

Sanjivani College of Engineering, Kopargaon

(An Autonomous Institute) Affiliated to Savitribai Phule Pune University.

At Sahajanand Nagar, Post Shingnapur-423603, Ta.: Kopargaon, Dist.: Ahmednagar (MS)

Approved by AICTE, ISO 9001-2015 Certified, Accredited by NBA, Accredited 'A' Grade by NAAC,

Website: www.sanjivani.coe.org.in, Email: principalcoe@sanjivani.org.in,

Ph.No.: (+91) 9130191301, Fax: (02423)-222682



Department of Structural Engineering Research & Development Progress (2022-2023)

Period: June 2022 to July 2023

1. Journal Publication

Name of the Authors	Title of the Work	Journal/Proceeding Name	Publisher	DOI	Indexed in	citations till jan 2024	Published date
2022-23							
A. S. Sayyad, Shailesh P Palekar, Bharti M Shinde	Higher order computational model considering the effects of transverse normal strain and 2-parameter elastic foundation for the bending of laminated panels	Applied and Computational Mechanics	-	https://doi.org/10.24132/acm.2023.808	Scopus/Journal	0	30/06/2023
Atteshamuddin S Sayyad, Valmik M Mahajan, Bharti M Shinde	Effects of transverse normal strain on the deformation of laminated and sandwich arches under the action of concentrated force	Mechanics of Advanced Materials and Structures	Taylor & Francis	https://doi.org/10.1080/15376494.2023.2229825	SCI/Journal	2	02/06/2023
T. Sathish, Prashant Sunagar, V. Singh, S. Boopathi, R. sathyamurthy, A. M. Al-Enizi, B. Pandit, M. Gupta, S. S. Sehgal	Characteristics estimation of natural fibre reinforced plastic composites using deep multi-layer perceptron (MLP) technique.	Chemosphere	Elsevier	https://doi.org/10.1016/j.chemosphere.2023.139346	SCI/Journal	0	28/06/2023
Pradosh P.	Stress analysis of	Materials Today:	Elsevier	https://doi.org/10.1016/j.matpr.2023	Scopus/Conferenc	0	29/06/202

Deshpande, Anuja S. Jape	functionally graded nanobeams using hyperbolic theory	Proceedings		.06.218	e Proceeding		3
A. S. Sayyad, Y.M. Ghugal and T. Kant	Higher-order static and free vibration analysis of doubly-curved FGM sandwich shallow shells	Forces in Mechanics	Science Direct	https://doi.org/10.1016/j.finmec.2023.100194	Scopus	4	03/2023
S.M.Gunjaj, S.D.Turkane, S.V.Patankar and B.Kondraivendhan	Effect of magnesium sulphate and sulphuric acid attack on limestone calcined clay cement concrete	Materials Today: Proceedings	Science Direct	https://doi.org/10.1016/j.matpr.2023.03.488	Scopus/Conference Proceeding	0	30/03/2023
A.S. Sayyad, P.V. Avhad and S.P. Palekar	Free Vibration Analysis of Anti-Symmetric FGM Sandwich Circular Beams Using a Fifth-Order Circular Beam Theory	Romanian Journal of Acoustics and Vibration	Romanian Society of Acoustic	http://rjav.sra.ro/index.php/rjav/article/view/328	ESCI/ Scopus	1	20/3/2023
A. S. Sayyad, B.M. Shinde and T. Kant	Effects of Transverse Normal Stress on Hygrothermomechanical Analysis of Laminated Shallow Shells	AIAA Journal	Aerospace Research Central	https://doi.org/10.2514/1.J062169	SCI	1	16/03/2023
A. Alnujaie, A. S. Sayyad, L. Hadji and A. Tounsi	Buckling and free vibration analysis of multi-directional functionally graded sandwich plates	Structural Engineering and Mechanics	Techno-Press	10.12989/sem.2022.84.6.813	SCI	1	12/2022
S. Yadav, S. Damse, S. Pendhari, K. Sangle, A.S. Sayyad	Comparative studies between Semi-analytical and shear deformation theories for functionally graded beam under bending	Forces in Mechanics	Science Direct	https://doi.org/10.1016/j.finmec.2022.100111	Scopus	6	01/08/2022
Atteshamuddin Shamshuddin Sayyad, Yuwaraj M Ghugal	Assessment of refined higher order theories for the static and vibration analysis of laminated composite cylindrical shells	Journal of Mechanical Engineering and Sciences	JMES	https://doi.org/10.15282/jmes.16.2.2022.04.0700	ESCI	0	30/06/2022

2. Patents

Name of the Authors	Title of the patent	Status	Patent Date of Issue	Design No.
1. Pramod Keshav Kolase 2. Nikhil Vishwas Shete 3. Sudhir Baskarrao Gayake	Combined Base Plate for Sieve Shaker	Granted	16/05/2023	355062-001
1. Dr. A.S. Sayyad 2. Ajim Shaukat Shaikh 3. Shubham Shrirang Rahinj	Castellated Beam	Granted	02/01/2023	354698-001
1. Kiran Nanasaheb Wakchaure 2. Dr. Ajaykumar Gulabsing Thakur 3. Sudhir Baskarrao Gayake	Child-cum-Adult Multi-user Water Closet Pan	Granted	31/10/2022	373280-001
1. Dr. A.S. Sayyad 2. Ajim Shaukat Shaikh 3. Shubham Shrirang Rahinj	Castellated Beam	Granted	26/12/2022	354701-001

3. Books/Book Chapter

S. No.	Name of the authors	Book title	Chapter title	ISBN Number	Publication House	Published on
1	Yawale A. D.	Fiber Reinforced Polymeric Materials and Sustainable Structures. Composites Science and Technology	Performance of GGBS and SBA in compressed Stabilized Earth Blocks	978-981-19-8979-7	Springer	02/2023
2	Shinde Bharti M., A.S. Sayyad	Fiber Reinforced Polymeric Materials and Sustainable Structures. Composites Science and Technology	Bending Analysis of Laminated Composite Cylindrical Shell Using Fifth Order Shear Deformation Theory	978-981-19-8979-7	Springer	02/2023

4. Awards:

S.No	Academic Year	Name of the Faculty	Title of the Award	Name of Authority
1	2022-23	Dr. A. S. Sayyad	A National Award for "Outstanding Research Contribution in Engineering & Technology-2021" Awarded in September 2022	Indian Society of Technical Education (ISTE)
2	2023-24	Dr. A. S. Sayyad	Recognized and listed among top 2% of Scientists globally.	-
3	2023-24	Prof. S.B. Gayake	"Promising Engineer Award" Awarded in September 2023.	Institution of Engineers

5. FDP/ Seminar/ STTP attended:

<u>S.No</u>	Name Of Faculty	Name of Organizing Institute/AICTE/ISTE	Title of FDP	Duration	Start Date	End Date
1	Sudhir B Gayake	HITS Chennai	Recent Advances in Structural Engineering	20-24 June 2022	20June 2022	24June 2022
2	Sudhir B Gayake	NPTEL AICTE	Accreditation and Outcome Based Learning	8 Weeks	Aug 2022	Oct 2022
3	Dr. N. S. Naik	OP Jindal University	Current research trends in the field of Civil engineering	16 -20 Jan. 2023	16 Jan 2023	20 Jan 2023
4	Dr. N. S. Naik	Amity University Gwalior	Emerging sustainable practices in Civil Engineering	3-9 August (One Week)	3 August 2022	9 August 2022
5	Dr. N. S. Naik	AICTE	Orientation towards Technical Education and Curriculum Aspects	8 Weeks	1 Oct 2022	04/02/2023
6	Ptof. H. N. Wagh	Amity University Gwalior	Emerging sustainable practices in Civil Engineering	3-9 August (One Week)	3 August 2022	9 August 2022
7	Dr. B. M. Shinde	NPTEL AICTE	Introduction to Lean Construction (Module 1)	4 week	Jan 2023	Feb 2023
8	Dr.S.M.Gunjal	Department of MBA, Sanjivani College of Engineering, Kopargaon	Quantitative Research with IBM SPSS	One week	26th Sept 2022	30th Sept 2022
9	Dr. S.D. Turkane	OP Jindal University	Current research trends in the field of Civil engineering	One week	16 Jan 2023	20 Jan 2023
10	Dr. S.D. Turkane	P.Dr.V.Vikhe Institute of technology & Engineering (Polytechnic) Loni.	Smart Engineering Materials	One week	10 th April 2023	15th April 2023
11	AS Jape	HITS Chennai	Recent Advances in Structural Engineering	20-24 June 2022	20June 2022	24June 2022
12	Dr.S.M.Gunjal	P.Dr.V.Vikhe Institute of technology & Engineering (Polytechnic) Loni.	Smart Engineering Materials	Smart Engineering Materials	10 th April 2023	15th April 2023
13	Dr. N. S. Naik	NPTEL AICTE	Structural Analysis-I	12 Week FDP	Jan 2023- April 2023	April 2023
14	Dr. N. S. Naik	Tulsiramji Gaikwad-Patil College of Engineering, Nagpur	Recent Advancement in Composite materials and Structures	08/05/2023		13/05/2023

15	A. S. Jape	Tulsiramji Gaikwad-Patil College of Engineering, Nagpur	Recent Advancement in Composite materials and Structures	5 days	08/05/2023	13/05/2023
16	Dr. B. M. Shinde	Tulsiramji Gaikwad-Patil College of Engineering, Nagpur	Recent Advancement in Composite materials and Structures	5 days	08/05/2023	13/05/2023
17	Dr. B. M. Shinde	Karpagam Academy of Higher Education Coimbatore	Recent Advancement and Activities in the Manufacturing of Composite Materials	6 days	08/05/2023	13/05/2023
18	A.D.Yawale	OP Jindal University	Current research trends in the field of Civil engineering	One week	16 Jan 2023	20 Jan 2023
19	A.D.Yawale	SCOE, Kopargao	Journey of Concrete from Waste to Best: Special focus on Mix Proportioning of Geopolymer Concrete”	One week	2nd feb 2023	7th Feb. 2023

6. Conference Attended:-

Sr No	Author	Date of Conference	Name of Authors	Title of Paper	International/ National	Name of Conference	Organized by
1	Mr. Om Talekar Dr. N. S. Naik	2-3 Feb. 2023	Om Talekar N. S. Naik	Experimental Study on Hollow Interlocking Fal-G Bricks	National	Recent Advances in Construction Materials and Structures	PSG College of Technology, Coimbatore
2	Mr. Deepak Gawali Dr. N. S. Naik	2-3 Feb. 2023	Deepak Gawali Dr. N. S. Naik	Experimental Study on Use of Steel Fibres in the Asphalt Mixture using Microwabve Heating.	National	Recent Advances in Construction Materials and Structures	PSG College of Technology, Coimbatore
3	Pradosh P. Deshpande Anuja S. Jape	2-3 Feb. 2023	Pradosh P. Deshpande Anuja S. Jape	Stress analysis of Functionally Graded Nanobeams using Hyperbolic Theory	National	Recent Advances in Construction Materials and Structures	PSG College of Technology, Coimbatore
4	Mr. Shripad Mate Dr. B.M.Shinde	2-3 Feb. 2023	Mr. Shripad Mate Dr. B.M.Shinde	Analysis and Design of Major Bridge at Nanded (Bhokar-Mhaisa) NH-61	National	Recent Advances in Construction Materials and Structures	PSG College of Technology, Coimbatore
5	Mr. Sumit S. Kolapkar	12-14 March 2023	Mr. Sumit S. Kolapkar Dr. A. S. Sayyad	Static Response of FGM Shell Using Refined Higher-Order Shear and Normal Deformation Theory	International	AToMech 1-2023 Advanced Topics in Mechanics of Materials, Structures and Construction	Prince Mohammad Bin Fahd University, Khobar, Saudi Arabia
6	Anuja S. Jape	12-14 March 2023	Anuja S. Jape Dr. A. S. Sayyad	Static Analysis of Cross-Ply Laminated Spherical Shells using a New Hyperbolic Shear Deformation Theory	International	AToMech 1-2023 Advanced Topics in Mechanics of Materials, Structures and Construction	Prince Mohammad Bin Fahd University, Khobar, Saudi Arabia

7. Workshop Attended-

Sr. No.	Academic Year	Name of Faculty	Organised By	Title of Workshop	Duration	Start Date	End Date
1	2022-23	Sudhir B. Gayake	Skill Lync	Analysis and Design of Industrial Structures	1 day	23 Oct 2022	23 Oct 2022
2	2022	Dr. A. S. Sayyad	Amrutvahini Institute of MBA, Sangamner	NEP - 2020	2 Days	15 Feb. 2023	16 Feb. 2023

8. Industrial / Software Training attended-

<u>Sr. No</u>	Name of Faculty	Organised By	Title	Duration	Start Date	End Date
1	Sudhir B Gayake	Department of Structural Engineering (AutoDesk)	REVIT Arch	1 Month	June 2022	July 2022
2	Dr. N. S. Naik	Department of Structural Engineering (AutoDesk)	REVIT Arch	1 Month	June 2022	July 2022
3	Dr, B, M, Shinde	Department of Structural Engineering (AutoDesk)	Structural Analysis and Design using ETABS	60 Hrs	June 2022	July 2022
4	Dr. B. M. Shinde	Mathwork	MATLAB Onramp	10 Hrs	Nov. 2022	Nov 2022
5	Prof. H. N. Wagh	Department of Structural Engineering (AutoDesk)	Auto CAD	24 Hours		
6	Mr. Sumit S Kolapkar	Department of Structural Engineering (AutoDesk)	Structural Analysis and Design using ETABS	60 Hrs	June 2022	July 2022
7	Dr.S.M.Gunjal	Department of Structural Engineering (AutoDesk)	Structural Analysis and Design using ETABS	60 Hrs	June 2022	July 2022
8	AS Jape	Department of Structural Engineering (AutoDesk)	Structural Analysis and Design using ETABS	60 Hrs	June 2022	July 2022

9. Research Projects/ Schemes undertaken by Teachers

Sr. No.	Name of Investigator	Title of the Research Project/ Scheme	Name of funding agency	Duration of project/scheme	Amount Sanctioned	Major/Minor
1.	Dr. B. M. Shinde and Prof. A. S. Jape	Estimation of Permeability and Strength of Concrete with Nano- materials	SERB	3 years	Rs. 34,91,000/ (Submitted)	Major
2	Dr. S. D. Turkane and Prof. S. B. Gayake	Sustainable Material for Road construction using Local Soil and Industrial by-product based- Geopolymer	SERB	3 years	Rs. 25,14.560/ (Submitted)	Major

R & D Coordinator

HoD/ Structural