



- 1. Name: Shekhawat Sanjay Pratapsingh**
- 2. Date of Birth: 03-05-1974**
- 3. Gender: Male**
- 4. Nationality: Indian**
- 5. Category: Open**
- 6. Designation: Professor & Director of Academics**
- 7. Department : Mechanical Engineering**
- 8. Address: B-3, COET Campus, Bambhori,
Jalgaon- 425001 (Maharashtra)**
- 9. Phone Nos.- (0257) 2258004, 09423621653**
- 10. Email: spshekhawat@rediffmail.com**
- 11. Qualification:**
 - i) M.E. Mechanical (Machine Design) securing first class with distinction from NMU, Jalgaon.
 - ii) B.E. Mechanical securing first class from Amravati University.
 - iii) Ph.D. (Mechanical Engineering) from North Maharashtra University**
- 12. Member of Professional Bodies:**
 1. Life member of **Indian Society for Technical Education**,
New Delhi
 2. Life member of **Solar Energy Society of India**

13. Teaching Experience:

At Shram Sadhana Bombay Trusts, COET, Bambhori. Jalgaon.

Professor - From 10 - 01 -15

Associate Professor - From 01-07- 12 to 10 - 01 -15

Assistant Professor - From 01-07-09 to 30 - 06 -12

Senior Lecturer - From 01-08-07 to 30 - 06 - 09

Lecturer - From 15-07- 99 to 31 -07-07

Recognized as a Post Graduate Teacher of the North Maharashtra University, Jalgaon from 13 -04-2012 in the subject Mechanical Engineering.(Ref. No NMU/11/PGR/Mech. Engg /1078/2012,dated 15-05-2012)

Project Guided at P.G. Level = 08

14. Administrative Experience:

Working as a **Director of Academics**, Member of Governing Body & Member of Local Management Committee of Shram Sadhana Bombay Trusts, College of Engineering & Technology, Jalgaon from A.Y. 2010-11.

Member of Board Of Studies (BOS) in Mechanical, Automobile & Production Engg. At North Maharashtra University, Jalgaon from 25-02-2013

Worked as **In- charge Principal** from 29-06-2011 A.N. to 30-06-2011.

Worked as a co-ordinator for central library form 2004 -05 to 2006-07.

Member of Sports committee for 2002-03.

Chairman, ISTE student chapter, 2002-04.

Member, Campus Development & Maintenance Committee , 2002-03

Member, Students Welfare Committee. 2002-03

Member, Anti – Ragging Committee, 2003-04

Member of Admission committee from AY. 2006 -07 to 2011- 12.

Vice – Chairman of Institute level Admission committee for A.Y. 2012-13 and 2013-14.

Chairman of Internal Quality Assurance Cell (IQAC) at institute level.

15. Work Involvement

Reports/proposals were prepared for Shikshan Shulk Samittee for fee fixation, Affiliation of courses to NMU, Variation of intake and additional courses to AICTE, etc.

Presented college profile at DTE Mumbai, AICTE, New Delhi, UGC, New Delhi and at other departments such as DST, TEQIP, DBT, etc.

Developed financial support scheme entitled as, "**Shram Sadhana Research Promotion Scheme (SSRPS)**" to promote research in the institute.

Developed financial support scheme entitled as, "**Shram Sadhana Scholarship Scheme (SSSS)**" to extend financial support to the students of weaker section.

Prepare **Faculty Academic Diary** which is a source of information of student attendance; project guided, research work, faculty performance appraisal, etc. It is very useful for work evaluation of work of faculty members.

Initiated different schemes to enhance teaching learning activities in the institute such as financial support to final year students for outstanding project work, Audio Visual class rooms, research journal, Teacher Guardian Scheme, Online courses, Student trainings, Expert lectures, conferences, professional society activities, etc.

16. Research Funding:

1. A research project entitled as **“Experimental Investigations on Operational Parameters of Salt Gradient Solar Ponds”** is selected for funding of Rs. 1,08,000/- under Shram Sadhana Research Promotion Scheme.
2. A research project entitled as **“Seismic response analysis of base isolated multistoried building”** is selected for financial assistance of Rs. 1,73,000/- by **University Grants Commission**, New Delhi as a Minor Research Project.
3. The project “Development of Economic and Efficient Air Cooler” was received Cash prize of Rs. 50,000/- and Third position at ELECTRAMA – 2014 held at Bangalore on 8-12 Jan. 2014.
4. The project “Development of Economic and Efficient Air Cooler” is selected for financial assistance of Rs. 1,00,000/- by **Innovation and Entrepreneurship Development Centre (IEDC)** , DST, India.

17. Papers presented:

1. Second International Congress of Chemistry & Environment, “Environmental Aspects of Engineering Practices” on 24th to 26th Dec. 2006 at Indore.
2. National workshop, “Industry Institution Interaction – The Path Ahead” on 24th to 25th Jan. at NTMIS nodal center, Nagpur.
3. National Conference (Mechanger- 07) , “ Software Simulation of Drive less Vehicle using Expert System” on 01st March 2007 At VBP, COE, Rajkot.
4. National Conference, “Butt fusion welding process for HDPE pipe” on 7th March 2008, COET Jalgaon.
5. National Conference, “ Study and Analysis of Solar chimney Power Plant”, on 7th March 2008, COET Jalgaon.
6. National Seminar, “Nanotechnology and its future scope”, on 8th March 2008, COET Jalgaon.

7. National Conference- Innovations in Mechanical Engineering ,29th to 30th March 2007, COE Faizpur.
8. International conference - 3 D Contact stress analysis of spur gear teeth pair of a planetary gear box and validation using Hertzian theory, National Institute of Technology, Surat.
9. A Paper presented on " Four cylinder diesel engine crankshaft frequency analysis" in National level conference and technical paper presentation held at Lokmanya Tilak college of engineering, Navi Mumbai on 7th Sept., 2011.
10. A paper entitles as "Salt Gradient Solar Pond – A perspective for Rural development" is presented on at National conference on Recent practices in Conventional and Non conventional energy resources organized by Sanjay Ghodawat Group of Institution, Atigre on 8th & 9th Feb. 2013.
11. A paper entitled as "**Salt Gradient Solar Pond – Global Perspective**" is presented at International conference on Advances in Energy Technology organized by Dept. of Civil Engg & Chemical Engg at SSBT, COET , Jalgaon on 29th March 2013.
12. A paper entitled as, " Fluid Viscous Dampers: An Innovative Approach" is presented at International Conference on Sustainable Development organized by SSBT, COET, Bambhori, Jalgaon on 25th -26th Feb.,2014.
13. A paper entitled as, " Performance appraisal of vibration control of Washing Machine" is presented at National Level Student Paper Presentation held on 8th March, 2014 at SSBT, COET, Bambhori, Jalgaon.
14. A paper entitled as, "Assessment for Coal Saving and Carbon emission reduction by Using Salt Gradient Solar Pond in Thermal Power Plant" is presented On 8th and 9th December 2014

at **12th International Congress on Renewable Energy** organized by solar Energy Society of India sponsored by Ministry of New and Renewable Energy, India.

18. Training Programs/ Workshop/ Meetings Attended:

1. Attended two days National workshop on **NBA Accreditation** at International center, Goa on 16-17th March 2003.
2. Attended a one day workshop on **Fees Fixation** at JNEC, Aurangabad during 2004-05.
3. Participated in workshop on suggestions on existing syllabus of Mechanical Engg at SSVPS Dhule on 26-02-2002.
4. Attended two day workshop on paper setting and Evaluation at JTM COE , Faizpur on 22 & 29th Sept. 2002.
5. Attended a meeting of Association of the Managements of Un-aided engineering colleges (MAH) on 16-01-2004 at PVG COET, Pune.
6. Attended three days orientation program, jointly organized by COET and Engineering Education Foundation Pune on 11th to 13th July 2003.
7. Attended one day workshop on "Intellectual Property Rights with special reference to Patents" held on 9 th January 2004 at North Maharashtra University, Jalgaon.
8. Attended two day workshop on "MATLAG & SIMULINK" on 21 st and 22nd July 2003 at COET JALGAON.
9. Attended One Day Workshop on "**Academic Autonomy to Engineering Institution**" held on 17-02-2009 at VIT, Pune.
10. Attended workshop on "High Impact Teaching Skills" organized by Wipro (Mission 10X) at SSBT, COET from 29th to 30th March 2010.

11. Attended National Conference on "**Excellence in Higher Education**" at Indian Institute of Technology , Delhi on 01St April to 03rd April 2011.
12. Participated in a Two week ISTE workshop on **HEAT TRANSFER** conducted by Indian institute of Technology Bombay from 29th Nov. to 10th December , 2011.This workshop was held under the National Mission on Education through ICT (MHRD).
13. Participated in three days National level workshop on "**Research Methodology**" jointly organized by department of mechanical engineering and department of business administration held from 17th to 19th October 2011.
14. Attended one day seminar on "**Technological universities of India and Higher & Technical education in Maharashtra**", organized by Association of the Management of Unaided engg colleges on 6th March 2012 at P.V. G. college of engineering, Pune. The eminent speakers are – Dr. Prem Vrat, former VC, UPTU., Dr, Arun Nigvekar, Former Chairman, UGC, Dr. Ram Takawale, former VC, Pune Univ., Dr. Anil Kakodkar, Former Chairman Atomic Energy Commission of India.
15. Participated in the In plant training programme on "**Disaster Management**" held at the college on 23rd Jan., 2010.
16. Participated in National seminar on "**Low Cost Automation**" held on 21st April 2007.
17. Attended **Entrepreneurship awareness camp** from 29th to 31st March 2004.
18. Participated in UGC- refresher course in the subject Production Engineering – **Automation in manufacturing**

- engineering** from 28th November to 17th December 2001 at BIT, Mesra, Ranchi.
19. Attended the ISO 9001:2008 awareness & auditing practices course held on 20th February 2010.
 20. Participated in the event " MECHEAVEN2012", a National level technical forum held on 15th & 16th March,2012 at K.K.Wagh Institute of Engineering & Research, Nasik.
 21. Participated in a Two-week ISTE workshop on "**Introduction to Research Methodologies**" conducted by Indian Institute of Technology(IIT) Bombay from 25th June to 04th July, 2012. This workshop was held under the National Mission on Education through ICT (MHRD).
 22. Participated in discussion on " Scenario of Higher Education" organized by Daily Lokmat on 24th July 2012.
 23. Attended a workshop on "**Research Methodology**", organized by the North Maharashtra University during 20th September to 24th September 2012.
 24. Participated in one day workshop on Syllabus framing of Mechanical Engineering at RCPIT, Shirpur on 8th Nov. 2012.
 25. Participated in National workshop on "**Technical Innovations and Reforms in Energy Sector**" organized by **Maulana Azad National Institute of Technology**, during 30th Nov. & 1st Dec. 2012.
 26. Participated in a Two -day ISTE workshop on, "**Aakash for Education**" conducted by Indian Institute of Technology Bombay on 10th & 11th November , 2012. This workshop was held under the National Mission on Education through ICT.

19. Program Organized:

1. One day seminar on the topic "**How to read Encyclopedia**" on 03-02-2005 for selected college students.
2. Treasurer for one day national seminar on "**Nanotechnology-Perspectives & Future**" held on 8-03-2008.
3. Treasurer for a national level paper presentation "**Milestone-2K8**" held on 07-03-08.
4. Member of organizing committee for one week STTP sponsored by ISTE held on from 23-03-09 to 30-03-09.
5. Joint Secretary for National level student's paper presentation at COET, Bambhori, Jalgaon dated 29th March 2011.
6. Joint secretary for One day National level workshop of **MATLAB** at COET, Bambhori,
7. Organizing committee member of university level project and poster competition "**AVISHAKAR – 2011**" held at North Maharashtra University In Jan 2012. It is a event to select the university team to participate in state level competition.
8. Member of V.I.P. pass committee for **special convocation function** organized by North Maharashtra University, Jalgaon to confer the D.LIT. degree to Hon'ble Pratibha Devisingh Patil, President of India.
9. Co-convener of three days National level workshop on "**Research Methodology**" jointly organized by department of mechanical engineering and department of business administration held from 17th to 19th October 2011.
10. Co-convener of two days National workshop on "**Advances in Power electronics and its applications**" on 15th and 16th March,2012 at COET Jalgaon.

11. Co-convener of " TRANSCRIPTION 2K12", One day National Conference on " **Biotechnology Advances**" on 16th March, 2012.
12. Worked as a coordinator to organize inaugural ceremony of Mechanical engineering building by the auspicious hands of Hon'ble President of India on 13th June 2008.
13. Course Coordinator for one week short term training program on " **Advances in Tribology**" organized from 25th Oct. to 29th Oct. 2010.
14. Member, technical committee for one day national level student paper presentation, Milestone 2K10 on 30th March 2010.
15. Member of Advisory Committee for a lecture series **FEAST** (Festival of Engineers, Administrators, Scientists and Technocrats) organized by SSBT's College of Engineering & Technology, Jalgaon from 30th Aug 2012 to 1st Sept. 2012.
16. Organized One week Orientation program on " Effective Communication & Skill Developments" for newly inducted faculty members from 10-12-12 to 14-12-12 at SSBT COET, Jalgaon.
17. Co-Convener for one week Faculty Development Program on," **Cloud Computing and its Application Domain**" from 21-25 January , 2013, organized by Department of Computer Engineering, SSBT COET, Bambhori in association with Computer Society of India.
18. Co-Convener for one week STTP on," **CAD/CAM/CAE**" from 14-19 January , 2013, organized by Department of Mechanical Engineering, SSBT COET, Bambhori.
19. Organized One day Women's Training Program –

- LIFE-2013**(**L**earning **I**nitiative of **F**emale **E**ducation) on "Internet Applications" on International Women's Day (8th March).
20. Co-convener of National workshop on "**Fermentation Technology**" jointly organized by Department of Biotechnology and The Biotech Research Society(BRIS), India from 25th march to 26th march 2013 at SSBT, COET, Bambhori, Jalgaon.
 21. Co-convener of "**INSPIRATION-2013**", a one day program for 11th & 12th Science students on 10th of April 2013 at SSBT,COET, Jalgaon.
 22. Co-convener of, "1st International conference on Mathematical modeling and optimization techniques in science and engineering" on 22 and 23 July 2012.
 23. Co-convener of "**INSPIRATION-2014**", a one day program for 11th & 12th Science students on 26th of April 2014 at SSBT,COET, Jalgaon.

20. Publications:

1. A book of the mechanical engineering subject "**Theory of Machines**" was published by Nirali Publication,Pune.
2. A paper title "Analysis of blades of axial flow fan using Ansys" published in the **International journal of advanced engineering technology** (E-ISSN 0976-3945).
3. A paper title " Aerodynamic analysis of the car body for minimum fuel consumption" published in the **Journal of information, knowledge and research in Mechanical engineering** (ISSN0975-668X)
4. A paper entitled "Tribological properties of Al based MMC's – need of industrial application: A review" has been published in

proceedings of International conference on engineering research & applications.

5. A paper title " Advanced Technology of Cry- processing for the Enhancement of Tool Material Machining characteristics: A Review", has been published in **International Journal of Emerging Technology and Advanced Engineering**, Volume 2, Issue 4, April 2012, ISSN 2250 - 2459, P.No. 612-620
6. A paper title "Meteorologically Efficient Commissioning of Salt Gradient Solar Pond", has been published in International Journal of Springer "**Applied Solar Energy**", Volume 48, No. 3, pp 180-185, 2012, ISSN 0003-701X.
7. A paper title "Wear Analysis of Polytetrafluoroethylene and its Composites under Dry Conditions using Design-Expert" has been published in **International Journal of Scientific and Research Publications**, Volume 3, Issue 1, January 2013 ISSN 2250-3153.
8. A paper title " Academic Self Study Report: a strategic tool to measure the Institutional Performance" has been published in **International Journal of Science, Spirituality, Business and Technology (IJSSBT)**, Vol.1, Issue 2, February 2013, ISSN 2277-7261.
9. A paper entitled as "**Experimental Investigation of Viscosity – Temperature behavior in 4 –Stroke engine**" has been published in Indian Journal of Research, Vol.2, issue 4, April 2013, pp 184 -186, ISSN 2250-1991.
10. A paper entitled as "Finite Element Analysis for residual stress, strain and temperature characteristics of Butt welded steel plate – a review". Has been published in International

Journal of Scientific research, Vol.2,Issue 6, June 2013, ISSN 2277-8179.

11. A paper entitled as, " Application of Simulated annealing algorithm for design optimization of automobile suspension system", has been published in International Journal of Innovative Research in Science, Engineering and Technology, Vol.2, Issue 6, June 2013, ISSN 2319-8753.
12. A paper entitled as, " Feasibility Study of Salt Gradient Solar Pond for a Thermal Power Plant" has been published in International Journal of Mechanical Engineering Research & Application, Vol.1, Issue 4, September 2013, ISSN 2347-1719
13. A paper entitled as, "Wear Analysis of Polytetrafluoroethylene (PTFE) and it's Composites under Wet Conditions" has been published in Journal of Mechanical and Civil Engineering, e-ISSN: 2278-1684, p-ISSN: 2320-334X, Volume 8, Issue 2 (Jul. - Aug. 2013), PP. 07-18
- 14. A paper entitled as, "Experimental Study of Turbidity Control by Coagulation for Salt Gradient Solar Pond" has been published in American Journal of Engineering Research, Vol. 2, No. 9, pp 147-153, 2013, ISSN 2320 - 0847**
- 15. A paper entitled as, "Salt Gradient Solar Pond: A Future Option for India" has been published in International Journal Of Energy Engineering, Vol. 4, Issue 2,2014,pp9-11,ISSN2225-6563**
- 16. A paper entitled as, "Development of Economic & Efficient Air-Cooler" has been published in International Journal 'Discovery' , 24(85), 2014, 134-145, ISSN 2278-5469.**

17. A paper entitled as, "**Design, Analysis and Optimization of Leaf spring**" has been published in International Journal of Innovative Research in Science, Engineering and Technology, 3(6), 3658-3666, 2014, ISSN 2319-8753.

21. Project Guided:

UG level:

1. Study of Solar radiation transmission in turbid water pond – An experimental and Analytical investigation. 2012-13
2. Analysis of effective cooling and frictional losses in four stroke engine. 2012-13
3. The project "Development of Economic and Efficient Air Cooler" was received Cash prize of Rs. 50,000/- and Third position at ELECTRAMA – 2014 held at Bangalore on 8-12 Jan. 2014.

PG level:

1. Tribological behavior of PTFE dry journal bearings. 2011-12
2. Analysis of spur gear for finding stresses and deformation by using finite element method in gear box. 2010-11
3. Analysis of Blades of Axial flow fan using ANSYS. 2009-10
4. Vibration analysis of four cylinder diesel engine crankshaft. 2012-13
5. Aerodynamic analysis of the car body for minimum fuel consumption. 2012-13
6. Experimental Analysis of Polytetrafluoroethylene (PTFE) and its Composites for Wear Under Wet Conditions. 2012-13.
7. Finite element analysis for Residual stress, Strain and Temperature characteristics of Butt Welded Steel Plate. 2012-13.
8. Design of Leaf spring for rear suspension of rear mounted engine, July 2014.

22. Social Activities:

1. Advisor, Maharana Pratap Pratishthan, Jalgaon.
2. Hon. Faculty at Dipstambh Foundation, which provide training to the students for competitive examinations.
3. Collected donations of Rs. 1,03,500/- for erection of statue of Maharana Pratap at Jalgaon city.
4. Blood donated in various blood donations camps organized by our institute.

22. Others

1. Interview panel member of North Maharashtra University for selection of drivers and liftman. Interviews were held on 31 December 2011.
2. Member of Local Inspection Committee of North Maharashtra University for affiliation of new proposed engineering college at Jalgaon.
3. Examiner and paper setter for various subjects of Mechanical Engg.
4. Worked as external senior supervisor for examination May 2010 at G.H.Raisoni engineering college, Jalgaon from 21-05-2010 to 29-05-2010.
5. Worked as Internal Vigilance Squad member during NMU exams.
6. Member, Transportation and accommodation committee, Chief guest and sponsorship committee and Catering committee at university level research festival " AVISHAKAR – 2011" organized by North Maharashtra University on 28th & 29th Decmber,2011.
7. Chief Guest for inauguration function of Faculty induction program at G.H.Raisoni institute of Engineering & Management held on 29th August 2011.
8. Member of Local Inspection Committee of North Maharashtra University for affiliation of engineering colleges.

9. Member of Staff (Faculty) selection committee for engineering colleges in the region of North Maharashtra University.
10. Member of the committee constituted for the installation of fellowship for doctoral programs by North Maharashtra University.
11. Member of an Advisory Committee of **Innovation and Entrepreneurship Development Centre** (IEDC) of our college. It is funded by Department of Science & Technology, Government of India.
12. Member of Organizing Committee of University level “ **AVISHKAR – 2012**” competition organized by North Maharashtra University, Jalgaon.
13. Appointed as an expert for project finalization at ME (Mechanical) by NMU , Jalgaon.
14. Awarded “**Best Teacher**” in Jalgaon Taluka in 2012 by Dr. Aproov Hire Foundation, Nasik.
15. Worked as Jury member for 9th National Level Student’s Technical festival “**Techno-Arena 2013**” on 1st & 2nd March, 2013 at Government Engineering College, Jalgaon.
16. Worked as Jury member for National Level paper presentation “**TECHCELLENCE-2013**” on 9TH March, 2013 at SSGB College of Engineering, Bhusawal
17. Member of **University and Colleges Quality Improvement Committee** North Maharashtra University, Jalgaon.
18. Member of Career Guidance Cell of Computer Engg. Dept.
19. Member of Truth finding (Investigation) committee for Engineering question paper leak in summer 2013 exam of NMU, Jalgaon.
20. Member of committee for preparation of Manual of Procedures in Examination Department of NMU, Jalgaon.
21. Member of Organizing committee for University Level Avishakar-2013 competition at NMU, Jalgaon.

22. Interview panel member of North Maharashtra University for selection of laboratory assistant. Interviews were held on 29 December 2013.

23. Member of organizing committee of Silver Jubilee Year celebrations of North Maharashtra University, Jalgaon,

24. Member of Sponsorship committee of International Conference GOLD-CT- 2014 organized by North Maharashtra University, Jalgaon.

23. Areas of Special Interest:

1. Excellence in Education
2. Industry oriented but value added curriculum development
3. Student welfare

SANJAY SHEKHAWAT