

## STAFF PROFILE

**Name :** Mr. Sanjay Shankar Patil

**Designation :** Associate Professor

**Qualification :** Ph.D.(Mechanical Engg.) M. Tech.

**Email :** sspatil.scoe@sinhgad.edu

**Experience :** 27 years Teaching, 1 year Industrial

**Area of Interest :** Optimisation and Modelling of Manufacturing process, World Class Manufacturing, Industrial Engg.

**Membership of Professional Societies:** LMISTE, INAAR,

**Major roles at Savitribai Phule Pune University/other universities/organization:** Senior Internal and external Supervisor, Moderator, Chairman, Paper setter and Examiner at Savitribai Phule Pune university, External Examiner at COEP, Reviewed syllabus as Manufacturing expert at Bharti Vidyapeeth (Deemed to be University), Pune

**Publications /Patents :**

**International journals:**

1) Sanjay Shankar Patil, Yogesh Jayant Bhale Rao, "Application of NSGA II for optimization of cylindrical plunge grinding process parameters" *International Journal of Abrasive Technology*, Vol. 9, No. 4, (2019), pp- 319-329, DOI: [10.1504/IJAT.2019.106678](https://doi.org/10.1504/IJAT.2019.106678), **Scopus indexed.**

2) Sanjay Shankar Patil, Yogesh Jayant Bhale Rao, "Determining Multiple Optimal Solutions of Process Parameters for Cylindrical Plunge Grinding Operation Using NSGA II" *International Journal of Control and Automation*, Vol. 12, No. 4, (2019), pp. 20-28, <http://serisc.org/journals/index.php/IJCA/article/view/253>, ISSN 2005-4297 **Scopus indexed.**

3) Sanjay Shankar Patil, Yogesh Jayant Bhale Rao, "Ranking of Vitrified Grinding Wheel Parameters by using Analytical Hierarchical Process (AHP) for surface Roughness of Work piece in Grinding Operation" IEEE International Conference on Advances in Mechanical, Industrial, Automation and Management Systems (AMIAMS-2017). Motilal Nehru National Institute Technology Allahabad, DOI: [10.1109/AMIAMS.2017.8069209](https://doi.org/10.1109/AMIAMS.2017.8069209), **Scopus indexed.**

4) Sanjay Shankar Patil, Yogesh Jayant Bhale Rao, "Selection of Levels of Dressing Process Parameters by Using TOPSIS Technique for Surface Roughness of En-31 Work piece in CNC Cylindrical Grinding Machine" National Conference on Processing and Characterization of Materials, National Institute of Technology, Rourkela, IOP Conf. Series: Materials Science and Engineering 178 (2017) 012033 DOI: [10.1088/1757-899X/178/1/012033](https://doi.org/10.1088/1757-899X/178/1/012033). **Scopus indexed**

5) V.V.Pansare, V.S.Gadak, S.S.Patil, "Selection of multi-point Diamond Dresser for Grinding Process Using Grey Relation Analysis" Advances in Manufacturing Systems Lecture notes in Mechanical



Engineering 2021/2/26, DOI-[https://doi.org/10.1007/978-981-33-4466-2\\_6](https://doi.org/10.1007/978-981-33-4466-2_6), Springer, Singapore 53-61, Web of Science

6) S. S. Patil, "Application of Analytical Hierarchical Process (AHP) method for dressing operation in surface grinding", *International Journal of Advances in management ,technology and engineering science*, Vol. II, Issue 3(IV) pp 25-28, December 2012 ,ISSN:2249-7455

7) S.S.Patil." Determining the ranking of Dressing parameters for Grinding ratio in Surface grinding by AHP", *International Journal of Research in Engineering and Applied Science*, Vol.-2, Issue-2, Pp 641-650, February-2012-650, (ISSN -2249-3905)

#### **International conference:**

1) S.S. Patil, Y.J. Bhalerao, "Effect of dressing parameters on surface roughness and grinding ratio in surface grinding", Proceeding of International Conference on Industrial Tribology 2012, (2012 –ICIT), 7-9 December 2012

2) Sanjay Shankar Patil, Yogesh Jayant Bhalearao, Shubham Bhoskar, "A comparative study of single point diamond dresser and multi point diamond dresser for grinding wheel a review" IJIERT - International Journal of Innovations in Engineering Research and Technology, ICSD 2019, ISSN: 2394-3696, PP. 87-89

3) Sanjay S. Patil, Yogesh J. Bhalerao, "Determining the optimum level (conditions) of dressing parameters for work piece surface roughness in surface grinding," Proceeding of International Conference on Advances in Tribology (ICAT," NIT, Calicut, 2014,, pp168-171)

4) S.S. Patil , P.P. Chikate," Analysis and Determining the ranking of dressing parameters for surface roughness by ANNOVA and AHP method" Proceeding of International Conference on Advances in Machine Design and Industry Automation Govt. College of Engg. Shivajinagar, Pune, 2007

5) S.S. Patil, A. Wayal, C. Chudhary (2017)," Framework for Experimental Investigations of Multi- point Diamond Dressers on CNC Grinding Wheel" Proceeding of International Conference on "Future Trends and Challenges in Mechanical Engineering, "(FTCME 2017) at Sinhgad College of Engg. Vadgaon budruk, Pune, 17-19 February, 2017, I, SBN No- 978-81-932761-50, p.p. 326-332

#### **National conference:**

1) V.G. Narange, Y.A. Kakade, S.S. Patil "Framework for Experimental Investigation in Flat Lapping of Magnetic and Non-magnetic Stainless Steel" Proceeding of National Conference on Operations & Manufacturing Excellence (COMEx 2012) at Ram dev baba College of Engg, Nagpur

2) S.S. Patil, P.P. Chikate , L.G. Navale "Study and Analysis of dressing parameters by using single point diamond dresser on roughness" Proceeding All India Seminars on Recent Advances in Manufacturing, NIT, Rourkel, Oct. 2005.

3) S.S. Patil, R.S. Katikar, B.M. Shinde, "MOST- Maynard Operation Sequence Techniques" Proceeding of National Conference on recent Trends CAD/CAM/CAE , RIT, Sakharale, June 2004

4) S.D. Lembhe, S.S. Patil, "New Uses of ADI in High Speed Strength Thin Wall Automotive Parts" Proceeding of NCQE 2007, DYPCOE, Akurdi, Pune, OCT. 2007

**Patent – 1 (Filed and published, Awaiting for examination)**

Sanjay Shankar Patil, Yogesh Jayant Bhalerao, “Evaluation of grinding process parameters of Cylindrical grinding operation”, the patent office journal, 19/2018, dated 11/5/2018,17564

**Books –**

- 1) Prof. S. S. Patil, Prof.S.R.Patil, Elements of mechanical engineering, Vradhna publication, Pune, July 2011
- 2) Prof. S. S. Patil, Nandkumar Hukkeri, Production, Operational, and Industrial Engineering, Electro-Tech publication, Satara, Third Edition ,December 2010

**FDP/SDP/STTP/Workshop/Seminars/ Summer School Attended:**

Sr. No.	Title of Program	Date and Duration	Organization
1	TEQIP sponsored one week STP on “Research methodologies: tools and techniques 3”	8 - 12 March 2021	SVNIT, Surat
2	TEQIP –III sponsored one week FDP on Industrial Engineering Techniques	15 - 19 March 2021	MANIT, Bhopal
3	TEQIP –III sponsored 5 days FDP Recent Advances in Health 5.0in fine with nep 2020	22 - 26 March 2021	AGCOE,SATARA
4	AICTE-ISTE Approval two week STTP on “Recent development in metal and manufacturing process”	22 February - 5 March 2021	SKN College of Engineering, Vadgoan budruk,Pune
5	One week FDP “Research in energy technologies”	6-11 July 2020	Deemed to be University,BVCOE,Mecahinacl department,Katraj-dhankwadi,Pune
6	Minister of Human Resource and development, Government of India, Global Initiative of Academic Networks (GIAN) on	24June – 5 July 2019	Department of production and industrial engineering. Government College of Engineering, Shivajinagar, Pune

	“Technology –based engineering entrepreneurship Development programme and advanced manufacturing process”		
7	Optimization Techniques for Engineering Applications- OTEA	8-9 Jan.2018 “	Sinhgad College of Engineering, Vadgoan budruk,Pune
8	AICTE-ISTE Approval two week STTP on “Matlab and Simulink”	4 - 15 December 2017	SKN College of Engineering, Vadgoan budruk,Pune
9	SDP-Advances in the Manufacturing and Micromachining	14 -18Nov.2011	VJTI, Mumbai
10	SDP-Statistical modeling & Data analysis	20- 26 Dec 2010	IIT,Kharagpur
11	FDP-Advanced Engineering optimization through Artificial Integillence	14-18 Dec 2009	SVNIT, Surat

**Research Work:**

- 1) Ph.D.thesis on,” Experimental investigation of diamond dresser on surface roughness and grinding ratio in CNC angular grinding machine” completed on 22/01/2021, Savitribai Phule Pune university, Pune
- 2) Completed Research project on ‘Effect of dressing parameters on surface roughness and grinding ratio in surface grinding’, under BCUD, Savitribai Phule Pune university, Pune

**Industry project – 2, (Grind Well Norton Limited, Shivainagar, Pune, Rs. 1.75 Lakhs rupees only)**

- 1) Title - Experimental investigation of diamond dresser on surface roughness and grinding ratio for conventional wheel. (2016-17)
- 2) Title - Experimental investigation of diamond dresser on surface roughness for patented grinding wheel of Grind Well Norton. (2017-18)