

	Name	Prof.Dr. Sachin Shankarrao Chavan		
	Designation	Professor		
	Department	Mechanical Engineering		
	Qualification	B.E(Production),M.E(Mechanical) Ph.D		
	Contact No.	09271635407	Ph. Extension	
	Email ID	sschavan@bvucoep.edu.in		
	Experience	Teaching :	Years:17	Industry :

Area of Interest	Industrial Engineering and Composite Material		
	International Journals : 40, National Journals :03		
	International conference : 07 , National conference:04		
	Patents: Published 05 and Filled 02		
Publication	Patent		
	<p>➤ Patent Published Publication Date: 17/11/2017: 1. Application No. 201621010253 dated 23.03.2016 entitled “Composite Road Dividers and a method of manufacturing the same”</p> <p>➤ Patent filed 1. Application No. 310839 dated 11/10/2018 entitled “Cathode tool” 2. Application No. 310840 dated 11/10/2018 entitled “Cathode tool 1” 3. Application No. 310841 dated 11/10/2018 entitled “Cathode tool 2” 4. Application No. 201821048839 dated 24/12/2018 entitled “Management of Green Supply Chain Indicators for Manufacturing Industries and Thereof” 5. Application no. 201921032915 dated 14/08/2019 entitled “A Process for Preparing an Ultrafiltration Membrane for Separation of Heavy Metals” 6. In process title “IAV Apps: Intelligent Advanced Vehicle Apps to Controlled All Things”</p>		
	International Journals:		
	1.	“ Optimization of Electrospinning Process Parameters for Nylon 6, 6 Nanofibers and Manufacturing and Characterization of Nylon 6, 6 Nanofibers Reinforced Composites as per ASTM standards ” (Under review) NATURE SCIENTIFIC REPORT Reference ID SREP-1925832	
	2.	“ Fracture problems, vibration, buckling, and bending analyses of functionally graded materials: A state-of-the-art review including smart FGMS ” Taylor and Francis Group Particulate Science and Technology An International Journal ISSN: 0272-6351 (Print) 1548-0046 (Online) Journal 08 Mar 2018.	
	3.	“ Challenges in Electrochemical Machining ” Research Review International Journal of Multidisciplinary ISSN 2455-3085 Volume 04, Issue 01 January 2019	

4.	Synthesis of Biofunctionalized Nanofibers (Curcumin, Gelatin and Formic Acid) using Electrospinning Process and Optimization of Parameters for Diameter of Nanofibers ” International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-9S3, July 2019
5.	Multiphysics Simulation and Experimental Validation of EDM Drilling Process ” Journal of Emerging Technology and Innovative Research, Volume 6, Issue 01 January 2019
6.	“Manufacturing and Testing of PAN Nano Fibres, Banana Epoxy Nanocomposite” International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-10, August 2019
7.	“Photocatalytic degradation of Methyl Orange (MO) dye under UV light irradiation using Fe₃O₄ nanoparticles” International Journal of Innovative Technology and Exploring Engineering’ at Volume-8 Issue-9, July 2019.
8.	“Electro Chemistry in Electrochemical Machining Process” Journal of Advanced Research in Dynamical and Control System. ISSN 1943-023X Scopus Indexed Issue 14 (Special) Year 2018, Page 1894-1909
9.	“Organic non-volatile memory device based on cellulose fibers” Materials Letters 232 (2018) 99–102
10.	“Photoluminescence characteristics of chemically synthesized Ag doped ZnS nanoparticles” ‘International Journal of Innovative Technology and Exploring Engineering’ at Volume-8 Issue-9, July 2019.
11.	“A review of literature and identification of Total Quality Management (TQM) tools for product development and design integration; and the ergonomics principles for customer satisfaction” International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN (P): 2249-6890; ISSN (E): 2249-8001 Vol. 8, Issue 3, Jun 2018, 1029-1044
12.	“What customers need from a product and why products fail” International Journal of Mechanical Engineering and Technology (IJMET) Volume 9, Issue 5, May 2018, pp. 703–716
13.	“Nanotechnology: A growing need for agriculture and food sectors” Taylor and Francis Group Integrated Ferroelectrics Volume 185. Page 73-81 12 December 2017
14.	“Innovative Approaches to Improve Electrochemical Machining Performance” Journal of Aerospace Engineering & Technology ISSN: 2231-038X (Online), ISSN: 2348-7887 (Print) Volume 7, Issue 2, <i>JoAET (2017) 9-16</i>
15.	“Nanotechnology and Its Application in Cosmetic Industry A Concise Review” International Journal of Innovative Science and Research Technology Volume 2, Issue 9, September– 2017 ISSN No: - 2456 – 2165 Impact Factor : 3.585
16.	“Synthesis of TiO₂ Nanofibers for Solar Cells and Their Analysis Using Statistical Tool—ANOVA” Springer International Publishing AG

	2018 P.M. Pawar et al. (eds.), Techno-Societal 2016, DOI 10.1007/978-3-319-53556-2_57. 978-3-319-53555-5
17.	“Influence of nanotechnology and the role of nanostructures in biomimetic studies and their potential applications” <i>Biomimetics</i> 2017, Volume2 <i>Issue</i> (2), 2020007 May 2017.
18.	“Design & Analysis of Sandwich Composite Leaf Spring For HMV” International Journal of Mechanical Engineering and Technology (IJMET) Volume 8, Issue 9, September 2017, pp. 01–17 ISSN Print: 0976-6340 Impact Factor 9.22 opus Indexed
19.	“ANOVA: Electrospinning of Nylon 6 nanofibers with optimum diameter” Advanced Science Letters, Volume 22, Number 4, April 2016, pp. 808-814(7) I10.1166
20.	“Synthesis and Characterization of Nanocomposites with VATRM and Electrospinning Processes” International Journal, Carbon – Science and Technology Vol.5, Issue 3, November 2013, 289 – 295.
21.	“A Review: Computer Aided Analysis for Weight Optimization of Leaf Spring Using Intermediate Layers of GFRP and CFRP” International Journal of Innovative Research In Technology, Volume 4 Issue 1 July 2017 ISSN : 2349 – 600, page no 217-223 Impact factor 5.8
22.	“Review –Electrospun Nanofibers In Biomedical Field” IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684,p-ISSN: 2320-334X PP. 01-05
23.	“A Review On Natural Composites” IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684,p-ISSN: 2320-334X PP. 88-95
24.	“TiO2 Nanofiber and Its Potential Application: Review” International Journal of Innovative Research in Technology Publication Volume & Issue: Volume 4, Issue 2, Page(s): 1 – 10, impact factor- 5.8 July 2017.ISSN 47589
25.	“ZnO nanofiber application area and ZnO properties review” International Journal of Innovative Research in Technology Publication Volume & Issue: Volume 4, Issue 1, Page(s): 358-362. <i>impact factor- 5.8.</i> July 2017 ISSN 47589
26.	“Characterization Technique of Nanofibers” International Journal for Scientific Research & Development Vol. 4, Issue 03, 2016 page no 2035-2041 ISSN (online): 2321-0613 <i>impact factor- 2.89</i>
27.	“Review: Electro Spinning Technique and Factors Affecting Electro Spun Nano Fibers and Some Applications” International Journal for Scientific Research & Development Vol. 4, Issue 03, 2016 page no 681-686 ISSN (online): 2035-2041 <i>impact factor- 2.89</i>

	28. “Quantum Dots and Biomedical Applications” International Journal for Scientific Research & Development Vol. 4, Issue 04, 2016 page no 166-172 ISSN (online): 2035-2041 <i>Impact factor- 2.89</i>
	29. “Short Review: Different Type of Ionic Liquids for CO2 Absorption” International Journal for Scientific Research & Development Vol. 4, Issue 04, 2016 page no 870-874 ISSN (online): 2321-0613 <i>Impact factor- 2.89</i>
	30. “An Effective Method for Soil Moisture Sensing using Arduino Uno and Interfacing with GSM Sim900” International Journal for Scientific Research & Development Vol. 4, Issue 04, 2016 page no 976-978 ISSN (online): 2321-0613 <i>Impact factor- 2.89</i>
	31. “Review On: Application of Nanotechnology in Computer Science” International Journal of Science and Research (IJSR) Volume 5 Issue 2, February 2016 ISSN (Online): 2319-7064 Index Copernicus Value (2013): 6.14 Impact Factor (2014): 5.611 Page No 1542-1545
	32. “A Brief Review on Different Synthesis Methods of CZTS Nano-Particles” International Journal for Scientific Research & Development Vol. 4, Issue 04, 2016 page no1102-1103 ISSN (online): 2321-0613 <i>Impact factor- 2.89</i>
	33. “Assessment of Three Phase Nanocomposite with Electrospun Nanofibers” International Journal of Science and Research (IJSR), Vol. 4, Issue 6, June 2015, 563-567. Impact Factor (2013): 4.438 ISSN 2319-7064
	34. “Human Safety: Composite Road Divider” International Journal of Advanced Technology in Engineering and Science Volume No.03, Issue No. 12, December 2015. Impact Factor-1.013 ISSN 2348-7550 Page No 117-123
	35. “Review-Paramatreic investigation of electrospun nanofiber” , International Journal of Engineering Research and General Science Volume 3, Issue 5, September-October 2015 537-547 ISSN 2091-2730 <i>impact factor- 3.72</i>
	36. “Analysis of Flexural Properties of Carbon Fiber Reinforced / E-Poxy Composite Material” International Engineering Research Journal (IERJ) Special Issue 2 Page 4920-4924, 2015, ISSN 2395-1621

	37.	“Analysis of a Short Beam Strength of Glass Fiber Reinforced / Epoxy (GFR-E) Composite Material” International Engineering Research Journal (IERJ) Special Issue 2 Page 4920-4924, 2015, ISSN 2395-1621
	38.	“Design, Analysis, Manufacturing and Testing of Mono Composite Leaf Spring Using UD E-Glass Fiber/Epoxy” International Journal of Advanced Technology in Engineering and Science Vol. 02, Issue 12, December 2014, 112-121. Impact Factor-1.013.
	39.	“Review-Parametric investigation of electrospun nanofiber” International Journal of Engineering Research and General Science Volume 3, Issue 5, September- October, 2015 ISSN 2091-2730 Impact Factor (2013): 3.843 Page 537-547
	40.	“Synthesis and Characterization of Nanocomposites with VATRM and Electrospinning Processes” International Journal, Carbon – Science and Technology Vol.5, Issue 3, November 2013, 289 – 295.
<i>National Journals:</i>		
	1.	“Enhancement in Mechanical Properties by VARTM Process & Nylon Nanofibers in Advance Composite Materials” Paripex - Indian Journal of Research Vol. 3, Issue 5, June 2013, 112-114. Impact Factor-0.32
	2.	“Synthesis and Parametric Investigation of Nanofibers by using Electrospinning Process” Paripex - Indian Journal of Research Vol. 3, Issue 5, June 2013, 101-103 Impact Factor-0.32
	3.	“Mono Composite Leaf Spring-Design and Testing” Indian Journal of Applied Research Vol.3, Issue 7, July 2013, 112-114. Impact Factor-0.8215
<i>International Conferences:</i>		
	1.	“Review – Parametric Investigation to Produce Nano Fibers by Electrospinning Process” International Conference: Advance in Mechanical Engineering Government College of Engineering, Pune 29 - 31 May 2013.
	2.	“Investigation of Electrospun Nanofiber-Parametric Study for diameter of the Nanofiber” Nanocon 012- International Conference: Nanotechnology-Innovative Materials, Processes, Products and Applications 18-19 October 2012.
	3.	“Assessment of Electrospun nanofibers properties in two phase composite” International Conference on “Nano Technology materials and Composites for Frontier Applications.”NANOCON 2010 14-15 October 2010 Pune.
	4.	“Low Cost Manufacturing of 1-D Nanostructures using

		Electrospinning ” International Conference on Precision, Meso, Micro and Nano Engineering, 10-11 December 2010 Government College of Engineering, Pune.
5.		“Knowledge Representation System With Help Of Petri Net In Supply Chain Management” International Conference on “An Advanced optimization Technology Approach” Coimbatore Institute of Technology, Coimbatore-641014, India. 24 th -26 th June 2006
6.		“Evaluation of Length of Propeller Shaft” International Conference on “An Advanced optimization Technology Approach” Coimbatore Institute of Technology, Coimbatore-641014, India. 24 th -26 th June 2006
7.		“Review-Green Supply Chain Management Practices ,Theories and Models” International Conference –Advance in Mechanical Engineering Government College of Engineering, Pune, 29 -31 May 2013

International Conferences:

1.		“Review – Parametric Investigation to Produce Nano Fibers by Electrospinning Process” International Conference: Advance in Mechanical Engineering Government College of Engineering, Pune 29 - 31 May 2013.
2.		“Investigation of Electrospun Nanofiber-Parametric Study for diameter of the Nanofiber” Nanocon 012- International Conference: Nanotechnology-Innovative Materials, Processes, Products and Applications 18-19 October 2012.
3.		“Assessment of Electrospun nanofibers properties in two phase composite” International Conference on “Nano Technology materials and Composites for Frontier Applications.”NANOCON 2010 14-15 October 2010 Pune.
4.		“Low Cost Manufacturing of 1-D Nanostructures using Electrospinning” International Conference on Precision, Meso, Micro and Nano Engineering, 10-11 December 2010 Government College of Engineering, Pune.
5.		“Knowledge Representation System With Help Of Petri Net In Supply Chain Management” International Conference on “An Advanced optimization Technology Approach” Coimbatore Institute of Technology, Coimbatore-641014, India. 24 th -26 th June 2006
6.		“Evaluation of Length of Propeller Shaft” International Conference on “An Advanced optimization Technology Approach” Coimbatore Institute of Technology, Coimbatore-641014, India. 24 th -26 th June 2006
7.		“Review-Green Supply Chain Management Practices ,Theories and Models” International Conference –Advance in Mechanical Engineering Government College of Engineering, Pune, 29 -31 May 2013
8		“Development of Electrospun Nanofibers for Applications in Energy Harvesting” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.

9	“Nanotechnology Applications in Automobiles: Comprehensive Review of Existing Data” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
10	“Banana Fiber Nano-composite: A Review for Future Applications” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
11	“Natural Fiber Composites: - Need for Greening Material” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
12	“Semiconductor Quantum Dots for Tissue Imaging: A Breakthrough In The Biomedical Domain” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
13	“Effect of Temperature on Structural and Magnetic Properties of Fe₃O₄ Nanoparticles” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
14	“Synthesis of Fe₃O₄ (Magnetite) Nanoparticles By Combustion Method” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
15	“Nanoscaffolds for Bone Tissue Engineering: An Outline” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
16	“Photocatalytic Activity of Chemically Synthesized Ag Doped ZnS Nanoparticles” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
17	“Nanotechnology: Toolkit for Electronic Material” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
18	“Study on Electrospun Polyacrylonitrile Nanofibers” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
19	“Applications of Nanotechnology in Computers” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
20	“Synthesis of Biofunctionalised Nanofibers (Curcumin, Gelatin and Formic Acid) Using Electrospinning Process and Optimization of Parameters for diameter of Nanofibers ” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
21	“Impact of Nano- Materials on Strength of Composite: A Review” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.

	22	“Review: Applications of Nanotechnology in Agricultural Development” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
	23	“Review: Applications of Nanotechnology in Electronics Engineering” International Conference on “Nano Technology- Applications , Advances and Innovations ” NANOCON 018 25-26 October 2018 Pune.
International Conferences:		
	1	“Multiscale Effect of Micro and Nano Fibers Infused with Epon 862-W Resin” National Conference “Research and Development in Mechanical Engineering” Rasoni College of Engineering, Pune 12-13 March 2013.
	2	“Nanocomposites by Electrospinning and VARTM Process” NAFEMS Indian Symposium on Composite Products from Concept Design to Manufacturing 24-25 July 2009 The IEI, Bangalore (India).
	3	“Review: Manufacturing of Nanofibers By Eletrospinning and their application” National Conference on “Innovation in Mechanical Engineering” at Sinhgad Institute of Technology Lonavala, Pune.
	4	“Petri Nets in Supply Chain Management” National Seminar XII ISTE Convention , JSPM Group of Institute Wagoli 12-13 January 2008.
Guest Editor		International Journal of Materials Science and Applications <i>Science publishing group</i>
Books Published		01
Ph. D Students:		02(Completed), 02 will submit in this month 05 (Pursuing)
M.Tech Student Guided:		16
Professional Memberships		Nil
Keynote Address Delivered		<ul style="list-style-type: none"> ▪ International Conference “World Congress on Chemistry” April 9-10 2019, Dubai, UAE. ▪ National Conference “Advance in Engineering and Technology” organized by JSPM Narhe. 2018
Invited Talk		<ul style="list-style-type: none"> ▪ STTP “Micro and Nanotechnology” S.B.Patil College of Engineering, Indapur 9th November 2017.

Session Chair	<ul style="list-style-type: none"> ▪ National Conference “Advance in Engineering and Technology” organized by Bharati Vidyapeeth College of Engineering, Kolhapur dated 10th March 2018. ▪ National Conference NCIETM-2018 during Nov 30-Dec 1, 2018. NITIE Mumbai.
Guest Lectures Delivered	<ul style="list-style-type: none"> ▪ A. C.Patil College of Engineering New Mumbai “ Career as Entrepreneur: Government Scheme and Support” 13th August 2019. ▪ Singhad Institute of Technology Narhe Pune” Role of Nano material in Mechanical Applications” 13th July 2019 ▪ Daulatrao Ahire College of Engineering, Karad Topic: Nanotechnology for Mechanical Engineering dated 18th January 2018. ▪ S.B.Patil College of Engineering, Indapur Topic: Nanotechnology for Mechanical Engineering dated 15th March 2017. ▪ Bharati Vidyapeeth College of Engineering, Kolhapur Topic : Nanotechnology for Mechanical Engineering dated 4th September 2017 ▪ G.H.Raisoni College of Engineering & Management Ahmednagar. Topic : Composite Materials Using Nanocomposite” dated 2nd August 2017.
Workshop/Seminar/Conference attended	<ul style="list-style-type: none"> • Workshop “Darim Studio” 6- 8 June 2016, BVU Institute of Management and Entrepreneurship Development, Pune. • Workshop “High Impact Presentation” 20-21 November 2015 BVUCOE, Pune. • Seminar “Cost Reduction through Innovations in S.C.M” 7th February 2015, Indian Institute of Materials Management, Pune. • Workshop “Understanding the Mind & Conditioning Ourselves through EFT” 19th July 2014, BVUCOE, Pune. • Short Course “FRP Composites: Overview, Characterization, Analysis, Design and Application FRP” 10-11 July 2014, IIT Hyderabad. • Seminar “Opportunities and challenges in Supply Chain Management” 8th February 2014, Indian Institute of Materials Management, Pune. • Faculty Development Programme “Nanomaterials and Nanocomposites” 2-6 December 2013, College of Engineering, Pune. • Seminar “Social Media Marketing for Education” 12th October 2013 BVUCOE, Pune. • Seminar “Personal Effectiveness and Career Progression” 29th March 2013 BVUCOE, Pune. • Training Programme “Application of MATLAB” 4-6 March 2013 National Water Academy, Pune. • Seminar “Good Teaching Practices & Challenges” 25th January 2013 BVUCOE, Pune • A Three day National level seminar on Emerging Technologies In Micro & Nano Manufacturing June 12th – 14th 2012 DIAT (DU), Pune.

		<ul style="list-style-type: none"> • National Seminar “Advances in New Engineering Composite Materials 12-13 Feb 2009, Sagamner. • Workshop on Nanotechnology-NANNOTECH 2008 April 4-5 2008 MITCOE, Pune • • Workshop “Teaching Engineering Effectively” 11th-12th August 2006 Great Foundation
Achievements		<ul style="list-style-type: none"> • Project Investigator: Grants received from Department of Science and Technology Govt. Of India (NANO MISSION) of Rs 33.72 Lacs for the project entitled “Charged graphite nanoplatelets anchored ultra filtration membranes for separation of heavy metals” March 2018 to March 2020. • Project Investigator: Grants received from DRDO Defence Material & Stores Research Development Establishment Kanpur of Rs. 10.00 lakhs for the project “Manufacturing of Panels of Plain and varied shapes using Composite Materials and Nano Fibers (Electrospinning Method) by VARTM Process” Nov 2011 to Nov 2014 at B.V.U.C.O.E. Pune. • Project Investigator: Grants received from DRDO R & D Engineers, Pune of Rs. 5.20 lakhs for the project “Synthesis of Polyamide 6,6 nano fibers of various diameters and densities on E-glass fabric by electrospinning process” June 2013 to June 2015. • Member Board of Studies Mechanical and Production from 2012 till date. • CAP Director for Academic year 2017-18 winter examination. • Reviewer • International Conference –Advance in Mechanical Engineering .Government College of Engineering, Pune • RESEARCH OUTCOME: • Manufactured Composite Road Divider by using glass epoxy composite with secondary reinforcement of nano fibers, biomimic resin for increasing impact strength ,which in result will reducing impact back force i.e reduced head injures while accidents on the road. • Manufactured and testing Composite Monoleaf Spring by which 77% of weight reduction is done by using glass epoxy composite as compared to steel leaf spring.
Extra Activities		<ul style="list-style-type: none"> • Co-ordinator: Blood Donation Camp • Secretary: Alumni Association Bharati Vidyapeeth College of Engineering (From 2004 till date). • Co-covenor: 4th International Conference NANOCON016 Nano-Technology Nanotechnology – “Nanotechnology - Applications Advances and Innovations

		<ul style="list-style-type: none"> • PG Co-ordinator M.Tech Nantechnology • Co-covenor: 1st International Conference NANOCON010 Nano-Technology “Material and Composites for the Frontier Applications”. • Member: 2nd International Conference NANOCON012 Nano-Technology “Material and Composites and Applications”. • Member: 3rd International Conference NANOCON014 Nano-Technology “Smart Material, Composites, Applications and New Invention”. • Convener: Golden Jubilee Committee (B.V.U.C.O.E Pune) • Member: Conference on “Indian Economic Conference” (2011). • In-charge: Production Engineering Student Association.(2006-2016) <p>Programme Officer: National Service Scheme (2008-2010)</p> <ul style="list-style-type: none"> • In-charge: Art Circle(2008-2010) • Conducting Theory and Practical for allotted subjects • Examiner and Paper Setter for S.E, T.E, B.E. exams. • In-charge-Department Time Table B.V.U.C.O.E Pune • Worked for NAAC & NBA accreditation work in 2004,2011 • Prepared B.V.University Annual Report:2007-08 • Laboratory commissioning/development: Robotics, Composite Material Laboratory and Nanotechnology.
--	--	--