2019
13	Dave Hiren R. Sutaria B. M. Patel Brijesh	Achieving Modulated Kinetics (MK) Combustion Mode in an Off-highway Diesel Engine - An Experimental Study.	International Journal of Energy, Environment and Economics, 25, 3, 187-205.	2019
14	Rahul Kumar, Achchhe Lal, B. M. Sutaria	Non-linear deflection and stress analysis of laminated composite sandwich plate with elliptical cutout under different transverse loadings in hygro-thermal environment	Curved and Layer. Struct. 7: 80-100	2020

15	Achchhe Lal, B. M. Sutaria, Rahul Kumar	Bending analysis of a sandwich plate with elliptical/circular cutout	IOP Conf. Series. Materials Science and Engineering: doi:10.1088/1757-899X/1004/1/012019	2020
16	Achchhe Lal, B. M. Sutaria, Rahul Kumar	Stress analysis of composite plate with cutout of various shape	IOP Conf. Series. Materials Science and Engineering: doi:10.1088/1757-899X/814/1/012011	2020
17	Rahul Kumar, Achchhe Lal, B. M. Sutaria	Comparative buckling analysis of laminated composite plates with various shapes of hole	Material Today: Proceedings: https://doi.org/10.1016/j.matpr.2020.10.205	2020
18	Achchhe Lal, B. M. Sutaria, Kundan Mishra	Fracture analysis of single edge cracked functionally graded material plate under various loading conditions by extended finite element method	IOP Conf. Series. Materials Science and Engineering: doi:10.1088/1757-899X/814/1/012014	2020
19	Achchhe Lal, B. M. Sutaria, Kundan Mishra	Fracture analysis of center crack functionally graded material plate under tensile biaxial loading by extended finite element method	IOP Conf. Series. Materials Science and Engineering: doi:10.1088/1757-899X/1004/1/012021	2020
20	Kundan Mishra, Achchhe Lal, B. M. Sutaria	Fracture analysis of edge cracked FGM plate under compressive load along crack	IOP Conf. Series. Materials Science and Engineering: doi:10.1088/1757-899X/1017/1/012018	2020
21	Makwana Mohit B. M. Sutaria	Slurry erosion behaviour of Ni-Hard under various impact angle and speed	IOP Conf. Series: Materials Science and Engineering 1004 (2020) 012023, doi:10.1088/1757-899X/1004/1/012023	2020

National Journals:

Authors	Title of Paper	Journal/ Volume/ Page no	Year
Sutaria B. M. Bhatt D.V. Mistry K.N.	Development of Test Rig and Experimental Study to Measure Piston Ring Assembly Friction under Different Variables	Indian Journal of Tribology Volume 5 (1) /PP: 37-41	2010
Bandapalli. C Sutaria B. M. Bhatt D. V.	Estimation of surface roughness on Ti-6Al-4V in high speed micro end milling by ANFIS model	Indian Journal of Engineering & Materials Sciences Vol. 26, October-December 2019, pp. 379-389	2019

International Conferences:

Sr. No.	Authors	Title of paper	Name of Conferences / Seminar	Month & Year
1	Sutaria B. M. Bhatt D.V. Mistry K.N.	Theoretical Analysis of Various PRA Friction Models of an I.C. Engine- An Over View	International Conference on Industrial Tribology, IISc, Bangalore	30. Nov to 2 Dec., 2006
2	Sutaria B. M. Bhatt D.V. Mistry K.N.	Friction Force Analysis In Piston Ring of A Single Cylinder Gasoline Engine Under Motorized Condition	International conference on recent trend in Mechanical Engineering, SUSCET, Mohali, Punjab	23 to 25 Jan-2008
3	Sutaria B. M. Bhatt D. V. Mistry K.N.	Simulation of PRA Friction Models And Experimental Study of An Internal Combustion Engine	Energy Engineering Vol.1, Mechanical Engineering, (ICEE-2009), Pondicherry Engg. College, Pondicherry	9 -10, January 2009 PP: 203-208. ISBN: 978-81-8424-479-3 Vol. I
4	Sutaria B. M. Bhatt D.V. Mistry K.N.	Simulation And Modelling of Friction Force And Oil Film Thickness In Piston Ring Cylinder Liner Assembly	World Congress on Engineering, (WCE-2009) Imperial College, LONDON, U.K.	30 th June -2 nd , July 2009 PP: 1452-1457 ISBN (Vol. I & II) 978-988-17012-5-1 978-988-18210-1-0
5	Sutaria B. M. Bhatt D.V. Mistry K.N. Shah A. S.	Experimental Study & Analysis of Temperature Variation In Multi Cylinder Motorized Engine Test Rig Under Different Lubricants – A Case Study	World Congress on Engineering, (WCE-2009) Imperial College, LONDON, U.K.	30 th June -2 nd , July 2009 PP: 1635-1639 ISBN (Vol. I & II) 978-988-17012-5-1 978-988-18210-1-0
6	Sutaria B. M. Bhatt D.V. Chaudhry A. S.	Simulation of PRA Friction Force For Single Cylinder Four-Stroke S.I. Engine Under Motorized Condition	Advances in Mechanical Engineering (ICAME- 2009), S.V.N.I.T, Surat, Gujarat.	3 – 5, August 2009, PP: 502-507
7	Sutaria B. M.	Multi Cylinder I.C.	7 th International	2 – 4,

	Bhatt D.V. Shah A. S. Aware G.	EnginePerformance Studies Under Different Lubricants – A Case Study	Conference on Industrial Tribology, (ICIT-2010),IspatBhavan, Ranchi, Bihar.	Dec.,2010
8	Sutaria B. M. Bhatt D.V. Shah A. S. Aware G.	Variation In Lubrication Regimes for Changes In Ring Geometry In A Multi Cylinder I. C. Engine Test Rig	7 th International Conference on Industrial Tribology, (ICIT-2010),IspatBhavan, Ranchi, Bihar	2 – 4, Dec.,2010
9	Sutaria B. M. Bhatt D.V. Patel M. T.	Ranking of Automotive Oil	7 th International Conference on Industrial Tribology, (ICIT-2010),IspatBhavan, Ranchi, Bihar	2 – 4, Dec.,2010
10	Sutaria B. M. Bhatt M. K. Gaderia S. N.	Intelligent Control System for Industrial Automation of Existing Plant – A Cost Saving Approach	International Conference on Manufacturing Engineering and Technology, PHUKET, THAILAND	21- 23, Dec., 2011 Pp:993-995 ISSN 2010-3778
11	Sutaria B. M. Bhatt M. K. Gaderia S. N. Channiwala S. A.	Experimental Study on Solar Flat Plate Collector for Losses Under Different Input Heat Flux by Changing Wind Velocity at 45 DegreeYaw Angle and at Zero Tilt Angle	International Conference on Applied Science & Engineering Technology, ICASET-2012, ROME, ITALY	26-27, Sept.,2012
12	Sutaria B. M. Patel N.G. Parghi. N. Y.	Investigation of Critical Stress Intensity Factor For IS 2062 Material Using Arc Shape Tension Specimen	International Conference on Engineering Trends in Mechanical Engineering, GH Patel College of Engineering, Anand, Gujarat	4-5 Jan,2013
13	Sutaria B. M. Patel J.M. Patel K.	Experimental Evaluation of Heat Transfer Characteristics for Double Pipe Heat Exchanger	International Conference on Engineering Trends in Mechanical Engineering,	4-5 Jan,2013

			GH Patel College of Engineering, Anand, Gujarat	
14	Sutaria B. M. Bhatt M. K. Gaderia S. N. Channiwala S. A.	Determination of Losses & Loss Coefficients of Solar Flat Plate Collector When Wind Velocity & Tilt Angle At Zero Value – An Experimental Study	International Conference on Mechanical, Automotive and Materials Engineering (CMAME 2013), HONG KONG	26 – 27 July, 2013
15	Sutaria B. M. Bhatt M. K. Sonigara B. K. Bhatt D. V.	ASTM Performance Tests to Study The Effect of Blend Oil with Based Oil Analysis for Automobile Engines	4 th International Conference on Mechanical, Production & Automobile Engineering (ICMPAE'2013), DU BAI (UAE)	6-7 October, 2013, ISBN 978-93-82245-1
16	Sutaria B. M. Bhatt M. K. Sonigara B. K. Bhatt D. V.	Study on The Effect of Blend Oil with Based Oil Analysis	International Conference on Advances in Tribology & Engineering Systems, L. D. College of Engg, Ahmadabad, Gujarat	15-17 October, 2013 ISBN 978-81-322-1655-1 ISBN 978-81-322-1656-8 (eBook) DOI 10.1007/978-81-322-1656-8 Springer, New York, London
17	Sutaria B. M. Bhatt D. V.	Optimization of Reciprocating Friction –Wear Test Rig Operating Parameters for Segmented Piston Ring – Liner Assembly	International conference on Advances in Tribology & Engineering systems, L. D. College of Engg, Ahmadabad, Gujarat	15-17 October, 2013 ISBN 978-81-322-1655-1 ISBN 978-81-322-1656-8 (eBook) DOI 10.1007/978-

				81-322-1656-8 Springer, New York, London.
18	Chakradhar B. Sutaria B. M. Bhatt D. V.	High Speed Machining of Ti- alloys- A critical Review	1 st International and 16 th National conference on Machines and Mechanisms (INACOMM), IIT Roorkee	18-20 Dec., 2013
19	Sutaria B. M. Bhatt M. K. Gaderia S. N. Channiwala S. A.	To Study Different Losses and Loss Co-efficient on Solar Flat Plate Collector at 90 ⁰ Yaw angle	2 nd International Conference on Mechanical, Automotive and Materials Engineering (CMAME-2014) SINGAPORE	26-28 May, 2014
20	Chakradhar B. Sutaria B. M. Bhatt D. V.	Analysis Top Burr Formation in High Speed Micro End Milling of Commercially Pure Titanium (Grade -2)	International Conference on Advances in Materials and Product Design, AMPD, SVNIT, Surat	10-11, January, 2015 ISBN 978-93- 5196-956-3
21	Sutaria B. M. Bhatt M. K. Anil Kumar Soni S. S. Bhatt. D. V.	Analysis of Tribological Parameters on Carbon Steel Used in Sugar Mill Rolls – A Case Study	1 st International Conference on Tribology Yiledz Technical University, ISTANBUL, TURKEY	7-9, October, 2015 Istanbul, Turkey
22	Chakradhar Bandapalli, Sutaria B. M. Bhatt D. V.	Estimation of Burr Formation on Ti-6Al-4V in High Speed Micro End Milling by Experimental Investigation and ANFIS Methodology	International Conference on Precision, Meso, Micro and Nano Engineering, COPEN 9, IIT Mumbai	10-12 December, 2015
23	Chakradhar Bandapalli	Experimental Investigation and Estimation of Surface	International Conference MNIT,	12-13, March, 2016

	Sutaria B. M. Bhatt D. V.	Roughness Using ANN, GMDH, MRA Models in High Speed Micro of Titanium Alloy (Grade 5)	Bhopal-GRET Hyderabad, Elsevier	
24	Chakradhar Bandapalli, Sutaria B. M. Bhatt D. V.	Performance of Coated and Uncoated Tungsten Carbide End Mills in High Speed Micro Milling	International Conference on Recent Trends in Engineering and Material Sciences Jaipur National University, Jaipur, India	17-19, March, 2016
25	Dave Hiren. R Sutaria B. M	Pilot Injection and Its Effects on Diesel Engine Performance Parameters and Emissions: A Review	International Conference on Recent Trends in Engineering and Material Sciences Jaipur National University, Jaipur, India	17-19, March, 2016
26	Chaudhary Tejaskumar Sutaria B. M	Investigation of Friction Characteristics In Segmented Piston Ring Liner Assembly of I.C. Engine	International Conference on Recent Trends in Engineering and Material Sciences Jaipur National University, Jaipur, India	17-19, March, 2016
27	Sutaria B. M Chaudhary Tejaskumar	Tribological Investigation of Piston Ring Liner Assembly	18 th International Conference on Automotive and Mechanical Engineering (ICAME) at NEW YORK, USA	10-11, October, 2016 EISSN:2010-3778, PP. 1068-1072
28	ChakradharBandapalli, Sutaria B. M. Bhatt D. V.	Surface Roughness Characterization in High Speed Micro Milling of Near Alpha Titanium Alloy (grade 12) Using Coated TiAlN&AlTiN Tools	6 th International & 27 th All India Manufacturing Technology, Design & Research (AIMTDR-2016) Conference, Pune	16-18, Dec. 2016
29	ChakradharBandapalli, Sutaria B. M.	Prediction of Cutting Forces In High Speed Micro Milling	13 th International Conference on High Speed Machining	2016

	Bhatt D. V.	of Near Alpha Titanium Alloy(Grade-12)	2016, <i>Metz , France</i>	
30.	ChakradharBandapalli, Sutaria B. M. Bhatt D. V.	Tool Wear Analysis In High Speed Micro End Milling of Titanium Alloy Ti-6Al-4V	Proceedings of MSSM 2018, University of the West of Scotland, <i>Paisley, UK</i> . www.MSSM2018.uws.ac.uk	2018
31	MakwanaMohit Sutaria B. M.	Centrifugal Slurry Pump Performance & Wear Study- A Critical Review	An International Conference on Tribology, TRIBOINDIA-2018 VJTI, Mumbai, India http://dx.doi.org/10.2139/ssrn.3331441	13-15, December 2018
32	Dave Hiren R. Sutaria B. M. Patel Brijesh	Influence of Nozzle Hole Diameter on Combustion and Emission Characteristics of Diesel Engine Under Pilot Injection Mode”	2 nd International Conference on Emerging Trends in Manufacturing, Engine and Modeling [ICEMEM-2019], Sirpur, Maharashtra	23-24, December, 2019

National Conferences:

Sr. No.	Authors	Title of Paper	Name of Conference/ Seminar	Month & year
1	Sutaria B. M. Mistry. K.N	Effect of Chip Thickness on Cutting Force In An Orthogonal Cutting	16 th AITDMR Conference at Pune	Nov-1996
2	Sutaria B. M. Raval H. K. Mistry K.N	Using A Grid Marking Technique In Orthogonal Metal Cutting Process	17 th AITDMR Conference at REC Warangal	Jan-1997
3	Sutaria B. M Mistry K. N.	Strength Measurement In Friction Welding	National Conference on AIME-2006 at New Delhi	20-21,Jan 2006
4	Sutaria B. M Shah. R. D. Parekh. A. D. Bhatt. M. K	A Study Residual Life Assessment of Boiler	XIV NASAS 2006, VNIT, Nagpur	30-31,Jan 2006
5	Sutaria B. M. Shah. R. D. Mistry K. N	A Parametric Study on Friction Welding Process	Recent Advances in Manufacturing Technology, VelammalEngg.College, Chennai	3 rd March-2006
6	Sutaria B. M. Parekh. A. D. Shah R. D. Patel V. M	Analysis of Heat Transfer In Pin Fin Under Steady State	Advancing in Mechanical Engineering, Kota, Rajasthan	18 &19 March-2006
7	Sutaria B. M Shah R. D.	Finite Element Analysis of Pin-Fin.	Application of Advance Quality/ Method in Engg. & Technology (AAQMENT-06), Irod, Tamilnadu	23 & 24 March-2006
8	Sutaria B. M. Bhatt D. V. Mistry K. N.	Analysis of PRA Friction Models of An Internal Combustion Engine	Recent Developments and Future Trends in Mechanical Engineering, NIT, Hamirpur	3-4 Nov.2006
9	Sutaria B. M BhattD.V. Shah A. S. Mistry K. N.	An Over View Wear Mechanism, Causes, And Prevention In Piston Ring Assembly In An I. C. Engine	Recent trend in Mechanical Engineering, GCET, Vidhynagar, Anan (HP)	19- 20,Mach - 2008
10	B.M. Sutaria Dr. D. V. Bhatt Dr. K.N. Mistry	Simulation of PRA Friction Models And Experimental Study of An Internal Combustion Engine	ICEE-2009, Pondicherry Engineering College, Pudcherry, India	7-9,Jan-2009
11	Sutaria B. M Bhatt D.V. Mistry K. N.	Experimental Study To Measure Piston Ring Assembly Friction Using Various Operating Parameters	Tribology of Automotive Systems, IIT Delhi	11-12, Dec. 2009
12	Sutaria B. M. Bhatt D.V. Aware G.	An Investigation of Friction Between Piston Ring and	Tribology of Automotive Systems, IIT Delhi	11-12, Dec., 2009

		Cylinder Wall of I.C. Engines		
13	Sutaria B. M. Bhatt D.V. Aware G.	Literature Review on Friction Forces and Piston Ring Dynamics	Tribology of Automotive Systems, IIT Delhi	11-12, Dec., 2009
14	Sutaria B. M. Bhatt D.V. Shinde S. B.	Simulation and Analysis of Friction Forces at PRA and Piston Ring Dynamics	Tribology of Automotive Systems, IIT Delhi	11-12, Dec., 2009
15	Sutaria B. M. Bhatt D.V. Shinde S. B.	Literature Review on Piston Ring Lubrication	Tribology of Automotive Systems, IIT Delhi	11-12, Dec., 2009
16	Sutaria B. M. Bhatt D.V. Patel Jitu	Theoretical Modelling of Piston Ring Assembly	Tribology of Automotive Systems, IIT Delhi	11-12, Dec., 2009
17	Sutaria B. M. Bhatt D.V. Patel M. T.	Tribological Study of Automotive Engine Oil	25 th National Convention on Recent Developments in Manufacturing Technology, NIT, Agartala, Tripura	8-9 May, 2010
18	Sutaria B. M. Bhatt D.V. Mehta P. M.	Tribological Characteristics of Flake And Nodular Graphite Cast Iron Under Wet Condition	25 th National Convention on Recent Developments in Manufacturing Technology, NIT, Agartala, Tripura.	8-9 May, 2010
19	Sutaria B. M. Chaudhary Prasson	Sliding Friction Characteristic of Composite Material – A Critical Review	National Conference on Emerging Trends in Mechanical Engineering (ETME-2008), GCET, Anand	18-19, March, 2011
20	Sutaria B. M. Bhatt D.V. Mistry K. N.	Experimental Evaluation of Friction Coefficient on Segmented Piston Ring Assembly of Automobile Engine	National Tribology Conference (NTC-2011) IIT Roorkee	8-10 Dec., 2011
21	Sutaria B. M. Bhagat Vinay	A Study Tribological Characteristic of I. C. Engine	Advances in Mechanical Engineering, UIET, Panjab University, Chandigarh	20-21, May, 2011
22	Sutaria B. M. Patel J. M. Patel Keyur	Evaluation of Heat Transfer Characteristics of A Double Pipe Heat Exchanger For Temperature Range of Hot Fluid (90 ⁰ C To 95 ⁰ C)	Thermal Fluids and Manufacturing Systems (TFMS-2012), I.E and C. K. Pithawal Engg. College, Surat	20-22, January, 2012 ISBN 978-81-8487-202-6
23	Sutaria B. M. Bandapalli C. Bhatt D. V.	An Overview on Tool Wear Mechanism In Metal Cutting	Thermal Fluid Science and Tribology Applications, MED, SVNIT, Surat	27-28, May, 2016 ISBN 978-93-5265-440-6

24	Sutaria B. M. Dave H. R.	Fundamentals of Homogeneous Charge Compression Ignition Engines	Thermal Fluid Science and Tribology Applications, MED, SVNIT, Surat	27-28, May, 2016 ISBN 978-93-5265-440-6
25	Sutaria B. M. Bhadakwad Simon.	FEA of Stress And Hollowness of Tapered Rollers Bearing	Thermal Fluid Science and Tribology Applications, MED, SVNIT, Surat	27-28, May, 2016 ISBN 978-93-5265-440-6
26	Sutaria B. M. Mulani K. D. Bhatt D. V.	A Review on Tribological Behaviour of Magneto Rheological Fluid	Thermal Fluid Science and Tribology Applications, MED, SVNIT, Surat	27-28, May, 2016 ISBN 978-93-5265-440-6
27	Sutaria B. M. Chaudhary T.	Piston Ring Liner Assembly Friction In I. C. Engine: A Review	Thermal Fluid Science and Tribology Applications, MED, SVNIT, Surat	27-28, May, 2016 ISBN 978-93-5265-440-6
28	Sutaria B. M. Vasava J. Bhatt D. V.	Magnetorheological Fluid As Lubricant In Bearings: A Review	Thermal Fluid Science and Tribology Applications, MED, SVNIT, Surat	27-28, May, 2016 ISBN 978-93-5265-440-6

Ph.D. Supervised:

Sr. No	Name of Student	Title of Thesis	Passing Year
1	Mr. Chakradhar Bandapalli	Experimental Investigation of Machining Parameters Influence in High Speed Micro End Milling of Titanium Alloys	2017
2	Mr. Hiren R. Dave	Experimental and Numerical Investigations of Advanced Injection and Combustion Strategies on Performance and Emission Characteristics of Diesel Engine	2020
3	Mr. Mohit D. Makwana	Investigation of Erosion Wear and Cavitation Wear Characteristic of Centrifugal Slurry Pump	December, 2017 Ongoing
4.	Mr. Paresh Chhotani	Enhancement of Static / Dynamic Load Carrying Capacity of Thrust Rolling Element Bearings	Jan, 2017 ongoing
5.	Mr. Rahul kumar	Non Liner Bending Response of Laminated Composite Sandwich Plate Cutout in Hygro-Thermo Environment	December, 2018 Ongoing
6.	Mr. Kundan Mishra	Fracture analysis of FGM Plate with Edge Crack under Different Loading Condition	December, 2018 Ongoing
7.	Mr. Hitesh Tailor	Design of air preheater for small scale boiler	Jan 2021 Course work continue

M. Tech Dissertation Guided:

Sr. No	Name of Student	Title of Thesis	Passing Year
1	Mr. MilapM. Madhikar	Flow Simulation & Visualization In HP Feed Water Heater at KAPS,	2006
2	Mr. Manubhai B. Rohit	Theoretical Simulation & Experimental Analysis of Piston Ring Assembly Friction & Film Thickness of Single Cylinder Various Capacity I.C. Engine Systems Under Different Variables.	2007
3	Mr. Atul S. Chaudhary	Theoretical Modeling & Simulation of PRA Friction Models of Single Cylinder S.I. Engine- A Case Study	2009
4	Mr. Kirit S. Kharadi	Modeling & Simulation of Tribological Parameters For A Single Cylinder C. I. Engine- A Case Study	2009
5	Mr. Jitu M. Patel	Friction Force Analysis of Piston Rings & Cylinder Liner on Reciprocating Test Rig	2010
6	Mr. Paresh M. Mehta	Experimental Analysis of Tribological Properties of Piston Ring Cylinder Liner Material Pairs on Pin on Disc Test Rig	2010
7	Mr. Sachin B. Shinde	To Study The Effect of Different Parameters on PRA Friction of Four Stroke Single Cylinder 100 CC S. I. Engines	2010
8	Mr. Menesh T. Patel	Experimental Study To Rank Automotive Lubricants on Four Ball Tester By Using Different ASTM Standards	2010
9	Mr. Ganesh B. Awre	Theoretical Modeling and Simulation of PRA Friction Models Applicable to Multi Cylinder I. C Engine and Experimental Verification -A Case Study	2010
10	Mr. Nitin Y. Parghi	Experimental & Numerical Analysis of Critical Stress Intensity Factor of Pressure Vessel Material Using Arc Shape Tension Specimen	2011
11	Mr. Prasoon Chaudhry	Effect of Apparent Area on Sliding Friction Characteristics of Composite Material	2011
12	Mr. Keyur B. Patel	Performance Evaluation & CFD Analysis of Operating Parameters on Double Pipe Heat Exchanger	2012
13	Mr. Bhaskar K. Sonigra	Experimental Studies of Blending Oil Using ASTM Standards On Four Ball Test Rig.	2013
14	Mr. Ankit Patel	Tribology Aspect Study of Engine Lubricants	2013
15	Mr. Ravi Patel	Study of Tribological Parameters of Journal Bearing Performance	2013
16	Mr. Anilkumar Jagar	Experimental Investigation of Friction & Wear of Carbon Steel Used In Sugar Mill Rolls	2014
17	Mr. Akshay Rajednra Gavai	Study Of Friction & Wear Characteristics of Brake Pad Materials	2015
18	Mr. Simon Vikram Bhadakwad	Finite Element Analysis of Stresses And Hollowness of Tapered Roller Bearing	2016

19	Mr. Tejaskumar Chaudhary	Investigation of Friction Characteristics of Segmented Piston Ring Liner Assembly of An I. C. Engine	2016
20	Mr. Brahmane Ganesh Balasaheb	Design and Development of Mechanism for Ergonomic Crisper for Top Mount Refrigerator	2017
21	Mr. Patil Mayur Gulabrao	Tribological Parameters Analysis of Cam Follower Pair With Using Different Concentration of Anti-Wear Additives In Lubricants	2017
22	Mr. Onkar Sambhaji Prodwad	Analysis of Heat Release Rate and Reduction of Emission In DI Diesel Engine	2017
23	Mr. Patil Satyajit Sarjerao	Optimization of Tribo Parameters For Evaluating Wear With Using Magneto Rheological Fluid In Reciprocating Motion	2017
24	Mr. Pankaj Gadwal	Investigation of Exhaust Gas Recirculation and Fuel Injection Strategies on Single Cylinder Diesel Engine Performance	2017
25	Mr. Dannana Venkatesh	Small Scale Power Generation Using Heat of Exhaust Gases Through Thermos Electric Generators.	2020
26	Mr. Hemanshu Joshi	Enhancement in Design of Aqua Silencer	2020

Publication of Books / Chapters Published: 03

Title	Name of Publisher	Publisher type	Publisher Year	Last Edition
Titanium Alloys Novel Aspect of Their Manufacturing and Processing	IntechOpen, Published in London, UK ISBN: 978-1-83962-552-7	Book Chapter	2019	2019
Proceeding of International conference on Advances in Tribology and Engineering System ICATES 2013	ISBN: 978-81-332-1655-1 Springer, USA	Book Chapter	2014	2014
Thermal Fluid Science and Tribology Applications	ISBN:978-93-5265-440-6 Dotcom Publication, India	Reference book	2016	2016

Expert Lecture Delivered:

Sr. No	Title of Talk	Name of Program	Date/ Duration	Place
1	Fundamental of Engine Tribology	STTP on Advances in Industrial Tribology and Maintenance	21/07/2008 1.5 Hours	SVNIT, Surat
2	Methods of Reducing Piston Ring Friction Losses in Modern Internal Combustion Engine	STTP on Advances in Industrial Tribology and Maintenance	25/07/2008 2.0 Hours	SVNIT, Surat
3	Advances in Engine Tribology	AICTE Approve One Week Winter School on Metallurgical Aspects of Tribology	30/09/2009 01 Hours	SVNIT, Surat
4	Fundamental & Advances in Tribology	One Week STTP on Advances in Tribology	25/10/2010 2.5 Hours	SSBT CET, Bambhori, Jalgaon, Maharashtra
5	An Innovative Approach for Friction Force Measurement of a Piston Ring Assembly.	Two Days Workshop on Industrial Tribology and Applications	14/11/2014 2 Hours	CAD LAB Seminar Room, MED SVNIT
6	Fundamental of Tribology & Its Industrial Applications	One Week STTP on Fundamental of Tribology & Its Industrial Applications	06/07/2015 1.5 Hours	Institute Guest House Seminar Room, SVNIT
7	Measurement & Prediction of Friction Force in I C Engine	One Week STTP on Fundamentals Tribology & Applications	06/12/2015 1.5 Hours	G. H. Patel College of Technology, Anand, Gujarat
8	Nondestructive Methods for Engineered Materials	One Week STTP on Recent Advances in Testing Methodology & Techniques for Engineered Materials	23/06/2016 1.5 Hours	Applied Mechanics Dept., SVNIT, Surat
9	An Importance Role of Tribology in Mechanical Engineering	One Week STTP on Technological Advancement in Mechanical Engineering	06/02/2017 2.0 Hours	S. S. Engineering College, Bhavnagar
10	Introduction to Locomotive Systems	Two Week Training Cum Workshop for Supervisors and Technician of Indian Railways Employee	07/02/2017 & 14/2/2017 4.0 Hours	Electronic & Electrical Eng. Dept., at EED Seminar room, SVNIT, Surat
11	Basics of Tribology and Its Applications	TEQIP - III Sponsored National Level Short Term Training Program on Basics of Tribology and Its Industrial Applications (BTIEA-2018)	22/10/2018 1.5 Hours	Seminar Hall, Med, SVNIT, Surat

12	Engine Lubrication and Tribology	International Workshop on Industrial Tribology	17/01/2019 2.0 Hours	Amrutavahini College of Engineering, Sangmner, Maharashtra
13	Advances on Tribology in Engineering field	An Expert Lecture Delivered Under Equity Initiatives Components (09) of RUSA	07/10/2019 2 hours	Mechanical Engineering Dept., GEC, Surat

Conducted STTP/ Workshop / Conference/ Seminar for Academic and Industry People

Sr. No.	Title of Programme	Duration
1.	AICTE Sponsored One Week STTP on Advances in Industrial Tribology & Maintenance.	21/07/2008 to 25/07/ 2008
2.	AICTE Approved one week STTP on Metallurgical Aspect of Tribology.	30/11/2009 to 04/12/2009
3.	TEQIP-II Sponsored Two Days Workshop on Industrial Tribology & Applications.	14/11/2014 to 15/11/2014
4.	TEQIP- II Sponsored National Level STTP on Fundamentals of Tribology and Its Industrial Applications.	06/07/2015 to 10/07/2015
5.	1 st National Conference on Thermal-Fluid Science and Tribological Applications (NCTFSTA-2016)	27/05/2016 to 28/05/2016
6.	Basics of Tribology and Its Industrial Engineering Applications (BTIA -2018)	22/10/2018 to 26/10/2018
7	International Conference on Recent Advancements in Design and Manufacturing (ICRADM 2020)	16/07/2020 to 17/07/2020
8	TEQIP-III Sponsored one week STTP on “Basics of Tribology and Its Industrial Engineering Applications (BTIEA-2021)”	04/01/2021 to 08/01/2021

STTP/Industrial Training / Summer – Winter School Attended:

Sr. No.	Title of Course	Organized by	Duration of Course
1.	Q.I.P. Industrial Training for Engineering College Teacher	I.P.C.L., Vadodara	01/07/1992 to 28/08/1992
2.	17 th AIDMR National Conference	REC, Warangal	07/01/1997 to 09/01/1997
3.	Ensuring Faculty Accountability	SVRCET, Surat	28/01/1997 to 29/01/1997
4.	Institute Planning and Management	SVRCET, Surat	17/02/1997 to 21/02/1997

5.	Computer Aided Manufacturing	MACT, Bhopal	16/06/1997 to 29/06/1997
6.	TQM in Technical Education	SVRCET, Surat	30/06/1997 to 4/07/1997
7.	Industry Institute Interaction	BVM Eng. College, V.V. Nagar, Anand	11/05/1998 to 16/05/1998
8.	Advances in Solar Energy Technology	SVRCET, Surat	03/07/2000 to 14/07/2000
9.	Advances in Tribology	IIT, Mumbai	18/06/2002 to 22/06/02
10.	Instruction Workshop on Soft Computing with MAT lab	M.S. University, Vadodara	07/01/02 to 12/01/2002
11.	Advance in Refrigeration and Air Conditioning	Nirma Institute of Technology, Ahmedabad	30/06/03 to 11/07/03
12.	AICTE/ISTE Summer School on Helping Students Better Learning Skill & Habit for Human Value in Educations	SVNIT, Surat	21/06/2004 to 25/06/2004
13.	Failure Analysis of Engineering Material and Residual Life Assessment	VNIT, Nagpur	31/01/2005 to 11/02/2005
14.	Specialization Workshop on Measurement Techniques of Turbo Machines	SVNIT, Surat	23/06/2005 to 25/07/2005
15.	STTP on Energy Conservation in Various Industrial Sectors	SCET, Surat	26/12/2005 to 30/12/2005
16.	Boilers Efficient Operation & Maintenance	The Institute of Energy Management National Center for Technical Development, Hyderabad	06/01/2006 to 08/01/2006
17.	Three Day Workshop on Different Aspect of Electron Microscopy	SVNIT, Surat	29/3/2006 to 31/3/2006
18.	Future Manager in Technical Education	EQUATE and S.V.N.I.T, Surat	04/02/2008 to 08/02/2008
19.	QIP STTP on Advances in Maintenance and Tribology	ITMMEC, IIT, Delhi	07/07/2008 to 11/07/2008
20.	Advanced Engineering Optimization Through Intelligent Techniques	MED, SVNIT, Surat	22/12/2008 to 26/12/2008
21.	ISTE on Techno Entrepreneurship Awareness	ED Cell, SVNIT, Surat	27/07/2009 to 31/07/2009

22.	AICTE Approved One Week STTP on Techno Entrepreneurship and Its Importance in Technical Education Systems	ED Cell, SVNIT, Surat	21/12/2009 to 25/12/2009
23.	One Week STTP on Advance Quality Management Philosophies and Techniques	MED, SVNIT, Surat	04/01/2010 to 08/01/2010
24.	One Week Training Program on Bearing Management Technology	Anchor Cell, SVNIT, Surat	18/08/2010 to 21/08/2010
25.	One Week Training Program on Lab VIEW Graphical Programming and Data Acquisition Basic Training.	Anchor Cell, SVNIT, Surat	17/01/2012 to 21/01/2012
26.	One Week Training course on Condensed Translation.	Department of official Language, Ministry of Home Affairs, New Delhi	26/11/2012 to 30/11/2012
27.	One Week Workshop Under TEQIP-II on Nanotechnology Application for Sustainable Development	CHED, SVNIT, Surat	19/04/2013 to 21/04/2013
28.	Two Days Workshop on NBA Accreditation Awareness	NITK, Surathkal	23/08/2013 to 24/08/2013
29.	Global Meet on Research Perspectives on Nano Science Applied to Passenger Car Engine Tribology in Order to Improve Fuel Efficiency and to Reduce the Carbon Emission	GTU, Ahmedabad	18/10/2013
30.	TEQIP-II Sponsored Workshop on Outcome Based Education	MED, SVNIT, Surat	24/02/2016
31.	TEQIP-II Sponsored Faculty Development Program on Outcome Based Teaching-Learning	SVNIT, Surat	03/06/2016 to 05/06/2016
32.	89 th Training Program for the Chief Liaison Officers (CLOS)/ Liaison Officers (Los) for SC/ST and PWD Employees on Reservation Policy of Gov. of India	Sector-21, Dwaraka, New Delhi	29/05/2017 to 30/05/2017
33.	93 rd Training Program for the Chief Liaison Officers (CLOS)/ Liaison Officers (Los) for SC/ST and PWD Employees on Reservation Policy of Gov. of India	Hotel Coconut, Goa	21/05/2018 to 23/05/2018
34.	One Week Online Short Term Course on Future Scope in Engineering Materials And Tribology (FSEMT - 2020)	Department of Mechanical Engineering, NIT, Jalandhar, Punjab	15/09/2020 to 19/09/2020

Outreach Activity:

Sr. No.	Title	Date and Duration	Place
1	Session Chair at International Conference on Automotive and Mechanical Engineering	10/10/2016 to 11/10/2016	New York, USA
2	Best Paper Award at Planetary Scientific Research Centre Organization	6/10/2013 to 7/10/2013	Dubai, UAE
3	Reviewed of BRNS Project on Wear Rate Measurement in Automobile Gear Box Using a Twin Disc Tribo Tester Through Thin Layer Activation Technique (TLA)	11/09/2013	BARC
4	Reviewer for National Conference on Progress , Research and Innovation In Mechanical Engineering	25/03/2017 to 26/03/2017	SCET, Surat
5	Reviewer for Journal of industrial Lubrication and Tribology	16/01/2018	-
6	Reviewer for Arabian Journal for Science and Engineering	November, 2020	-
7	Reviewer at 2 nd International Conference on Research and Innovation in Science, Engineering & Technology	September, 2020	BVM, Vidynagar, Anand
8	Industrial Visit to KRIBHCO, Surat for PG Student	4/4/2003	KRIBHCO Hazira, Surat
9	Industrial Visit To KRIBHCO, Surat For The Process of Establishment of NDT Section In Calibration and Testing Centre at The Institute Under The World Bank Project	30/01/2004- 31/01/2004	KRIBHCO Hazira, Surat
10	Industrial Training for Engineering Faculty From Govt. of India, MHRD (Department of Education)	01/07/1992 to 29/08/1992	IPCL Baroda
11	Worked as a Principal Coordinator for JEE Exam, 2017	Offered by Dean Academic on 09-02-2017	SVNIT, Surat
12	Guided 02 Dissertations for Students of The Institute of Engineers (India), Kolkata	Allotment of Project guide by Director IEI, 8, Gokhle Road, Kolkata 29/11/2016	IEI South Gujarat Chapter Mahida Bhavan, Surat
13	Guided 04 Dissertations for Students of the Institute of Engineers (India), Kolkata	Allotment of Project guide by Director IEI, 8, Gokhle Road, Kolkata 01/06/2017	IEI South Gujarat Chapter Mahida Bhavan, Surat
14	Guided 04 Dissertations for Students of The Institute of Engineers (India), Kolkata	Allotment of Project guide by Director IEI, 8, Gokhle Road, Kolkata 01/06/2018	IEI South Gujarat Chapter Mahida Bhavan, Surat

15	Guided 04 Dissertations for Students of The Institute of Engineers (India), Kolkata	Allotment of Project guide by Director IEI, 8, Gokhle Road, Kolkata 10/08/2019	IEI South Gujarat Chapter Mahida Bhavan, Surat
16	Guided 01 Dissertations for Students of The Institute of Engineers (India), Kolkata	Allotment of Project guide by Director IEI, 8, Gokhle Road, Kolkata 09/12/2019	IEI South Gujarat Chapter Mahida Bhavan, Surat

Development of Experimental Equipment set up in the Mechanical Engineering laboratory

Sr. No.	Name of Lab	Activity	Remarks
1	Advanced Tribology	<ul style="list-style-type: none"> • Four Ball Test Rig • Pin on Disc Test Rig(Wear and Friction) • Reciprocating Friction Test Rig • Portable Digital Multi meter • Electronic Variable Injection Kit • Smoke Meter • Computerize Single Cylinder Diesel Engine Test Rig • Gas Analyzer • Journal bearing test rig • Surface roughness measurement instrument • Hardness measurement Instrument • Ring tension measurement Instrument 	TEQIP – I & II and Institute Annual Grant for Tribology Laboratory Equipment
2.	Heat Transfer	<ul style="list-style-type: none"> • Double Pipe Heat Exchanger Experiment • Stephan-Boltzmann Constant Experiment • Shell & Tube Heat Exchanger • Heat Transfer by Natural Convection • Emissivity Measurement Experiment 	Institute Annual Grant for Upgradation of Laboratory Equipment
3	Measurement & Instrument	<ul style="list-style-type: none"> • Thermocouple and RTD experiment setup • Calibration of Burdon tube pressure gauge • Calibration of Rotameter, Orifice meter, Venturi meter, Nozzle and Magnetic flow meter • Measurement of rotation speed by tachometer and stroboscope • Study of force measurement by strain gauge 	Institute Annual Grant for Development of New Laboratory and procured Equipment
4.	Workshop	<ul style="list-style-type: none"> • Development of Dynamometer for Cutting Force Analysis of Shaper Machine • Development of Two – Ton Capacity of Hydraulic Truck for Material Handling for Central Workshop 	Projects

Worked as Lab Incharges:

Sr. No	Name of Laboratory	Duration of Period	Activities
1.	I.C. Engine	1993 to 1995	Modification and Update the Experiments
2.	Basics of Mechanical Systems	1995 to 2000	Update The Experiments Setup and Prepared New Laboratory Manual
3.	Tribology & Machine dynamics	2000 to 2003	Maintain The Experiments Set Up
4.	Heat Transfer	2002 to 2010	Updated and Procure New Experiments Setup For UG/PG Students
5.	Tribology & Machine dynamics	2005 to till date	Upgrade and Procure Advanced Tribo Test Rigs for PG and Research Scholars
6.	Mechanical Measurement	2016 to till date	Procured New Sets of Measurement Instruments

Design and Developed an Experimental Set Up at The Mechanical Engineering Department:

1. Design and Developed a Dynamometer for Force Analysis of Shaping Machine
2. Designed and Developed the Two – Ton Capacity of Hydraulic Truck for Material Handling Purposes
3. Developed Attachments of Various Size PRA for Advance Tribology Equipment to Measure of Tribological Characteristic
4. Designed and Developed Heat Transfer Rate by Parallel and Counter Flow in Double Pipe Heat Exchanger Experiment Setup

Expert Member:

- Expert Member for GTU Interview Panel for Recruitment of Assistant Professor in Mechanical and Automobile Engineering Department at Bhagvan Mahavir Engineering College and Mahavir Swami Engineering College on Institute of Technology Surat, 2014-2018.
- Expert Member for Techfest at Faculty of Engineering Technogy and Reasearch (FETR) Bardoli, On 15-16 September, 2015.
- Expert Committee member for GTU Interview for Lecturer in Mechanical engineering, HOD/ Lecture er in Automobile Engineering at B. V. Patel Institute of Technology, Umarakh, Bardoli.
- Appointed as a Expert for the Academic Audit of GTU affilated Institutes through Online mode. 20-30 December, 2020.
- Nominatted expert member by GTU for Promotion under Carrier Advancement Scheme at Sarvajanic College of Engineering & Technology, Surat, 25/01/2021

Professional Membership:

- American Society of Mechanical Engineers
- Institution of Engineers (LM No.143143-3)
- India Indian Society for Technical Education (LM No. 13768)
- Tribology Society of India (LM No. 1391)

Consultancy & Testing :

Sr No	Name of Principal Faculty	Title of Problem	Name of Industries/Firm	Amount (Rs.)	Month & Year
1.	B. M. Sutaria	Testing & Calibration of temperature Meter	Surat Municipal, Corporation, Vigilance Department, Surat	1500=00	March-2001
2.	B. M. Sutaria	-- do --	M/s KantilalBhalal, Surat	1000=00	March-2001
3.	B. M. Sutaria	-- do --	M/s Anish Construction co, Himmatnager	1500=00	March-2001
4.	B. M. Sutaria	-- do --	M/s RoylBuilders,Surat	1000=00	April-2001
5.	B. M. Sutaria	-- do --	M/s KantilaBhalala	1500=00	April-2001
6.	B. M. Sutaria	-- do --	M/s Paulomi Road Buildrers,Pvt.,Ltd, Athwalines, Surat	2000=00	April-2001
7.	B. M. Sutaria	-- do --	M/s Royal Builder, Center point, Surat	2000=00	May-2001
8.	B. M. Sutaria	-- do --	M/s Paulomi Road Builders,Pvt.,Ltd, Athwaline, Surat	1000=00	Sept-2001
9.	B. M. Sutaria	-- do --	M/s Jitendra G Patel, Sardarnager, Main Road, Rajkot	4000=00	Jan-2002
10.	B. M. Sutaria	-- do --	M/s Anish Construction, Co Himmatnager	4000=00	Jan-2002
11.	B. M. Sutaria	-- do --	M/s Paulomi Road Buildrers,Pvt,Ltd,Athwalines,Surat	3000=00	Jan-2002
12.	B. M. Sutaria	-- do --	M/s Paulomi Road Buildrers,Pvt,Ltd,Athwalines,Surat	1000=00	April-2002
13.	B. M. Sutaria	-- do --	M/s Paulomi Road Buildrers,Pvt,Ltd,Athwalins Surat	1000=00	Dec-2002
14.	B. M. Sutaria	-- do --	M/s D.S.Patel & Co Balolnager, Mehsana	2000=00	Jan-2003
15.	B. M. Sutaria	-- do --	M/s Paulomi Road, Buildrers, Pvt, Ltd, Athwalines,Surat	2000=00	Feb-2003
16.	B. M. Sutaria	-- do --	M/s Mahendra& Co,Navsari	2000=00	Dec-2003
17.	B. M. Sutaria	-- do --	M/s A. K. Patel Co,Surat	1000=00	Jan-2004
18.	B. M. Sutaria	-- do --	Royal Builder, Center point, Surat	2000=00	Jan-2004
19.	B. M. Sutaria	-- do --	M/s A.K.Patel,Co, Surat	1000=00	Feb-2004
20.	B. M. Sutaria	-- do --	M/s Mahendra Patel, SMS, Surat	2400=00	Nov-2005

21.	B. M. Sutaria	-- do --	M/s Bhavin Construction New Civil Road Surat	1200=00	Nov-2005
22.	B. M. Sutaria	-- do --	Ex.Engineer,South zone, SMS, Surat	2400=00	Nov-2005
23.	B. M. Sutaria	-- do --	M/s Ex.Engineer,Muglisara, SMS, Surat	2400=00	Nov-2005
24	B. M. Sutaria	-- do --	M/s Ex.Engineer, North Zone, SMS, Surat	2400=00	Nov-2005
25	B. M. Sutaria	-- do --	M/s Paulomi Road & Builder Pvt, Ltd, Surat	4000=00	Dec-2006
25	B. M. Sutaria	-- do --	M/s Shri Classic network pvt, ltd, Surat	4000=00	Dec-2006
26	B. M. Sutaria	-- do --	M/s Bhavani Construction Co, Surat	2000=00	Dec-2006
27	B.M. Sutaria, R.D.Shah, S.A. Channiwal	Gas Meter for Domestic and Industrial Application.	M/s Surya Enterprise, Surat	5000=00	Nov-2006
28	B. M. Sutaria	Temperature Meter	M/s Mahindra A. Patel, Surat	2000=00	Jan-2007
29	B. M. Sutaria	--- do ---	M/s Paulomi Road & Builder Pvt, Ltd, Surat	4000=00	Oct-2007
30	B. M. Sutaria	--- do ---	Ex.Engineer SMC, North Zone, Surat	2000=00	Oct-2007
31	B. M. Sutaria	--- do ---	Executive Engineer, South Zone, SMC, Surat	4000=00	Nov-2009
32	B. M. Sutaria	--- do ---	Executive Engineer, Weast Zone, SMC, Surat	4000=00	Oct-2010
33	B. M. Sutaria	--- do ---	M/s Paulomi Road & Builder Pvt., Ltd, Surat	4000=00	Dec.-2010
34	B. M. Sutaria	--- do ---	M/s Paulomi Road & Builder Pvt., Ltd, Surat	4000=00	Nov.-2011
35	B. M. Sutaria D. V. Bhatt	Oil Test	M/s L & T, Hazira, Surat	12500=00	Agust-2012
36	B. M. Sutaria	Metal Composition of Given Samples	M/s. Gurukrupa Fabrication Works, Udhana, Surat	2250=00	June - July, 2013
37	B. M. Sutaria A. K. Desai C.D. Modhera	Proof Checking Services for Launching Scheme for Steel Girder for Railway Over Bridge on Bagodra- Vasad -Tarapur Road	M/s Rajkmal Builder Infrastructure Pvt., Ltd, 54, Park hill Society, Nr. Heaven park society, Ramdevnagar, Ahmadabad- 280 015,	1,01250=00	September- October, 2013

38	A.K. Desai B. M. Sutaria J. V. Meghani	Condition Assessment of Mild Steel Storage Tanks (14 No)	M/s Recycling Solution Private Limited, Plot No.223, GIDC Estate, Panoli, Dist: Bharuch, Gujarat	1,77,650/-	March-April, 2016
39	B. M. Sutaria A. B. Makwana	Weight Machine -02	M/s Sjreeji Construction Co. Ltd., Bhatar, Surat Weight Machine for The Calibration – 50 Kg.	4000=00	Jan 2017
40	B. M. Sutaria A. B. Makwana	Temperature Meter -07	M/s J. M. shah & M/s Sjreeji Construction Co. Ltd., Bhatar, Surat	23000=00	Jan 2017