# SRES', Sanjivani College of Engineering, Kopargaon (An Autonomous Institute affiliated to SPPU, Pune)

# **Staff Profile**

Personal Information				
Name of Teaching Staff: Dr. Bharti M. Shinde				
Designation: Assistant Professor			Co.	
Department : Structural Engineering			N	
Date of joining : 14 <sup>th</sup> Dec. 2011			B	
E Mail ID :	shindebhartist@sanjivani.org.in			
Contact No:	9096239178			
Education Details				
Qualification	Specialization with Class or Grade	Univers	ity	Year
UG	Civil Engineering	Pune Univ	ersity	2008
PG	Structure	Pune Univ	ersity	2013
Ph.D	Civil Engineering	ivil Engineering Pune University 2021		2021
Total experience in years:				
Teaching:	13.5 Years			
Industry:	1 year			
Research and Publications				

## Year 2024

- [1]. Wakchaure S.V., Rakshe P. A., Jadhav R. S., Gavhane R. A. and Shinde B. M., Utilization of contruction and demolotion waste material in low volume road construction: Experimental study. Best Practices in Geotechnical and Pavement Engineering, Lecture notes in Civil Engineering, Vol. 449, pp. 433-441, 2024.
- [2]. Shinde B. M., Sayyad A. S., Naik N.S. Assessment of a new higher-order shear and normal deformation theory for the static response of functionally graded shallow shells, Curved and layered structures, Vol. 11(1), pp. 20240014.

- [3]. Shinde B.M., Sangale A., Maile P., Sangale J., Roham C., Utilization of waste materials for soil stabilization: A comprehensive review, Progress in Engineering Science, Vol. 1(2-3), pp. 100009.
- [4]. Shinde B.M., Rakshe P, Gavhane R., Wakchaure S., A Case Study on Structural Audit of Commercial Building, Springer Nature (In process).

#### Year 2023

- [5]. Shinde B.M. and Sayyad A.S., Bending analysis of laminated composite cylindrical shell using fifth order shear deformation theory. *Fiber reinforced polymer materials and sustainable structures*, pp. 235-242, 2023.
- [6]. Sayyad A. S., Shinde B. M. and Kant T., Hygro-Thermo-Mechanical analysis of sandwich shallow shells considering the effects of transverse normal strain. *Journal of Thermal Stresses*, Vol.46(7), pp. 639-671, 2023.
- [7]. Sayyad A. S., Palekar S. P., Shinde B.M., Higher order computational model considering the effects of transverse normal starin and 2-parameter elastic foundation for the bending of laminated panels. *Applied and Computational Mechanics*, Vol. 17(1), pp. 53-70,2023.
- [8]. Sayyad A. S., Mahajan V. M., Shinde B. M., Effects of transverse normal strain on deformation of laminated and sandwich arches under the action of concentrated force, *Mechanics of Advanced Materials and Structures*, 2023. DOI: <u>10.1080/15376494.2023.2229825</u>.
- [9]. Sayyad A. S., Shinde B.M. and Kant T., Effects of transverse normal stress on hygrothermomechanical analysis of laminated shallow shells, AIAA Journal, Vol.61(5), pp. 2281-2298. 2023.

#### Year 2022

- [10]. Shinde B.M. and Sayyad A.S., A new higher order shear and normal deformation theory for FGM sandwich shells. *Composite Structures*, Vol. 280, 2022. Impact factor: 5.407
- [11]. Shinde B.M. and Sayyad A.S., <u>A New Higher-Order Shear and Normal Deformation</u> <u>Theory for the Free Vibration Analysis of Laminated Shells</u>, *Mechanics of Advanced Composite Structures*, Vol. 9 (1), 89-104, 2022

#### Year 2021

[12]. Shinde B.M. and Sayyad A.S., A new higher-order theory for the static and dynamic response of sandwich FG plates *Journal of Computational Applied Mechanics*, Vol. 52
(1) pp. 102-125 DOI: 0.22059/JCAMECH.2020.313152.569, , 2021.
(https://jcamech.ut.ac.ir/article\_79876.html)

### Year 2020

[13]. Shinde B.M. and Sayyad A.S., Analysis of laminated and sandwich spherical shells using new higher-order theory. *Advances in Aircraft and Spacecraft Science*, Vol.7 (1), pp.19-40, 2020.

(https://www.koreascience.or.kr/article/JAK0202011362304294.page)

[14]. Shinde B.M. and Sayyad A.S., Static deformation of orthotropic spherical shell using fifth-order shear and normal deformation theory *Materials Today: Proceeding*, Vol.21, pp.1123-1127, 2020.

(https://www.sciencedirect.com/science/article/pii/S2214785320301218)

[15]. Shinde B.M. and Sayyad A.S., Thermoelastic analysis of laminated composite and sandwich shells considering the effects of transverse shear and normal deformations *Journal of Thermal Stresses*, Vol. 43(10), pp. 1234-1257, 2020. (https://www.tandfonline.com/doi/abs/10.1080/01495739.2020.1786484)

### Year 2017

[16]. Shinde B.M. and Sayyad A.S., A Quasi-3D Polynomial Shear and Normal Deformation Theory for Laminated Composite, Sandwich and Functionally Graded Beams. *Mechanics of Advanced Composite Structures* Vol.4 (2), pp. 139-152, 2017. Impact Factor: 0.634 (https://journals.semnan.ac.ir/article\_2626.html)

#### Year 2016

- [17]. Sayyad A.S., Shinde B.M. and Ghugal Y.M. Bending, Vibration and Buckling of Laminated Composite Plates Using a Simple Four Variable Plate Theory. *Latin American Journal of Solids and Structures*, Vol. 13, pp. 516-535, 2016. Impact Factor: 1.411 (https://www.scielo.br/j/lajss/a/swwW8fWRRbFpt7t7Bvhq9Gs/?format=pdf&la ng=en)
- [18]. Sayyad A.S., Shinde B.M. and Ghugal Y.M. Thermal stress analysis of laminated composite plates using exponential shear deformation theory. *International*

Journal of Automotive Composites, Vol. 2, No. 1 pp. 23-40, 2016. (https://www.inderscienceonline.com/doi/abs/10.1504/IJAUTOC.2016.078100) Year 2015

- [19]. Shinde B.M., Sayyad A.S. and Ghugal Y.M. A refined shear deformation theory for bending analysis of isotropic and orthotropic plates under various loading conditions. *Journal of Materials and Engineering Structures.* Vol. 2, pp. 3-15, 2015. (http://revue.ummto.dz/index.php/JMES/article/view/336)
- [20]. Sayyad A.S., Shinde B.M. and Ghugal Y.M. Thermo-elastic Bending Analysis of Laminated Composite Plates According to Various Shear Deformation Theories. *Open Engineering (formerly Central European Journal of Engineering)* Vol. 5, No. 1, pp. 18-30, 2015. (https://www.degruyter.com/document/doi/10.1515/eng-2015-0004/html)
- [21]. Ghumare S.M., Sayyad A.S., Shinde B.M. and Naik N.S. Cylindrical Bending of Laminated Composite Plates Using Refined Shear Deformation Theory. *Journal of Applied and Experimental Mechanics.* Vol. 1, No. 1, pp. 10-17, 2015. (https://d1wqtxts1xzle7.cloudfront.net/41215456)
- Year 2013
- [22]. Shinde B.M., Sayyad A.S., and Kawade A.B. Thermal analysis of isotropic plates using hyperbolic shear deformation theory. *Applied and Computational Mechanics*. Vol. 7, pp. 193-204, 2013. (https://www.kme.zcu.cz/acm/article/view/209)
- [23]. Sayyad A.S., Shinde B.M. and Ghugal Y.M. Thermo-elastic Bending Analysis of Orthotropic Plates using Hyperbolic Shear Deformation Theory. *Composites: Mechanics, Computations Applications. An International Journal*, Vol. 4, No. 3, pp. 257-278, 2013. (https://www.dl.begellhouse.com/journals/36ff4a142dec9609,120e958c786b37 f0,5a9eccce3ccfdc1a.html)
- [24]. Shinde B.M., Kawade A.B., and Sayyad A.S., Thermal Response of Isotropic Plates Using Hyperbolic Shear Deformation Theory. *International Journal of Advanced Technology in Civil Engineering*. Vol. 2, No.1, pp. 140-145, 2013. (https://scholar.google.com/scholar?cluster=17007643442038810304&hl=en&o i=scholarr)

**Book Chapters:** 

Sr.	Name of	Title of Book Chapter	Title of Book	Publisher	Page
No.	Author				No.
1	Shinde B	Free vibration analysis of	Technologies for	Taylor and	51-
	М	laminated composite	sustainable	Francis	56
	Sayyad A	spherical shells: An	development		
	S	analytical approach			
5	Shinde B	Bending of FGM plates	Advances in	Bloomsburry	145-
	М	using four variable shear	concrete,		150
	Sayyad A	deformation theory",	structural and		
	S	Advances in concrete,	Geotechnical		
		structural and	Engineering		
		Geotechnical Engineering			

## Papers presented in conferences:

Sr	Author	Title of Paper	Name of Conference	Date and
No.				Venue
1	Shinde B.M. and Sayyad A.S	Free vibration analysis of laminated composite spherical shells- an analytical approach	7 <sup>th</sup> Nirma University International conference on Engineering (NUiCONE -2019)	21 <sup>st</sup> to 22 <sup>nd</sup> Nov 2019 at Nirma University, Ahemedabad
2	Shinde B.M. , Sayyad A.S.	Analytical solution using fifth order shear and normal deformation theory for FG plates resting on elastic foundation subjected to hygro-thermo-mechanical loading	6 <sup>th</sup> International Conference on recent advances in composite materials. (IRACM-2019), IIT Varanasi	25 <sup>th</sup> -28 <sup>th</sup> Feb 2019 at IIT Varanasi
3	Shinde B.M., Sayyad A.S.,	Bending of FGM plates using four variable shear deformation theory	Advancesinconcrete,structuralandGeotechnicalEngineering(ACSGE2018),InternationalConferenceatBitsPilani.	26 <sup>th</sup> to 28 <sup>th</sup> Feb 2008 at Bits Pilani
4	Shinde B M	Stress analysis of FGM plates under thermal load	INNOVATION-17 Regional research conference, University Research Cell, SPPU, Pune	15 <sup>th</sup> Nov. 2017 at Pune Institute of Technology,

	Pune			
Research Profile URL				
Google Scholar	https://scholar.google.co.in/citations?user=LvbXix8AAAAJ&hl=			oXix8AAAAJ&hl=
Scopus		https://www.scopus.com/authid/detail.uri?authorId=57140349900		
Orcid		https://orcid.org/0000-0	0001-9076-4263	
		Other Researc	1 Details	
Ph D Guide ?Give field & SPPU Pune- Civil Engineering				
Ph Ds/ Projects G	auided:	ded:		
Books Published				
IPRs/Patents		06 granted Design Patent		
Professional Memberships:		03 (IOV, IEI, ISSE)		
Interaction with professional institutions				
Consultancy Activities				
Duration	DurationTitle of ActivityIssuedOrganization		Amount	
		Grants feto	hed	
Duration		Title	Issued Organization	Amount
2016-18	Therm plates	al Analysis of FGM under thermal load	BCUD, SPPU Pune	1, 10,000/-
2019-20		Intellectual Property Rights (IPR): Processes and Policies	QIP Scheme, SPPU Pune	1, 00,000/-
		Award	<u> </u>	
Received a "Lady Engineer Award" by Institution of Engineer Ahmednagar Local				

Centre in 2016

FACULTY DEVELOPMENT PROGRAMMES ATTENDED			
Name of the FDP / Workshop	Organization	Duration	Month-Year
Evolution of Construction Industry to address Infrastructure Challenges	AISSMS COE Pune, Superior Construction and Ultra Tech Cement	1 day	23 <sup>rd</sup> April 2021
Consultancy in Civil Engineering: Opportunities and Challenges	MVP's KBT college of Engineering, SPPU and ACCE	1 week	10 <sup>th</sup> to 14 <sup>th</sup> May 2021
Structural Health Monitoring and Retrofitting Rehabilitation of structures	College of Engineering and Management Amravati	1 week	10 <sup>th</sup> to 15 <sup>th</sup> May 2021
National Education Policy 2020 with Special reference to HEI's	SCOE Kopargaon	1 day	10 <sup>th</sup> April 2021
Wind and Earthquake Resistant Design	Prof. Ram Meghe Institute of Technology and Research Badnera	1 week	19 <sup>th</sup> to 24 <sup>th</sup> Dec 2020
Universal Human Values in Technical Education	Sanjivani College of Engineering, Kopargaon, IQAC Cell	1 week	22 <sup>nd</sup> to 27 <sup>th</sup> June 2021
Two days FDP on Theories of Beams and Plates	G H Raisoni COE and Management Pune	2 day	2 <sup>nd</sup> to 3 <sup>rd</sup> May 2020
Innovations and upgradation in infrastructural technology	TEC, ASTR, Krishna conchem peroducts	1 week	31 <sup>st</sup> May to 4 <sup>th</sup> June 2020
Advanced Microsoft Excel	TATA Steel	1 day	18 <sup>th</sup> April 2020
1 week FDP on QCAD	Singhad Institute of Technology and science, Narhe and Spoken Tutorial IIT Bombay	1 week	9 <sup>th</sup> to 13 <sup>th</sup> May 2020
Scheduling Techniques in Project Management	NPTEL	4 week	Aug.2019

(result-80%)			
Two week FDP on	Sanjivani College of	2 week	13 <sup>th</sup> -25 <sup>th</sup> Nov
"Present Scenario of	Engineering, Kopargaon		2017
Waste in India:			
Challenges, Issues and			
New Techniques of			
Treatment"			Linth Linth -
Study of special types of	Sanjivani College of	2 days	$12^{tn} - 13^{tn}$ Jan
concrete and its	Engineering, Kopargaon		2018
application			
2 days workshop on	Sanjivani College of	2 days	$9^{\text{th}} - 10^{\text{th}}$ Dec.
Introduction to Finite	Engineering, Kopargaon		2016
Element Method and its			
Engineering Applications			
Introduction to Research	NPTEL, Online Certification	12 week	July-Sep 17 (8
(Result- 67%)			week)
Renewable Energies for a	ALISON online	1 week	
sustainable Future			
FACULTY DEVELOPMENT PROGRAMMES ORGANIZED			

Name of the FDP / Workshop	Organization	Duratio n	Month-Year	Capacity
Intellectual Property Rights (IPR): Processes and Policies	Dept. of Civil Engg. SCOE Kopargaon	2 days	January 2019	50
Strategies to improve R and D activities in Engineering College	Dept. Of Structural Engg. SCOE Kopargaon	5 days	September 2020	50
INVITED LECTURES IN CONFERENCE/SEMINAR				
Title of Lecture/ Academic Session	Title of Conference/ S etc.	Seminar	Organized By	7


	OTHER Professional URLs
Personal Website	
Linked In Profile	https://www.linkedin.com/feed/?trk=onboarding- landing
GitHub URL	
YouTube Channel	https://www.youtube.com/channel/UCYySOL0vVDHnPU YA8bLoumQ
Other	

Any Other: