Dr. Sandeep Soni Associate Professor, Department of Mechanical Engineering (DoME), Sardar Vallabhbhai National Institute of Technology, Surat. Tel : 0261-2201932 (O); FAX : 0261-2227334, 2228394 Mobile: +91-9727337702 E-mail: <u>s.soni@med.svnit.ac.in; sandytit2004@gmail.com;</u>



#### Educational Qualifications:

Degree	Branch/Specialization	Year	Institute/University
Ph.D.	Mechanical Engineering	2017	S.V.N.I.T., Surat (Gujarat)
M.Tech.	Mechanical Engineering (Industrial Design)	2004	M.A.N.I.T., Bhopal (M.P.)
B.E.	Mechanical Engineering	1998	Dr. Harisingh Gour University, Sagar (M.P.)

#### **Employment Details:**

Designation	Duration	Institute/Organization
Associate Professor (AGP 9500) Level 13A2	21 <sup>st</sup> Dec 2023 toDate	S.V.N.I.T., Surat (Gujarat)
Assistant Professor (AGP 8000)	28 <sup>th</sup> Jan 2019 to 20 <sup>th</sup> Dec 2023	S.V.N.I.T., Surat (Gujarat)
Assistant Professor (AGP 7000)	30 <sup>th</sup> Mar 2009 to 27 <sup>th</sup> Jan 2019	S.V.N.I.T., Surat (Gujarat)
Assistant Professor	16 <sup>th</sup> Oct 2001 to 26 <sup>th</sup> Mar 2009	Technocrats Institute of Technology, Bhopal (M.P.)
Lecturer	16 <sup>th</sup> Nov 2000 to 31 <sup>st</sup> Jul 2001	Bansal Institute of Science and Technology, Bhopal (M.P.)
Lecturer	03 <sup>rd</sup> Mar 1999 to 07 <sup>th</sup> Jul 2000	Bhopal Engineering College, Bhopal (M.P.)

Administrative Duties	Duration	Institute/Organization
Laboratory Incharge (Metrology Lab)	21 <sup>st</sup> Jan 2011 to 21 <sup>st</sup> Jan 2013	SVNIT, Surat
Laboratory Incharge (CAD Lab)	24 <sup>th</sup> Aug 2012 to 24 <sup>th</sup> Aug 2014	SVNIT, Surat
Paper Setter (Machine Design ETME- 314),G. G. S.Indraprastha Univ., Delhi	28 <sup>th</sup> Feb 2012	Guru Gobind Singh Indraprastha University, Delhi
Paper Setter (Machine Design – II ETME- 304), G. G. S. Indraprastha Univ., Delhi	28 <sup>th</sup> Feb 2012	Guru Gobind Singh Indraprastha University, Delhi
Laboratory Incharge (CAD Lab)	18 <sup>th</sup> Mar 2014 to 18 <sup>th</sup> Aug 2016	SVNIT, Surat
Laboratory Incharge (CAD Lab)	18 <sup>th</sup> Mar 2014 to till date	SVNIT, Surat
Coordinators, Annual Reports, Website, MIS etc.	01 <sup>st</sup> Mar 2011 to 01 <sup>st</sup> Mar 2013	SVNIT, Surat
Coordinators, Annual Reports, Website, MIS etc.	01 <sup>st</sup> Sept 2012 to 01 <sup>st</sup> Sept 2014	SVNIT, Surat
Coordinators, Data Collection of Publication- Journal / Conference etc.	01 <sup>st</sup> Sept 2012 to 01 <sup>st</sup> Sept 2014	SVNIT, Surat
Coordinators, AMC (Computer Peripherals)	01 <sup>st</sup> Sept 2012 to 01 <sup>st</sup> Sept 2014	SVNIT, Surat
Coordinators, Students Grievances/ Feed Back Forms etc.	01 <sup>st</sup> Jan 2015 to 01 <sup>st</sup> Jan 2017	SVNIT, Surat
Coordinators, Data Publication (Journal / Conference etc.), Website update, MIS, Annual Report Preparation etc.	01 <sup>st</sup> Jan 2015 to 01 <sup>st</sup> Jan 2017	SVNIT, Surat
Paper Setter (Machine Design – II ME- 1181), , S.A.T.I., Vidisha	09 <sup>th</sup> Sept 2015	Samrat Ashok Technological Institute, Vidisha
Workshop In-charge	10 <sup>th</sup> Apr 2017 to till date	SVNIT, Surat

Coordinator AMC (Computer Peripherals)	10 <sup>th</sup> Apr 2017 to till date	SVNIT, Surat
Coordinators Department Elective and Institute Elective Subjects	10 <sup>th</sup> Apr 2017 to till date	SVNIT, Surat
Faculty Advisor (B. Tech V and VI Semester of Mechanical Eng. Dept.)	2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18	SVNIT, Surat
Member, Ph.D. and M. Tech. (Research) Programme Scrutiny/ Verification Committee	06 <sup>th</sup> Jul 2017 (2017-18); 03 <sup>rd</sup> Dec 2016, 30 <sup>th</sup> Jun 2016 (2016-17); 05 <sup>th</sup> Dec 2014, 03 <sup>rd</sup> Jul 2014 (2014-15); 06 <sup>th</sup> Dec 2013, 08 <sup>th</sup> Jul 2013 (2013-14); 29 <sup>th</sup> Nov 2012, 11 <sup>th</sup> Jul 2013 (2012-13); 01 <sup>st</sup> Jun 2011 (2011-12)	SVNIT, Surat
Member, Result Verification Committee in Examination Cell of the Institute	09 <sup>th</sup> May 2017	SVNIT, Surat
Member, Teaching Assistant (TA) Scrutiny / Verification Committee	03 <sup>rd</sup> Jul 2017 (2017-18); 16 <sup>th</sup> Jul 2014, 29 <sup>th</sup> Dec 2014 (2014-15).	SVNIT, Surat
Member, Scrutiny Committee of the Teaching Positions of Mechanical Engineering Department	16 <sup>th</sup> Apr 2010	SVNIT, Surat
Chairman, M. Tech. (CS) Dissertation Examination (ECED)	07 <sup>th</sup> Jul 2015	SVNIT, Surat
Examiner, Practical Exams of Mechanics of Automotive Body	03 <sup>rd</sup> Jan 2015	ChhotubhaiGopalbhai Patel Institute of Technology, Bardoli
Paper Setter and Assessment of Answer Books(Mechanics of Automotive Body)	08 <sup>th</sup> Jan 2015	ChhotubhaiGopalbhai Patel Institute of Technology, Bardoli
Member, Committee for UG Programme Curriculum Revision for B. Tech. (Mechanical Eng.)	27 <sup>th</sup> Aug 2014	SVNIT, Surat
Member, Interaction with TEQIP Auditor	20 <sup>th</sup> Jan 2015	SVNIT, Surat

Member, Committee for Document Verification Scrutiny for CCMT/ Sponsored/ Non-Sponsored / Non-GATE (Mechanical Eng.)	04 <sup>th</sup> Jul 2014 (2014-15)	SVNIT, Surat
Member, Committee for Document Verification Scrutiny for M. Tech. Sponsored/ Non-Sponsored / Non-GATE (Mechanical Eng.)	25 <sup>th</sup> Jul 2014 (2014-15)	SVNIT, Surat
Member, Committee for Scrutiny of Applications for M. Tech. under Sponsored/ Non-Sponsored / Non-GATE (Mechanical Eng.)	01 <sup>st</sup> Jul 2013 (2013-14)	SVNIT, Surat
Member, Committee for Scrutiny of Applications for M. Tech. under Sponsored/ Non-Sponsored / Non-GATE (Mechanical Eng.)	15 <sup>th</sup> Jun 2012 (2012-13)	SVNIT, Surat
Member, Accreditation Team for Design and Dynamics Engineering (Mechanical Eng.)	18 <sup>th</sup> Mar 2014 (2013-14)	SVNIT, Surat
Member, Accreditation Team for Design and Dynamics Engineering (Mechanical Eng.)	05 <sup>th</sup> Jan 2016 (2015-16)	SVNIT, Surat
Member, Accreditation Team for B. Tech. (Mechanical Eng.)	11 <sup>th</sup> Feb 2014 (2013-14)	SVNIT, Surat
Member, Accreditation Team for M. Tech. (CAD/CAM)	30 <sup>th</sup> Jan 2014 (2013-14)	SVNIT, Surat
Member, Accreditation Team for B. Tech. (Mechanical Eng.) & M. Tech. (CAD/CAM)	10 <sup>th</sup> Dec 2012 (2012-13)	SVNIT, Surat
Member, Accreditation Team for M. Tech. (CAD/CAM)	30 <sup>th</sup> Jan 2012 (2011-12)	SVNIT, Surat
Member, Committee for Scrutiny of Ph.D. Applications (QIP) (Mechanical Eng.)	26 <sup>th</sup> Dec 2013 (2013-14), 26 <sup>th</sup> Dec 2012 (2012-13)	SVNIT, Surat

Co-coordinator Examination (UG/PG/Ph.D.) (Mechanical Eng.)	25 <sup>th</sup> Apr 2013 (2013-14)	SVNIT, Surat
Member, Performance Audit of TEQIP-II (Mechanical Eng.)	12 <sup>th</sup> Mar 2013 (2012-13)	SVNIT, Surat
Member, Departmental TEQIP Committee (Mechanical Eng.)	15 <sup>th</sup> Feb 2013 (2012-13)	SVNIT, Surat
Examiner, Ph. D. Credit Seminar Committee	(2017-18)	SVNIT, Surat
Examiner, Ph. D. Credit Seminar Committee	(2017-18)	SVNIT, Surat
Member, Preparation of Question Bank for the AICTE, (Sub: Mechanical Design and Computer Aided Design) [PG]	(2017-18) O. O. No. Dean (Acad)/1462/2017-18, Date: 13/04/2018	SVNIT, Surat
Departmental Academic Advisory Committee (DAAC) Secretary	10 <sup>th</sup> Jul 2019 to 19 <sup>th</sup> Feb 2024	DoME, SVNIT, Surat
Additional Prof. I/C (Workshop)	06 <sup>th</sup> May 2019 to 05 <sup>th</sup> May 2021 (2019-2021) O. O. No. MED/297/2018-19, Date 30/04/2019	DoME, SVNIT, Surat
UG/PG Departmental Examination	06 <sup>th</sup> May 2019 to 05 <sup>th</sup> May 2021 (2019-2021) O. O. No. MED/297/2018-19, Date 30/04/2019	DoME, SVNIT, Surat
Liaison with T & P and Alumni	06 <sup>th</sup> May 2019 to 05 <sup>th</sup> May 2021 (2019-2021) O. O. No. MED/297/2018-19, Date 30/04/2019	DoME, SVNIT, Surat
Coordinators, AMC (Computer Peripherals)	06 <sup>th</sup> May 2019 to till date O. O. No. MED/297/2018-19, Date 30/04/2019; O.O. No. MED/Lab –In- charges/2928/2020-21, Date 05/03/2021;	DoME, SVNIT, Surat

Laboratory In-charge (CAD Lab)	19 <sup>th</sup> Jul 2019 toContd.	DoME, SVNIT, Surat
Laboratory In-charge (Tribology Lab)	19 <sup>th</sup> Jul 2019 toContd.	DoME, SVNIT, Surat
Laboratory In-charge (Department Library)	19 <sup>th</sup> Jul 2019 toContd.	DoME, SVNIT, Surat
Member Secretary in newly proposed M. Tech. (Machine Design)	O. O. No. MED/1524/2021-22 Dated: 16 Aug 2021	DoME, SVNIT, Surat
Member, Restructuring Laboratories of Mechanical Engineering Department	O. O. No. MED/1898/2019-20 Dated: 23 Aug 2019	DoME, SVNIT, Surat
Member, Anti-Ragging Committee of Institute First Year Hostel, A. Y. 2017-18 to A. Y. 2019-20	O. O. No. E/6808/2017-18 Date: 08-09/08/2017; O. O. No. E/1079/2018-19 Date: 10/08/2018; O. O. No. E/100/2019-20 Date: 01/08/2019;	SVNIT, Surat
Faculty Advisor (UG- B. TechIII Mechanical), A. Y. 2017-18	O. O. No. Acad./Faculty Advisor/2017- 18/1436 Date: 20/07/2017; O. O. No. Acad./Faculty Advisor/2017- 18/1034 Date: 16/01/2018;	SVNIT, Surat
Faculty Advisor (UG-B. TechIII Mechanical), A. Y. 2018-19, A. Y. 2019-20, A. Y. 2022-23	<ul> <li>O. O. No. Acad./Faculty Advisor/2018- 19/312 Date: 04/09/2018;</li> <li>O. O. No. Acad./Faculty Advisor/2018- 19/312 Date: 21/08/2019;</li> <li>O. O. No. Acad./Faculty Advisor/2022- 23/312 Date: 30/08/2022;</li> </ul>	SVNIT, Surat
Fee Remission Committee Member (UG- B. TechIII Mechanical), A. Y. 2018-19 to A. Y. 2023-24	<ul> <li>O. O. No. E/277/Acad./2018-19 Date: 17/05/2018;</li> <li>O. O. No. E/849/Acad./2019-20 Date: 23/07/2019;</li> <li>O. O. No. E/503/Acad./2020-21 Date: 11/09/2020;</li> <li>O. O. No. E/246/Acad./2021-22 Date: 14/09/2021;</li> <li>O. O. No. E/Acad./236/2022-23 Date: 05/08/2022;</li> <li>O. O. No. E/812/Acad./2023-24 Date: 24/06/2023;</li> </ul>	SVNIT, Surat

Member, 16 <sup>th</sup> Convocation Programme Registration Sub-Committee 8 for UG	O. O. No. Dean (Acad.)/16 <sup>th</sup> Conv./1969/2018-19,	SVNIT, Surat
(Mechanical), 13 <sup>th</sup> Oct 2018 (2018-19)	Date 24/09/2018	
Member, 19 <sup>th</sup> Convocation Programme	O. O. No. Dean (Acad.)/19 <sup>th</sup>	SVNIT, Surat
Registration Sub-Committee 8 for UG (Mechanical), Oct 2022 (2022-23)	Conv./4157/2022-23,	
(Mechanical), Oct 2022 (2022-23)	Date 31/08/2022	
Member of Scrutiny Committee for Group	No. E/1625, Date-23 Dec 2022	SVNIT, Surat
A, B & C Recruitment Member of Document Verification	No. 5/141/Doott (NT)/2084	SV/NUT Surget
Committee for Group A, B & C	No. E/141/Rectt. (NT)/2084, Date-02 Mar 2023	SVNIT, Surat
Recruitment		
Member of Document Verification	No. E/NT-Rectt./2299,	SVNIT, Surat
Committee for Group A, B & C	Date-23 Mar 2023	
Recruitment		
Member of Scrutiny Committee for the	No. E/472, Date-17 May 2023	SVNIT, Surat
Post of Assistant Professor (Pay level 10		
and level 11) Recruitment		
Member of Document Verification	No. E/T-Rectt./1349, Date-22 Aug 2023	SVNIT, Surat
Committee (Dept. of Elect. Eng.) for the		
Post of Assistant Professor (Pay level 10, level 11 & level 12) Recruitment		
level 11 & level 12) Reclutifient		
Member of Document Verification	No. E/T-Rectt./1519, Date-10 Sept 2023	SVNIT, Surat
Committee (Dept. of Mathematics) for		
the Post of Assistant Professor (Pay level 10, level 11 & level 12) Recruitment		
Member of Document Verification	No. E/T-Rectt./3380, Date-13 Sept 2023	SVNIT, Surat
Committee (Dept. of Physics & Chemistry)		
for the Post of Assistant Professor (Pay level 10, level 11 & level 12) Recruitment		
Faculty Mentor of Student Mentorship	No. Acad/477, Date-18 Sept 2023	SVNIT, Surat
Programme for B. Tech. and M. Sc. 1 <sup>st</sup> year students of the A.Y. 2023-2024		
year students of the A.t. 2023-2024		
Committee Member Time Table and	01 <sup>st</sup> May 2024 to till date	DoME, SVNIT, Surat
Workload	DoME/5757/2023-24,Date: 22/03/2024	

Committee Member M. Tech. (CAD-CAM) syllabus preparation as per NEP	05 <sup>th</sup> Jun 2024 to till date DoME/778/2024-25, Date: 05/06/2024	DoME, SVNIT, Surat
Committee Member B. Tech. (III & IV year) syllabus preparation as per NEP	01 <sup>st</sup> May 2024 to till date DoME/779/2022-23, Date: 05/06/2024	DoME, SVNIT, Surat

### Awards / Honors:

2018	Best Oral Presentation, ICMAA-2018, 2 <sup>nd</sup> International Conference on Mechanical, Aeronautical
	and Automotive Engineering, Singapore, Febuary 24-26, 2018.

#### Area of Research:

Machine Design, Tribology and Bearing Design, Hydrodynamic/Hydrostatic Lubrication, Wear of Machine Components, Analysis of Steam Turbine, Finite Element Analysis, Materials Tribology, CAD-CAM.

#### International / National Visits:

2018	<b>ICMAA-2018,</b> 2 <sup>nd</sup> International Conference on Mechanical, Aeronautical and Automotive Engineering, <b>Singapore</b> , Febuary 24-26, 2018.
2016	NCTEEE-2016, National Conference on Tribology: Energy, Environmentand Efficiency, Organised
	by CSIR(AMPRI) & Tribology Society of India, <b>Bhopal (India)</b> , January 21-22, 2016.
2015	TurkeyTRIB-2015, First International Conference on Tribology, Organised by Yildiz Technical
	University, <b>Istanbul (Turkey)</b> , October 07-09, 2015.
2014	ASIATER 2014 Asian Tribology Conference Organized by Tribology Seciety of India Agra
2014	ASIATRIB-2014, Asian Tribology Conference, Organised by Tribology Society of India, Agra (India), Febuary 17-20, 2014.
	(India), 1 codary 17 20, 2014.

#### **Extra Curricular Activities:**

- Recipient of The National Merit Scholarship(Govt. of India) in High School Examination, 1990.
- Outstanding Performance in All India Board of General Knowledge and Moral Education Examination.
- President and Secretary of Students Council of Govt. Polytechnic, Ashoknagar during 1993-94.

- Organizes M. P. State Level Intercollege Paper Presentation "PARWAAZ-06" and "PARWAAZ-07" in two consecutive years at Technocrates Institute of Technology, Bhopal (M.P.).
- Participated in Various Athletic Meets and Sports Events at School Level.

#### Research Guidance:

Ph.D. (Annexure-I) <sup>*</sup>	03 (Awarded)	03 (In Progress)
M.Tech. (Annexure-I)*	27 (Awarded)	02 (In Progress)
B.Tech. (Annexure-I)*	10 (Awarded)	02 (In Progress)

\*For Details of Research Guidance Please See Annexures.

#### Research Publications: As on 21 Dec 2023

h- Index: **11** i-10 Index: **12** Citations: **301** 

International Refereed Journals	23
International Peer Review Journals	10
Book Review/ Series/ Chapter	10
Abstracts	-
National Journals	-
<ul> <li>Proceedings of International and National Conferences</li> </ul>	25

For Details of Research Publications Please See Annexure-2.

#### Short Term Courses Participated: (23)

S. No.	Title	Duration	Institute	Dates
1.	AICTE/MHRD Sponsored Summer School on "Recent Trends in Industrial and Production Engineering"	13 Days	MANIT, Bhopal	30 <sup>th</sup> Jun to 12 <sup>th</sup> Jul 2008
2.	AICTE/MHRD Sponsored STTP on "Recent Applications of Thermal Engineering"	12 Days	MANIT, Bhopal	11 <sup>th</sup> Aug to 22 <sup>th</sup> Aug 2008
2.	AICTE/MHRD Sponsored STTP on "Advances in Production Technology and Industrial Engineering"	13 Days	MANIT, Bhopal	02 <sup>th</sup> Feb to 14 <sup>th</sup> Feb 2009
3.	AICTE Sponsored STTP on "Advanced Engineering Optimization Through Intelligent Techniques"	05 Days	SVNIT, Surat	13 <sup>th</sup> Jul to 17 <sup>th</sup> Jul 2009
4.	AICTE Sponsored STTP on "CAE and Design Optimization Using Optistruct"	05 Days	SVNIT, Surat	20 <sup>th</sup> Jul to 24 <sup>th</sup> Jul 2009
5.	Training ProgrammeOrganised by Altair and SVNIT, Surat on "CAE Training Programme"	05 Days	SVNIT, Surat	20 <sup>th</sup> Jul to 24 <sup>th</sup> Jul 2009
6.	AICTE Sponsored STTP on "Pedagogy and Research Methodology"	05 Days	SVNIT, Surat	03 <sup>th</sup> Aug to 07 <sup>th</sup> Aug 2009
7.	AICTE Sponsored STTP on "Metallurgical Aspects of Tribology"	05 Days	SVNIT, Surat	30 <sup>th</sup> Nov to 04 <sup>th</sup> Dec 2009
8.	AICTE Sponsored STTP on "Mechanical Drawings Using CAD"	05 Days	SVNIT, Surat	07 <sup>th</sup> Dec to 11 <sup>th</sup> Dec 2009
9.	AICTE Sponsored SDP on "Computational Fluid Dynamics (CFD) for Engineers"	05 Days	SVNIT, Surat	01 <sup>th</sup> Feb to 05 <sup>th</sup> Feb 2010

10.	TEQIP-II Sponsored STTP on "Recent Advances in Composite Materials (RACM-2013)"	05 days	SVNIT, Surat	24 <sup>th</sup> Jun to 28 <sup>th</sup> Jun 2013
11.	TEQIP-II Sponsored Workshop on "Industrial Tribology & Applications"	02 Days	SVNIT, Surat	14 <sup>th</sup> Nov to 15 <sup>th</sup> Nov 2014
12.	TEQIP-II Sponsored CEP on "Computational Fluid Dynamics: Theory and Practice"	05 Days	SVNIT, Surat	30 <sup>th</sup> Jun to 04 <sup>th</sup> Jul 2014
13.	TEQIP-II Sponsored CEP on "Finite Element Method: A Universal Tool for Engineering Analysis"	05 Days	SVNIT, Surat	02 <sup>th</sup> Jan to 06 <sup>th</sup> Jan 2017
14.	TEQIP-II Sponsored STTP on "Basics and Developments in Refrigeration and Air Conditiong (RAC-2017)"	05 Days	SVNIT, Surat	27 <sup>th</sup> Feb to 03 <sup>th</sup> Mar 2017
15.	AICTE Sponsored FDP on "Recent Advances in Tribology and Surface Engineering, Series I: Introduction to Tribology and Surface Engineering"	05 Days	Saintgits College of Engineering, Kottayam	17 <sup>th</sup> to 22 <sup>th</sup> Aug 2020
16.	AICTE Sponsored FDP on "Recent Advances in Tribology and Surface Engineering, Series II: Tribology of Machine Components and Applied Tribology"	05 Days	Saintgits College of Engineering, Kottayam	14 <sup>th</sup> to 19 <sup>th</sup> Sept 2020
17.	AICTE Sponsored FDP on "Recent Advances in Tribology and Surface Engineering, Series III: Introduction to Special Topics like Nanotribology, BioTribology, Biomimetics and Tribology in Industry"	05 Days	Saintgits College of Engineering, Kottayam	12 <sup>th</sup> to 17 <sup>th</sup> Oct 2020
18.	AICTE Sponsored FDP on "Recent Advances in Tribology and Surface Engineering, Series IV: Surface Characterisation and Traetments in Tribology"	05 Days	Saintgits College of Engineering, Kottayam	23 <sup>rd</sup> to 28 <sup>th</sup> Nov 2020

19.	TEQIP-III Sponsored STTP on "Noise and Vibration Monitoring of Mechanical Systems"	03 Days	IIT, Indore	29 <sup>th</sup> to 31 <sup>th</sup> Oct 2020
20.	TEQIP-III Sponsored STTP on "Industrial Noise and Vibration Control"	03 Days	Indian Institute of Technology, Indore	26 <sup>th</sup> to 28 <sup>th</sup> Nov 2020
21.	TEQIP-III Sponsored STTP on "Condition Monitoring of Rotating Machines using Advanced Signal Processing Techniques"	03 Days	Indian Institute of Technology, Indore	21 <sup>th</sup> to 23 <sup>rd</sup> Dec 2020
22.	International Workshop on Advancements in Design and Materials for Product Development	02 Days	Vellore Institute of Technology, Vellore	03 <sup>rd</sup> to 04 <sup>th</sup> Oct 2020
23.	International Webinar on Advances In Tribology	01 Day	The Asaam Kaziranga University, Jorhat (Asaam)	23 <sup>rd</sup> May 2022

# Short Term Courses Organized : (18)

S. No.	Title	Durati	Resource	Sponsors	Dates
		on	Persons		
1.	Steam Engineering	05	Forbes &	Anchor Institute	28 <sup>th</sup> Jun to 02 <sup>th</sup> Jul 2010
		Days	Marshall Pvt.	Cell and SVNIT,	
			Ltd., Pune	Surat	
2.	Energy Conservation in	05	Forbes &	Anchor Institute	27 <sup>th</sup> Nov to 01 <sup>st</sup> Dec 2010
	Steam Systems	Days	Marshall Pvt.	Cell and SVNIT,	
			Ltd., Pune	Surat	
3.	Lubrication of Rolling	05	SKF, Pune	Anchor Institute	25 <sup>th</sup> to 29 <sup>th</sup> May 2011
	Element Bearing	Days		Cell and SVNIT,	
				Surat	
4.	Welding & Brazing	03	ASME	Anchor Institute	14 <sup>th</sup> to 16 <sup>th</sup> Sep 2011
	Qualifications-ASME BPVC	Days		Cell and SVNIT,	
	Section-IX			Surat	

5.	Power Transmission of	01 Day	SKF, Pune	Anchor Institute	08 <sup>th</sup> Sep 2011
	Rotating Machinery (WE-202)			Cell and SVNIT, Surat	
6.	Welding & Brazing Qualifications-ASME BPVC Section-IX	05 Days	ASME	Anchor Institute Cell and SVNIT, Surat	05 <sup>th</sup> to 09 <sup>th</sup> Nov 2011
7.	Basics of Hydraulics	01 Day	SKF, Pune	Anchor Institute Cell and SVNIT, Surat	10 <sup>th</sup> Jan 2012
8.	Bearing Maintenance Technology	05 Days	SKF, Pune	Anchor Institute Cell and SVNIT, Surat	09 <sup>th</sup> to 13 <sup>th</sup> Oct 2012
9.	Fundamentals of Bearing Maintenance	01 Day	SKF, Pune	Anchor Institute Cell and SVNIT, Surat	31 <sup>st</sup> Jul 2012
10.	Power Transmission Technology	01 Day	SKF, Pune	Anchor Institute Cell and SVNIT, Surat	07 <sup>th</sup> Aug 2012
11.	Lubrication of Rolling Element Bearing	01 Day	SKF, Pune	Anchor Institute Cell and SVNIT, Surat	12 <sup>th</sup> Sept 2012
12.	1 <sup>st</sup> Basics of Tribology and Its Industrial Engineering Applications (BTIEA - 2018) O.O. No. MED/SS- BMS/1418, Dated: 04 Jul 2018	05 Days	IIT, NIT, MMMUT & MSU	TEQIP-III MED, SVNIT, Surat	22 <sup>nd</sup> - 26 <sup>th</sup> Oct 2018 Co-ordinators: Dr. B. M. Sutaria Dr. Sandeep Soni
13.	Trends in Mechanical Design and Development (TMDD-2020) O.O. No. MED/SS-SK- RT/1417, Dated: 02 Nov 2020	05 Days	IIT, NIT,UEC & Industry	TEQIP-III MED, SVNIT, Surat	14 <sup>th</sup> -18 <sup>th</sup> Dec 2020 Co-ordinators: Dr. Sandeep Soni Dr.SumitKhare Dr. RohitTamrakar
14.	2 <sup>nd</sup> Basics of Tribology and Its Industrial Engineering Applications (BTIEA - 2021) O.O. No. MED/SS- BMS/1418, Dated: 04 Nov 2020	05 Days	IIT, NIT, MMMUT & MSU	TEQIP-III MED, SVNIT, Surat	04 <sup>th</sup> -08 <sup>th</sup> Jan 2021 Co-ordinators: Dr. Sandeep Soni Dr. B. M. Sutaria

15.	Advances in Materials and Design (AMD - 2021) O.O. No. MED/SNP-SS- JVM/2072, Dated: 08 Jan 2021	05 Days	IIT, NIT, MMMUT & MSU	TEQIP-III MED, SVNIT, Surat	08 <sup>th</sup> -12 <sup>th</sup> Feb 2021 Co-ordinators: Dr. S.N. Pandya Dr. Sandeep Soni Dr. J.V.Menghani
16.	Advances in Materials and Design (AMD - 2023) O.O. No. MED/SS-JVM- SNP/3669, Dated: 13 Oct 2022	05 Days	IIT, NIT, MMMUT & MSU	Self Sponsored, DoME, SVNIT, Surat	30 <sup>th</sup> Jan- 03 <sup>rd</sup> Feb 2023 Co-ordinators: Dr. Sandeep Soni Dr. J. V. Menghani Dr. S.N. Pandya
17.	Advances in Material Processing & Design (AMPD-2024) O.O. No. SVNIT/CCE/DoME/SS-JVM- SNP/59/2023-24, Dated: 26 Mar 2024	05 Days	IIT, NIT,UEC & Industry	Self Sponsored, DoME, SVNIT, Surat	13 <sup>th</sup> -17 <sup>th</sup> May 2024 Co-ordinators: Dr. Sandeep Soni Dr. J. V. Menghani Dr. S.N. Pandya
18.	3 <sup>rd</sup> Basics of Tribology and Its Industrial Engineering Applications (BTIEA - 2024) O.O. No. SVNIT/CCE/DoME/SS- BMS/06/2024-25, Dated: 15 Apr 2024	05 Days	IIT, NIT,UEC & Industry	Self Sponsored, DoME, SVNIT, Surat	20 <sup>th</sup> -24 <sup>th</sup> Aug 2024 Co-ordinators: Dr. Sandeep Soni Dr. B. M. Sutaria

#### International/National Conferences Organized: (02)

 1. 1<sup>st</sup> International Conference on Recent Advancements in Design and Manufacturing (ICRADM 2020) from 16<sup>th</sup>-17<sup>th</sup> July 2020. O.O. No. MED/SS-BMS-AL/58, Dated: 09 Jun 2020
 2. International Conference on Advancements in Design and Tribology (ICADT-2021) under Diamond Jubilee Celebration Event from 17<sup>th</sup>-18<sup>th</sup> December 2021. O.O. No. SVNIT/CCE/DJC/DME/BMS-SS-AL-SNP-SK/59/2021-22 Dated: 09-12-2021

1.	Life Member, Tribology Society of India, Faridabad (LM-5051), Yr. of Membership: 2014
2.	Member, The Institution of Engineers (India), Kolkata (M-137535-5), Yr. of Membership: 2008
3.	Member, Indian Institution of Industrial Engineering, Mumbai (LM-9369), Yr. of Membership: 2009

# **Reviewer/Member of International Journals and Conferences:**

•	2 <sup>nd</sup> International Conference on Mechanical, Aeronautical and Automotive Engineering, <b>Singapore</b> , Febuary 24-26, 2018 (ICMAA-2018)[Session Chairman]
•	IMechE Part J: Journal of Engineering Tribology, London [Reviewer]
•	National Conference on Advances in Materials and Product Design (AMPD-2017) [Reviewer]
•	International Journal of Wind and Renewable Energy [Editorial Board Member]
•	International Journal of Mechanical Engineering and Research [Editorial Board Member]
•	National Conference on Advances in Materials and Product Design (AMPD-2010) [Session Chairman]
•	Tribology International, Elsevier, UK [Reviewer]
•	Advisory Board member for International Conference on Future Trends in Materials and Mechanical Engineering (ICFTMME-2020) on May 29-30, 2020, SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, U.P. (INDIA) [Advisory Board Member]
•	Advisory board member for the National Conference Recent Advancements in Energy, Sciences & Technology (NCRAEST19). Annual ISTE M.P State Convention during 8-9 November, 2019, Oriental College of Technology (OCT), Bhopal [Advisory Board Member]
•	Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE), Springer, UK [Reviewer]
•	5 <sup>th</sup> International Conference on Emerging Trends in Mechanical Industrial Engineering (ICETMIE-2022) 04-05 March 2022, The North Cap University, Gurugram–2022 [Reviewer]
•	Journal of Applied and Computational Mechanics, Iran [Reviewer]
•	5 <sup>th</sup> International Conference on Emerging Trends in Mechanical Industrial Engineering (ICETMIE-2022) during 04-05 March, 2022, The NorthCap University, Gurugram [Reviewer]

•	Advisory board member of the second edition of "International Conference on Future Trends in Materials and Mechanical Engineering (ICFTMME-2022)" conducted by the Department of Mechanical and Automobile Engineering, SRM Institute of Science & Technology, Delhi-NCR campus, Modi-Nagar [Advisory Board Member]
•	Worked as Series Editors of Edited Book on "Futuristic Trends in Mechanical Engineering", Volume 3, Book 3, 2024, IIP Series, Published by Iterative International Publishers, Karnataka, India & Iterative International Publishers, USA [Series Editor]

### Expert Lecture Delivered:

1.	Delivered Expert Lecture in <b>"Design of Machine Elements",</b> Dr. B. B. A. Govt. Polytechnic, Karad (D.P.), October 03, 2017.
2.	Delivered Expert Lecture on "Analysis of Hydrodynamic Journal Bearing Under Severe Operating Contions", STTP BTIEA-2018, SVNIT, Surat, October 26, 2018.
3.	Delivered Expert Lecture on "Analysis of High Speed Journal Bearings", STTP BTIEA-2018, SVNIT, Surat, October 22, 2018.
4.	Invited Keynote Speaker at <b>"International Workshop on Industrial Tribology", Amrutvahini College of</b> Engineering, Sangamner, Ahmednagar, Maharashtra, January 19, 2019. Title of Talk: Analysis of Hydrodynamic Journal Bearing Under High Speed
5.	Member of Interview Board Bhagwan Mahavir Polytechnic, Surat, Date: 08 Aug 2018. Outward No. BMEF/170/2018-19, Date: 03 Aug 2018.
6.	Delivered Expert Lecture on <b>"Analysis of Hydrodynamic Journal Bearing through FEM"</b> , TEQIP-III STTP on Finite Element Analysis through ANSYS, 15-16 Oct 2019, REC, Banda (U.P.).
7.	Delivered Expert Lecture on "FEM Analysis of Journal Bearing under Severe Industrial Environment", STTP BTIEA-2021, SVNIT, Surat, January 04-08, 2021.
8.	Delivered Expert Lecture on "FEM Analysis of Journal Bearing under Severe Industrial Environment", STTP, SSSUTM, Sehore, April 26, 2021.
9.	Delivered Expert Lecture on <b>"Challenges in Using Hydrodynamic Bearings in High Speed Automobiles"</b> , <b>FDP on Recent Advances and Challenges in Automotive Sector</b> , Dream Institute of Technology, Kolkata (WB), May 25-27, 2023.
10.	Delivered Expert Lecture on <b>"Investigation of Conformal Contact Elements in Harsh Flow</b> Surroundings" STTP AMD-2023, SVNIT, Surat, January 30-Feburary 03, 2023.

11.	Delivered Expert Lecture on "Turbulence and Non-Newtonian Flow Modeling for Hydrodynamic Bearings" <b>STTP AMPD-2024,</b> SVNIT, Surat, <b>May 13-17, 2024.</b>
12.	Delivered Expert Lecture on <b>"Fault Diagnostics of Rolling Element Bearing"</b> , <b>STTP on Condition-based</b> <b>Monitoring: Leveraging Technology for Smarter Industrial Maintenance (CBMLTSIM-2024)</b> , St. Francis Institute of Technology, Mumbai, June 24 -28, 2024.
13.	Delivered Expert Lecture on "Analysis of Hydrodynamic Bearings in High Speed Applications", STTP BTIEA-2024, SVNIT, Surat, August 20-24, 2024.

# **Book Review and Book Chapters:**

1.	Script Review: Engineering Drawing, Author- Basant Agrawal and C. M. Agrawal, Publisher: McGraw Hill Education (India) Private Limited, New Delhi [19 July 2012]
2.	Script Review: Engineering Drawing, Author- Basant Agrawal and C. M. Agrawal, Publisher: McGraw Hill Education (India) Private Limited, New Delhi [10 Sept 2018]
3.	Sandeep Soni, U. Saindane (2019). Stress Analysis of Infinite Plate with Elliptical Hole. In: Prasad, A., Gupta, S., Tyagi, R. (Eds.) Advances in Engineering Design. Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-13-6469-3_50</u> .
4.	Sandeep Soni, D. V. Kushare (2019). Static and Dynamic Characteristics of Two-Lobe Hydrostatic Journal Bearing. In: Prasad, A., Gupta, S., Tyagi, R. (Eds.) Advances in Engineering Design. Lecture Notes in Mechanical Engineering. Springer, Singapore. <u>https://doi.org/10.1007/978-981-13-6469-3_63</u> .
5.	<b>Sandeep Soni (2021).</b> Performance Investigation of Hydrodynamic Journal Bearing Under Severe Environment, In Pruncu, C.I., Aherwar, A., & Gorb, S. (Eds.) Progress in Lubrication and Nano-and Biotribology (1 <sup>st</sup> Ed.). <b>CRC Press</b> . <u>https://doi.org/10.1201/9781003096443</u> .
6.	Sandeep Soni (2022). Performance Evaluation of Journal Bearing Under Thin-Film Lubrication, In Tribology and Characterization of Surface Coatings, Edited by Sarfraj Ahmed and Vinayak S. Dakre (Eds.), Scrivener Publishing, Wiley. ISBN 978-1-119-81878-6. <u>https://doi.org/10.1002/9781119818878.ch7.</u>
7.	<b>Sandeep Soni (2024).</b> Performance Estimation of Non-Circular Bearing in Thin Film Lubrication, In Abhishek Kumar, Avinash Kumar, Ashwani Kumar (Eds.) Performance Characterization of Lubricants (1 <sup>st</sup> Ed.) <b>CRC Press</b> . <u>https://doi.org/10.1201/9781003535447</u> .
8.	<b>Sandeep Soni (2024).</b> Numerical Modelling of Crack Growth Path in Linear Elastic Materials. In: Kumar, A., Kumar Singla, Y., Maughan, M. R. (Eds.) Fracture Behavior of Nanocomposites and Reinforced Laminate Structures. <b>Springer, Cham</b> . <u>https://doi.org/10.1007/978-3-031-68694-8_7</u> .

9.	Sandeep Soni (2024). Performance Estimation of Circular Bearing with Nano-lubricants, In Z. A. Khan, M. S. Charoo, P. D. Srivyas, T. Medhi (Eds.) Bio-Lubrication for Sustainable Tribology CRC Press.						
10.	S. Dhotare, <b>Sandeep Soni</b> , P. Bramhwanshi and C. Rohekar <b>(2024).</b> IOT-Based Smart Liquid Mosquito Killer for Smart Homes: A Prospective of Industry 4.0 Technologies, In Futuristic Trends in Mechanical Engineering. <b>Iterative International Publishers (IIP), India and USA</b> . E-ISBN: 978-93-5747-352-1.						

# **Book Publications:**

1.	Script Review: Engineering Drawing, Author- Basant Agrawal and C. M. Agrawal, Publisher: McGraw Hill Education (India) Private Limited, New Delhi [19 July 2012]
2.	Sandeep Soni and Praveen Chandrakar, 'Simulation and flatness control of steel plates in hot rolling processes, LAP LAMBERT Academic Publishing, ISBN: 978-613-9-89170-2, 30-07-2018.
3.	Sandeep Soni and Rahul Pal, 'Boiler tube failure: A Study', LAP LAMBERT Academic Publishing, ISBN: 978-613-9-45347-4, 15-02-2019.

# List of Research Guidance (M. Tech.):

# List of M.Tech. Thesis Supervised

S. No.	Candidate	Year	Title	Co-Supervisor if any
1.	Rahul Pal	2009-10	Boiler Tube Failure -A Study	
2.	Amit Dewangan	2009-10	Study of Organic Rankine Cycle and Its Applicability in Thermal Power Plant	
3.	Ashish Kumar	2010-11	An Analysis of Fuel Cell as an Alternative to Turbine-APU	
4.	Jayendra B. Kanani	2010-11	Automation in Outer Race of Taper Roller Bearing Manufacturing Using Software Package	
5.	HareshwarR.Jat	2011-12	Design and Analysis of 150 Tonne Capacity Electric Overhead Travelling Crane	Mr. J.J.Pandya (ESSAR Steel, Surat)
6.	VinayakShinde	2012-13	Analysis of Hydrodynamic Journal Bearing Using Numerical Technique	
7.	Mane Ravindra M.	2012-13	Analysis of Lubricated Journal Bearing Using COMSOL Software	Dr. A.K.Jana (ChED)
8.	Ganesh Patil	2012-13	Design and Analysis of 63T -20T Capacity Industrial Crane	Mr. J.J.Pandya (ESSAR Steel, Surat)
9.	Anand D. Kalani	2012-13	Expert Knowledge Base System for Computer Aided Design of Hydrodynamic Journal Bearing	
10.	PravinChandrakar	2013-14	Simulation and Flatness Control of Steel Plates in Hot Rolling Process	

11.	Rohit S. Kamble	2013-14	Design and Analysis of Universal	Mr. J.J.Pandya (ESSAR
			Shaft Used in Roughing Mill of Steel Plant	Steel, Surat)
12.	Anil Kumar	2013-14	Experimental Investigation of Friction And Wear of Carbon Steel Used In Sugar Mill Rolls	Dr. B.M.Sutaria (MED)
13.	Shayam B. Pandey	2015-16	Analysis of Erosion for Steam Turbine Blades of Homogeneous Materials	
14.	Nayanesh S. Gamit	2017-18 09/Aug/2018	Performance Investigation of Some Mechanical Drives for Power Transmission	
15.	Prajal V. Nandewalia (P18ME017)	2019-20 28/Aug/2020	A research study on Al <sub>2</sub> O <sub>3</sub> -TiO <sub>2</sub> and Cr2O3 coating done by plasma spray technique	Dr. J. V. Menghani
16.	Vidyottam Semwal (P19CC006)	2020-21 26/Jul/2021	Parametric Analysis and Fault Detection of Gears Using Digital Image Processing	Dr. J. V. Menghani
17.	Bhirud Shubham (P19ME017)	2020-21 29/Jul/2021	Parametric Analysis of Flexural Behaviour of Jeffcott Rotor	
18.	Rana Vishwajeet (P19ME011)	2020-21 29/Jul/2021	Analysis of Hydrodynamic Journal Bearing	
19.	Barun Kumar Mahato (P19ME014)	2020-21 29/Jul/2021	Parametric Analysis of Centrifugal Blower Impeller Through ANSYS	
20.	Sayak Saha (P20CC006)	2021-22 22/Jul/2022	Transient Thermal Analysis of Disc Brake Rotor	Dr. B.M.Sutaria
21.	Abhishek Kumar (P20CC007)	2021-22 22/Jul/2022	Structural Analysis of Plane and Space Truss Using Computer Programming	
22.	Rishav Parashar (P20CC011)	2021-22 22/Jul/2022	Thermal Analysis of Antifriction Bearings	
23.	Mangesh Sharma (P20MF010)	2021-22 22/Jul/2022	Design and Analysis of Pressure Vessel Under Various Weld Joints Efficiencies	Dr. B.M.Sutaria
24.	Ashish Patel (P21ME012)	2022-23	Numerical Analysis of Crack Using ANSYS Workbench	-

25.	Anjan K Patel (P21ME004)	2022-23	Investigation and Optimization of NiTi Actuator for Deployable Radiator for Deep Space Missions	<ol> <li>Mr. Surendra Singh Sisodia,</li> <li>Scientist/Engineer - SD Thermal Engineering Division,</li> <li>Space Application Centre, ISRO, Ahmedabad</li> <li>Mr. Vivek Kumar Singh</li> <li>Scientist/Engineer – SF</li> <li>Thermal Engineering Division,</li> <li>Space Application Centre, ISRO, Ahmedabad</li> </ol>
26.	Navin Prajapati (P21ME002)	2022-23	Design and Analysis of Dry Cell Electrolyzer	-
27.	Krutika K Nangare (P22ME005)	2023-24	Mechanical Design of Serial Manipulator for Remote Operations	Ms. Ramnik Singh Scientific Officer (F) CDM/BARC, Mumbai

# List of M.Tech. Thesis Currently Under Progress

S. No.	Candidate	Year	Title	Co-Supervisor if any
1.	Shreyal Patel	2024-25	Fatigue Life Estimation of Extension	Dr. B.M.Sutaria
	(P23ME006)		Spring Including Effect of	and
			Nonlinear Motion During Energy	Mr. Vishal Bagade
			Release Operation	R&D Principal Engineer
				PGHV-Technology
				Center,
				Hitachi Energy,
				Vadodara, India
2.	Aarati Srivastava	2024-25	Define the Alternative Fixing Methods	Dr. J. V. Menghani
	(P23ME002)		of Corona Shield with Design	and
			Constrains (First Pass Yield,	Mr. Chetan Redasani
			Mechanically Stable and with Ease Of	Business R&D Manager
			Assembly) to Avoid Failures in	PGHV-Technology
			Production	Centre
				Hitachi Energy,
				Vadodara, India

# List of M. Tech. Students for MINI-PROJECT [A.Y.-2023-2024]

Sr. No.	Roll No.	Name of Student	Title of MINI-PROJECT
1.	P23ME001	Manoj Wadile	Design and analysis of connecting rod with different materials
2.	P23ME002	Aarti Shrivastava	Design and analysis of non-circular gear
3.	P23ME003	Utkarsh Shrivastava	Design and analysis of composite helical gears
4.	P23ME005	Aniraj Maru	Design and analysis flange coupling for power transmission
5.	P23ME006	Shreyal Patel	Optimum design and analysis of drive shaft

# List of B.Tech. Thesis Supervised

S. No.	Candidate	Year	Title	Co-Supervisor if any
1.	Akash Agarwal (U07ME604) Chauhan Maulik Kumar B. (U07ME620) Siddharth K. Shah (U07ME675) Viral Pathak (U07ME686)	2010-11	Design of Automatic Humidity Controller	
2.	Nishant Kumar (U07ME702) Harsh Parikh (U07ME704) Sagar Chauhan (U07ME706) Payoj Gupta(U07ME714)	2010-11	Thermal Analysis of Vertical Axis Wind Turbine	
3.	Abhijeet (U08ME666) Rahul Mishra (U08ME711) KuldeepBairwa (U08ME694)	2011-12	Bicycle Operated Water Pump	
4.	Omkar Yadwadkar (U12ME217) Ashwini Rajpurohit (U12ME207) Dashrath Saini (U12ME133) RaghavAsopa (U12ME154) Bansi Lal (U12ME156)	2015-16	Analysis of Wave Springs	

5.	Suraj Jangid (U12ME185) Devendra Kumar (U12ME180) Jitendra Sharma (U12ME1192) J. Baraiya(U12ME186) Parth Parmar (U12ME1194)	2016-17	Analysis of Wave Spring	
6.	J. Maloo (U14ME178) S. Dubey (U14ME187) P. Kumar (U14ME189) S. Verma (U14ME190) P. Kumar (U14ME191)	2017-18 10/May/2018	Analysis of Different Mechanical Springs for Locomotive Suspension	
7.	C. K. Azad (U14ME108) H. Shenoy (U14ME126) Rajnikant (U14ME155) Nirmal (U14ME150) S. Meena (U14ME157)	2017-18 10/May/2018	A Comparative Analysis of Coiled and Wave Spring for Two-Wheeler Suspension System	
8.	Meet kumar Patel [U15ME001] Rajkumar Meena [U15ME005] Aniel Kumar Yadav [U15ME041] Aakash Sanjay Mane [U15ME096] Anand Shah [U15ME104]	2018-19 08/May/2019	Design and optimization of planetary gear-train	
9.	Ellenki Vamshi Mani Teja (U15ME151) Sannadi Muni Srikanth (U15ME150) Veera Rukesh (U15ME149) Boju Karthik (U15ME140) Nishant Mishra (U15ME148)	2018-19 08/May/2019	Analysis and optimization of clutch dampers using CAD softwares	

### List of B.Tech. Internship Supervised

S. No.	Candidate	Admn. No.	Year	Title	Co-Supervisor if any/ Place & Period of Internship
1.	Ashutosh A. Banerjee	U20ME179	2023-24	A multi-disciplinary approach to studying transient thermal effects in disc brakes	Inst.: SVNIT, Surat Mode: OFFLINE 01 Jan 2024 to 31 May 2024
2.	Kondreddy Pallavi Devi	U20ME184	2023-24	Designing of tourism and portfolio websites	Full Stack Development (Intern) Startup Name: Business Web Solutions, New Delhi Mode: ONLINE 01 Jan 2024 to 31 May 2024
3.	Mr. Ganesh S. Kashyap	210180119548	2023-24	Analysis of fatigue crack growth using ANSYS workbench	Inst.: GEC, Dahod Mode: OFFLINE 10 Jan 2024 to 20 Apr 2024

# List of Ph.D. Thesis Completed/Currently Under Progress

S. No.	Candidate	Admn. No.	Year	Title	Co-Supervisor if any
1.	U. V. Saindane	DS17ME002 (PEC)	2017-18	Investigation and Characterization of Polymer Based Composites for Brake Pad Applications	Dr. J. V. Menghani Completed on 03 March 2023
2.	D. V. Kushare	DS17ME007 (PEC)	2017-18	Performance Analysis of Various Textured Configuration of Non Circular Journal Bearing with Non Newtonian Lubricant	
3.	P. Mathur	D19ME012 (PEC)	2019-20	Performance Analysis of Micropolar Fluid Lubricated Bearings	
4.	S. V. Damania	D17ME006 (PEC)	2017-18	Design and Analysis for Performance Improvement of Construction-Block Making Machine	Completed on 29 Nov 2024
5.	P. Bramhwanshi	D23ME009 (ERS)	2023-24	Performance Evaluation of Brake-Pad Materials	Dr. J. V. Menghani
6.	S. Dhotare	D23ME010 (ERS)	2023-24	Performance Evaluation of Clutch-Plate Materials	Dr. J. V. Menghani

### List of Publications:

# International Refereed / Peer Reviewed Journals

1.	<b>Sandeep Soni</b> , Effects of lubricant rheology and flow turbulence on the dynamic properties of hydrodynamic bearing, <i>Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering</i> , <b>2024</b> , DOI: 10.1177/09544089241244580.
2.	<b>Sandeep Soni</b> and S. V. Damania, Design and development of an automatic brick-making machine for various materials, <i>Research and Development in Machine Design</i> , 6(3), <b>2023</b> , pp. 41-56. <u>DOI:</u> <u>10.5281/zenodo.10228614</u> .
3.	<b>Sandeep Soni</b> and S. V. Damania, Development of hydraulically operated energy efficient machines for eco-friendly brick manufacturing, <i>International Journal of Sustainable Building Technology and Urban Development</i> , 14(4), <b>2023</b> , pp. 455-466. DOI: 10.22712/susb.20230035.
4.	<b>Sandeep Soni</b> , Numerical analysis of finite bearing operating under non-Newtonian lubricant and flow turbulence effect, <i>Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering</i> , <b>2023</b> , DOI: 10.1177/09544089231189652.
5.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Performance evaluation of brake pads developed using two different manufacturing methods, <i>Material Science and Engineering Technology</i> (Materialwissenschaft und Werkstofftechnik), Wiley Publication, 54(2), <b>2023</b> , pp. 186-195. <u>DOI:</u> <u>10.1002/mawe.202100407</u> .
6.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Friction and wear performance of brake pad and optimization of manufacturing parameters using grey relational analysis. <i>International Journal of Engineering, Transactions C : Aspects</i> , 35(3), <b>2022</b> , pp. 552-559. DOI: 10.5829/IJE.2022.35.03C.07.
7.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Studies on mechanical properties of brake friction materials derived from carbon fibres reinforced polymer composite. <i>Materials Today: Proceedings</i> , 47, <b>2021</b> , pp. 5760–5765. <u>DOI: 10.1016/j.matpr.2021.04.079</u> .
8.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Dry sliding behavior of carbon-based brake pad materials. <i>International Journal of Engineering, Transactions B: Applications</i> , 34(11), <b>2021</b> , pp. 2517-2524. DOI: 10.5829/IJE.2021.34.11B.14.
9.	<b>Sandeep Soni</b> , Performance of finite bearing under combined influence of turbulent and non-Newtonian lubrication, <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , <b>2021</b> , 235(11), pp. 2350-2363. DOI: 10.1177/1350650121993355.
10.	<b>Sandeep Soni,</b> Turbulence effect on dynamic performance of non-circular floating ring bearing, <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology,</i> 235(2), <b>2021</b> , pp. 290-302. <u>DOI: 10.1177/1350650120916050.</u>

11.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Recent research status on modern friction materials- an Overview. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2020</b> , 810 (1), pp. 012067. <u>https://doi.org/10.1088/1757-899X/810/1/012067</u> .
12.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Recent research status on synthesis and characterization of natural fibers reinforced polymer composites and modern friction materials-An overview, <i>Materials Today: Proceedings</i> , 26, <b>2020</b> , pp. 1616-1620. <u>DOI:10.1016/j.matpr.2020.02.334</u> .
13.	<b>Sandeep Soni</b> and D. P. Vakharia, A steady state performance analysis of a non-circular cylindrical floating ring bearing, <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , <b>2017</b> , 231(1), pp. 41-56.
14.	<b>Sandeep Soni</b> and D. P. Vakharia, Dynamic performance analysis of a non-circular cylindrical floating ring bearing, <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , <b>2017</b> , 231(6), pp. 745-765.
15.	<b>Sandeep Soni</b> and D. P. Vakharia, Performance analysis of finite non-circular floating ring bearing in turbulent flow regime, <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , <b>2017</b> , 231(7), pp. 869-888.
16.	<b>Sandeep Soni</b> and D. P. Vakharia, Staticanalysis of finite hydrodynamic journal bearing in turbulent regime with non-Newtonian lubricant, <i>Tribology Online</i> . <b>2015</b> , 10(4), pp. 246-261.
17.	A Kalani, <b>Sandeep Soni</b> and R Jani, Expert knowledge-base system for computer aided design of full hydrodynamic journal bearing, <i>International Journal of Mechanical Engineering and Technology</i> , <b>2015</b> , 6 (8), pp. 46-58.
18.	A Kalani, <b>Sandeep Soni</b> and R Jani, New simple equations for designing of finite full journal bearing, <i>International Journal of Mechanical Engineering and Technology</i> , <b>2015</b> , 6 (4), pp. 134-142.
19.	<b>Sandeep Soni</b> and D. P. Vakharia, Performanceanalysis of short journal bearing under thin film lubrication, <i>ISRN Mechanical Engineering</i> , <b>2014</b> , Article ID 281021, 8 pages.
20.	<b>Sandeep Soni</b> and R. Mane, Design and modeling of fixture for cylinder liner honing operation, <i>Global Journal of Researches in Engineering Mechanical &amp; Mechanics</i> , <b>2013</b> ,13(7),pp. 1-7.
21.	<b>Sandeep Soni</b> , Analysis of liquid droplet erosion for steam turbine blades of composite material, <i>International Journal of Mechanical Engineering and Robotics Research</i> , <b>2012</b> ,1(3),pp. 214-226.
22.	Nishant Kumar, Parikh Harsh, Payoj Gupta, Sagar Chauhan and <b>Sandeep Soni</b> , Thermal analysis of vertical axis wind turbine, <i>International Journal of Wind and Renewable Energy</i> , <b>2012</b> , 1(2), pp. 84-90.
23.	<b>Sandeep Soni</b> and J. P. Pandey, Erosion behaviour of steam turbine blades of glass-epoxy, <i>International Journal of Advanced Engineering Technology</i> , <b>2011</b> , 2(2), pp. 110-117.

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# **Research Papers Published / Presented in National and International Conferences**

1.	O. N. Dorkar and <b>Sandeep Soni (2021)</b> , Optimization of hobbing process for sustainability in productivity, quality and cost parameters, <i>International Conference on Advancements in Design and Tribology</i> <b>(ICADT-2021)</b> , SVNIT, Surat (India) <b>December 17-18, 2021</b> .
2.	S. D. Bhirud and Sandeep Soni (2021), Flexural motion behaviour of damped Jeffcott rotor with viscous damping, <i>International Conference on Advancements in Design and Tribology (ICADT-2021)</i> , SVNIT, Surat (India) December 17-18, 2021.
3.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Characterization of non-asbestos friction composite reinforced with short carbon fibers and multiwall carbon Nano tubes, <i>International Conference on Technological Innovations in Mechanical Engineering</i> (TIME-2021), Sharda University, Uttar Pradesh, India, April 16-17, 2021.
4.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Studies on mechanical properties of brake friction materials derived from carbon fibers reinforced polymer composite. 1 <sup>st</sup> International Conference on Technology Innovation in Mechanical Engineering (TIME-21), Sagar Institute of Science and Technology, Gandhinagar, Bhopal, India May 10-11, 2021.
5.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Studies on mechanical properties of brake pad materials based on newly developed carbon fibres reinforced polymer composite, <i>Material-TECH 2021</i> , NIT, Raipur <b>January 9-10, 2021</b> .
6.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Recent research status on synthesis and characterization of natural fibers reinforced polymer composites and modern friction materials—An overview, 10 <sup>th</sup> International Conference on Materials Processing and Characterization, GLA University, Mathura, <i>ICMPC-2020</i> , February 23-24, 2020.
7.	P. Mathur and <b>Sandeep Soni</b> , Relative study of a plain circular bearing and two-lobe journal bearing lubricated with micropolar fluid, <i>FLAME'2020</i> , August 05-07, 2020, AMITY University, Noida (India).
8.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Recent research status on modern friction materials - an Overview. <i>IOP Conference Series: Materials Science and Engineering</i> , 810, 012067, <b>2020</b> . <u>DOI:</u> <u>10.1088/1757-899X/810/1/012067</u> .
9.	U. V. Saindane, <b>Sandeep Soni</b> and J. V. Menghani, Recent research status on modern friction materials- an Overview, 2 <sup>nd</sup> International Conference on Emerging trends in Manufacturing, Engines and Modelling (ICEMEM -2019), SVKM's Narsee Monjee Institute of Management Studies, Mumbai, <b>December 23-24</b> , 2019.
10.	P. V. Nandewalia, <b>Sandeep Soni</b> and J. V. Menghani, Coating on surface by different methods, 7 <sup>th</sup> International and 9 <sup>th</sup> National Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering <b>AFTMME'19</b> , Indian Institute of Technology Ropar, Punjab, <b>December 05-07</b> , <b>2019</b> .

11.	<b>Sandeep Soni</b> and D. V. Kushare, Performance characteristics of two lobe hybrid journal bearing, International Conference on Insights in Mechanical & Civil Engineering <i>ICIMCE'2019</i> , D Y Patil Institute of Engineering and Technology, Pune, (India), April 26-27, 2019.
12.	Vinayak Shinde and <b>Sandeep Soni,</b> Effect of lubricants with Nanoparticles on performance of hydrodynamic journal bearing, <i>An International Conference on Tribology</i> <b>TRIBOINDIA'2018</b> , T.S.I., <i>Faridabad and V.J.T.I., Mumbai (India)</i> , <b>December 13-15, 2018.</b> Abstract ID: TI_40, Page 31. <b>DOI:</b> <u>10.2139/ssrn.3320357.</u>
13.	<b>Sandeep Soni</b> and D. V. Kushare, Comparative study of static and dynamic characteristics of two lobe hydrostatic journal Bearing, 1 <sup>st</sup> International Conference on Future Learning Aspects of Mechanical Engineering FLAME'2018, AMITY University, Noida (India), October 3-5, 2018.
14.	<b>Sandeep Soni</b> , Effect of combined turbulence regime and non-Newtonian lubrication on the performance of circular journal bearing, 2 <sup>nd</sup> International Conference on Mechanical, Aeronautical and Automotive Engineering ICMAA'2018, Singapore, Febuary 24-26, 2018, Vol. 1, Issue 1, pp. 21.
15.	J. P. Pandey, <b>Sandeep Soni</b> and S. C. Soni, Performance analysis of two-lobe floating bush bearing, National conference on Tribology: Energy, Environment and Efficiency <b>NCTEEE'2016</b> (TSI and CSIR- AMPRI), Bhopal (India), January 21-22, 2016, Vol. 1, Issue 1, pp. 17.
16.	<b>Sandeep Soni</b> and J. P. Pandey, Static performance of finite circular bearing considering linear turbulence with non-Newtonian lubrication, <i>National conference on Tribology: Energy, Environment and Efficiency</i> <b>NCTEEE'2016</b> ( <i>TSI and CSIR-AMPRI</i> ), <i>Bhopal (India)</i> , <b>January 21-22, 2016</b> , Vol. 1, Issue 1, pp. 23.
17.	<b>Sandeep Soni</b> and D. P. Vakharia, Analysis of Finite Journal Bearing in Turbulent Regime Considering Non-Newtonian Lubrication, 1 <sup>st</sup> International Conference on Tribology <b>TURKEYTRIB'2015</b> , Yıldız Technical University, Istanbul (Turkey), <b>October 07-09, 2015</b> , Vol. 1, Abstract Ref. No BET-07.
18.	Anil Kumar, <b>Sandeep Soni</b> , B. M. Sutaria, M. K. Bhatt, D. V. Bhatt, Analysis of tribological parameters on carbon steel used in sugar mill rolls–A case study, 1 <sup>st</sup> International Conference on Tribology <b>TURKEYTRIB'2015</b> , Yıldız Technical University, Istanbul (Turkey), <b>October 07-09</b> , <b>2015</b> , Vol. 1, Abstract Ref. No BET-06.
19.	Sandeep Soni, D. P. Vakharia and J. P. Pandey, Effect of journal and ring speed on the performance of floating ring bearing, <i>ICAMPD-2015</i> , <i>SVNIT</i> , <i>Surat</i> ( <i>India</i> ), January 10-11, 2015, Vol. 1, pp. 9-16.
20.	Sandeep Soni, D. P. Vakharia, Steady state behaviors of an elliptical journal bearing, <i>ASIATRIB-2014</i> , <i>Agra (India)</i> , February 17-20, 2014, Vol. 1, Abstract Ref. No TSI - 914693.
21.	Sandeep Soni and R. Mane, Analysis of hydrodynamic plain journal bearing, COMSOL Conference - 2013, Bangalore (India), October 17-18, 2013, Vol. 1, pp. 1-5.

22.	R. Mane and <b>Sandeep Soni</b> , Design and manufacturing with modeling of hydraulic fixture for cylinder liner honing process on honing machine, 3 <sup>rd</sup> International Conference on Production and Industrial Engineering <b>CPIE-2013</b> , NIT, Jalandhar (India), <b>March 29-31</b> , <b>2013</b> , Vol. 1, pp. 1109-1116.
23.	Sandeep Soni and R. M. Sarviya, Water droplet erosion of steam turbine blades of glass-epoxy, NCAMPD-2010, SVNIT, Surat, (India), November 22-23, 2010, Vol. 1, pp. 1-8.
24.	Sandeep Soni, R. M. Sarviya and J. P. Pandey, Prediction of erosion behaviour of steam turbine blades of FRC materials, <i>ICAME-2008</i> , <i>SVNIT</i> , <i>Surat (India)</i> , December 15-17, 2008, Vol. 1, pp. 284-289.
25.	Sandeep Soni and A. Chaube, Erosion behaviour of Co-Cr alloy coated steam turbine blades, <i>ICRTME-2007</i> , <i>UEC</i> , <i>Ujjain (India)</i> , October 04-06, 2007, Vol. 2, pp. 50-56.